THIRTY-EIGHTH ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE

STATE OF NEW JERSEY

1914

AND

Report of the Bureau of Vital Statistics

PATERSON, N. J.
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1915.

Board of Health of the State of New Jersey.

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The offices of the Board are in the State House, Trenton.

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J. A. Moran, Laboratory Assistant.

DIVISION OF FOOD AND DRUGS.

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R. M. Ficht, Canning Factory Inspector.
A. Foy, Laboratory Assistant.
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DIVISION OF WATER AND SEWERAGE INSPECTION.

F. E. Daniels, Director of Water and Sewerage Inspection in charge of Division.
J. J. Newman, Assistant Sanitary Engineer.
W. J. Orchard, Assistant Sanitary Engineer.
H. P. Croft, Assistant Sanitary Engineer.
C. B. Robinson, Water and Sewerage Inspector.
F. C. Worman, Water and Sewerage Inspector.
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Thirty-Eighth Annual Report of the Board of Health of the State of New Jersey, 1914.

Letter of Transmittal.

TRENTON, N. J., October 31, 1914.

To His Excellency, James F. Fielder, Governor of New Jersey:

SIR:—I have the honor to transmit herewith the Thirty-eighth Annual Report of the Board of Health of the State of New Jersey, and the Report of the Bureau of Vital Statistics.

Very respectfully,

JACOB C. PRICE,
Secretary.

Report of the Board.

To His Excellency, James F. Fielder, Governor,
Trenton, New Jersey.

SIR:—The work of the State Board of Health during the year ending October 31, 1914, has shown a great increase. Notwithstanding this, the various Bureaus of the Board have met the demands made upon them promptly and have rendered to the State splendid service. In the face of this record there have been laid against the Board and its faithful employees charges that are without any foundation in fact, and the Board feels that it would be remiss in its duty if it did not emphatically resent them. The Board invites a fair and impartial investigation of its work, but it will not submit to the offensive criticisms of the uninformed. That which this department has accomplished during the year has been of the greatest importance and value to the State and the work has been economically and efficiently accomplished and without any self-advertising accompaniment.

There is considerable work that the Health Department ought to undertake in this State remaining to be done, but there are neither the laws nor the money at present available to begin it. For this condition the present Board cannot and will not be held responsible, for it has urged repeatedly further legislation along the lines which experience has shown to be necessary; and it has also asked the Legislature for more funds. Failing to secure this additional power, that work has been carried on which has promised the greatest results.

The members of the Board and the chiefs and employees of the various Bureaus have given diligent attention to the work assigned to them. Weekly meetings of the Board have been held throughout the year in Trenton and special meetings and hearings given in various parts of the State.

As illustrating the increase in the work required of the Board it is interesting to note the reporting of communicable diseases. It is shown by the records that in 1911, 10,963 cases were reported; in 1912, 19,078 cases; in 1913, 25,267 cases and in the last year, 28,427 cases were reported to this Board. This great increase does not mean that preventable diseases are more prevalent. The most notable increase is in the number of cases of tuberculosis which were reported and this is due to the fact that physicians have more uniformly complied with the law requiring the reporting of cases of tuberculosis, and to the very complete system of following up the failures of physicians to make such reports which has been put into effect by the Board. The steady lowering of the death rate from tuberculosis indicates that by the reporting of cases, health authorities obtain information upon which to base preventive measures. No state which gathers data in reference to communicable diseases can show a record such as this, and this Board believes it is recognized that the reports of communicable diseases occurring in the State which are filed in the office of the State Board of Health are more complete than in any other state.

Another phase of the Board's work which is dealt with more in detail later on in this report is the supervision over efforts to limit the spread of tuberculosis. During the several years in which this Board has maintained its Tuberculosis Exhibit in various municipalities in the State, over one-half of a million of persons have seen the Exhibit and listened to the lectures, while one and one-half million of pieces of literature on the prevention of tuberculosis have been distributed. After carefully considering the foundation upon which this work should be based, the Board has come to the definite conclusion that the hope of the future in educational work for the prevention of disease lies in the instruction of children, and therefore for the most part the exhibitions which have been given have been to school children in school buildings, and the majority of persons who have attended the exhibitions have been children from the schools and their parents. While this work is of a most valuable char-

acter and should be and will be continued, it would be desirable to change the law under which the Exhibit is maintained so that other preventable diseases may be shown in graphic form to the public and thus instruction given which will lead the individual to protect himself against infection.

One of the criticisms that has been made by persons having no intimate knowledge of the work of the Board is that efficient work is not given by the employees. To cite an instance, attention is called to the fact that six men in the Bureau of Creamery and Dairy Inspection, during the year, have made in widely separated sections of the State, inaccessible for the most part to the ordinary means of transportation, 5,442 inspections. Another example may be cited in the bacteriological laboratory where in 1913 there were 18,342 specimens examined and in 1914, 22,272 specimens. Anyone acquainted with the detail work required and the technique which is necessary in making these examinations will readily understand that it is impossible to render this service without working beyond office hours, and even on Sundays. During the year there has never been a day in which some one was not on duty in the Laboratory. This service has been rendered to the State without extra pay of any sort or description.

In the Division of Food and Drugs eleven men employed during 1914 made 8,383 inspections. These inspections required 1,818 visits to 302 different cities and towns. In addition to this work in this Division, the inspection of the shellfish grounds of the State required a vast amount of work. The samples examined in the Laboratory in connection with it totaled 10,268.

In the Bureau of Vital Statistics the figures show that each month nearly 11,000 certificates of births, marriages and deaths are received by the Board, tabulated and filed. In addition to the receipt of these certificates several hundred certified copies are furnished monthly to persons for use in court, to give age of persons applying for work in factories, and for state and government pensions. There are six employees in this Bureau and yet this small force is able to satisfactorily compile these records.

This in brief gives some idea of the magnitude of the Board's work in the various Bureaus and effectually refutes any charges that have been made that the employees are not industrious and efficient. The Board believes that for the money expended there is given to New Jersey as good if not better service in its Health Department than in any other state in the Union.

In the past few years the Board has, in a measure, experimented with the organization of its various departments. During the last year the system of maintaining bureaus has been in force. As a whole the plan has worked satisfactorily, but experience has proved that in one Bureau at least the duties are too diversified to be properly placed under one head. The Bureau referred to is that of Food, Drugs, Water and Sew-

erage. This Bureau contains the engineering department of the Board and since this work is of great importance and has little bearing upon some of the other activities of the Bureau, it is believed that greater efficiency may be attained by dividing the work and if need be creating a separate Bureau of Engineering. The difficulty which is encountered in putting such a plan into effect is to find the proper man to head such an important division. A position such as is proposed requires a man who could command a salary much higher than the Board with its present appropriation is able to pay. However, it is believed that it might not be unwise to create experimentally, at least, such a Bureau and place a member of the engineering force of the Board in charge as Acting Chief.

BUREAU OF CONTAGIOUS DISEASES AND SANITARY INSPECTION.

The work of this Bureau consists in advising local boards of health as to methods of limiting the spread of epidemics, the control of contagious diseases in State Institutions, collection and tabulation of statistical data relating to communicable diseases and industrial diseases, and the maintenance of a Tuberculosis Exhibit in the State.

The control of contagious diseases on dairy premises is a field of activity which results directly in the lessening of the spread of disease. During the year ending October 31, 1914, the Bureau was called upon to inspect over sixty dairies in the State on which cases of communicable diseases had occurred, and the action taken was of such efficiency that not one single case of the disease was traced from one of these dairies to the consumers of milk. No service that is rendered has any more direct bearing upon the spread of disease than this control over the sale of milk from infected dairies.

Under a special law this Bureau is given absolute power to control contagious diseases in any of the State Institutions. The work which has been done in the past along these lines in controlling diphtheria in the State Village for Epilepsy, diphtheria and typhoid fever in the State Reformatory and scarlet fever in several of the institutions of our State, indicates the value of the law and also has met with the universal commendation of the superintendents of the institutions in which cases of these diseases have occurred.

It is admitted by all sanitary authorities that the foundation upon which is to be constructed plans for effective work along sanitary lines, especially in the control of contagious diseases, rests upon the collection of accurate statistics of the number of cases occurring and other data which may be of service in epidemiological study. Several years ago a change was made in the law relating to the reporting of contagious diseases which made this law much more effective than in the past. In 1911 a special effort was made to increase the number of reports of cases

and as evidence of the increasing compliance by physicians with the law requiring the reporting of communicable diseases, it is shown by the records that whereas in 1911 but 10,963 cases were reported; in 1912, 19,078 cases; in 1913, 25,267 cases were reported, and in the year ending October 31, 1914, 28,427 cases occurred in the State. In addition to reports of cases of communicable diseases, all cases of mental deficiency and epilepsy, and industrial diseases are also received and records kept.

When reports of communicable diseases are received at the office of the State Board of Health it is not merely for the purpose of record and classification. When increased numbers of cases of disease occurring in a given community are reported it leads to a visit by one of the representatives of this Bureau and a careful epidemiological study is made in every instance. Our attention thus being directed to localities in which contagious diseases occur, we are led to a study of the causes of these diseases, and often in places in which contagious diseases are endemic are able to take such precautionary measures as will lead to the prevention of epidemics. In our efforts to control outbreaks of typhoid fever and diphtheria there is always at our command the efficient Laboratory which assists in the making of diagnoses and in the discovery of "carrier" cases.

BUREAU OF CREAMERY AND DAIRY INSPECTION.

During the past year the representatives of this Bureau made nearly 5,000 inspections of premises where milk is either produced or handled for sale. As a result the hygienic quality of the milk supply of 46 municipalities requesting these inspections has been greatly improved.

The law passed at the last session of the Legislature makes it mandatory upon the State Board of Health to furnish any local board of health in the State with records showing the sanitary condition of each of the dairies contributing to any local milk supply. Already a number of cities have applied for the inspection of dairies supplying them with milk. Near the end of the year the city of Newark sent in such a request, and we were able to send them, from our files, records of nearly 500 dairies, and excepting for the outbreak of Foot and Mouth Disease in the State would have furnished the scores of some 1,500 more dairies which contribute to this supply. This work will be resumed as soon as the epidemic of Foot and Mouth Disease has subsided.

Another feature of the law passed last year requires dairymen to have their milch cows examined by a veterinarian, and to send a certificate of such examination to the office of the State Board of Health. This section of the act has enabled us to prevent the sale of milk from 271 animals which were suffering from diseases liable to influence the hygienic condition of market milk. Attention is also called to the subject of the disinfection of cow stables in which tuberculous animals have been housed.

BUREAU OF FOOD, DRUGS, WATER AND SEWERAGE.

The work of the Bureau has followed the lines laid down in the report for 1913; the administrative divisions described in that report having been adhered to without material change. If the Bureau was divided into at least two, it would enable the man at the head of each to give more careful attention to the details of his work, and greater efficiency would undoubtedly result.

The number of specimens examined in the bacteriological Laboratory shows a considerable increase. This is gratifying, in that it shows that the service is appreciated; but it is also very embarrassing because the quarters available for bacteriological work are so inadequate in size, and the Laboratory force is so limited in number, that the work is carried on under very great difficulties. For the first time in the history of the Laboratory, it has been necessary this year to refuse to examine certain specimens sent by physicians, because the laboratory force could not find time to undertake the work.

Attention is directed in another part of this report to the increasing prevalence of rabies. It is quite evident, if this disease is to be controlled, that legislation is needed which will greatly restrict the movements of dogs.

FOOD AND DRUGS: Several years' experience in the enforcement of the so-called "Sanitary Act" (Chapter 231, Laws of 1909) has shown not only its importance, but the impossibility of securing adequate enforcement by any central authority. Those phases of it which deal with retail establishments must be enforced by local boards of health if they are to be enforced at all. There is no difficulty about this. Local boards can do it if they so desire. Some of them are doing it with great success. An amendment to the food law, which will compel local boards to enforce its provisions, is greatly needed.

The inspection of slaughter-houses during the present fiscal year has produced very satisfactory results, although not as many inspections could be made as were believed to be necessary. At the present time licenses to operate slaughter-houses are issued for an indefinite time. It is believed that better results would be accomplished if these licenses were issued annually, and a small fee charged for them. Attention has been directed in earlier reports to the lack of adequate meat inspection in the State.

The cold storage warehouse is proving more of a necessity all the time in the economical handling of foods near large centers of population. The warehouses in this State have been carefully watched during the year, and only a few infractions of the cold storage law have been discovered. The law itself, as has been pointed out in previous reports, is ineffective in many respects, and should be changed. It is recommended that it be repealed at this session of the Legislature, and that one mod-

elled very closely on the bill prepared by the Commission on Uniform Legislation in States be enacted. Such a law would give the Board more effective control over the warehouses than it now has; would make it possible to correct a few abuses which have crept into the business, and would harmonize our legislation with that of other states.

EGG BREAKING RULES AND REGULATIONS.

Under the act of 1914 giving the Board of Health that power, the following rules have been made regulating the business of breaking eggs.

1. Every person who operates or conducts any establishment where the business of breaking eggs is carried on, whether such eggs are broken for use as food or other purposes, shall make application to the Board of Health of the State of New Jersey to operate such egg-breaking establishment. Such application shall be in writing and shall be signed by the person making the application.

Upon receipt of an application for a license to conduct an egg-breaking establishment, an inspection will be made of the premises designated in the application. If it appears as a result of this inspection that the establishment where the business of breaking eggs is carried on is in compliance with the provisions of "An act to regulate the sale, handling and distribution of eggs and egg products," a license will be issued.

2. Rooms in which the business of breaking eggs is carried on must be provided with smooth, water-tight floors which can be properly cleansed, and such floors must be cleansed daily.

3. The walls and ceilings of such rooms shall be provided with a smooth, hard finish, and must be so constructed that there be no ledges on which dust or dirt can collect. Such sidewalls and ceilings shall be kept in a clean condition at all times.

4. All benches and tables must be constructed of hard, smooth material, and must be readily accessible for thorough cleansing.

5. The establishment where the business of breaking eggs is carried on must be adequately lighted and ventilated, and shall be furnished with an abundant supply of hot and cold water. Sinks connected by suitable piping with the sewer and of sufficient size to enable all utensils to be thoroughly washed must be installed.

6. All doors and windows of the establishment where eggs are broken shall be screened to prevent the entrance of flies and other insects.

7. Proper apparatus for immediately cooling the eggs to a temperature of 45° F. or below must be installed in all establishments where eggs are broken for food purposes.

8. All receptacles containing liquid egg material intended for food purposes shall be kept covered and in a cooler, except the receptacle into which eggs are actually being broken.

9. During the process of breaking out eggs for food purposes, any eggs found to be unfit for such use shall be denatured immediately.

10. The term "denatured" when used herein refers to the treatment of eggs with a substance the presence of which prevents their use for human food. Eggs shall be regarded as denatured only when the denaturing substance is brought in contact with the whites and yolks.

11. Proper receptacles for "Rots" and "Spots" shall be provided in all places where eggs are broken out for food purposes, and such receptacles shall contain a suitable denaturant.

12. All persons engaged in the business of breaking eggs for food purposes shall thoroughly cleanse their hands before beginning work and after visiting the toilet.

13. All persons engaged in the business of breaking eggs for food purposes shall be provided with outer garments of washable material which shall be clean at the beginning of each day's work.

14. No person shall be allowed to live or sleep in any room where the business of breaking eggs is carried on.

15. Upon the conclusion of the day's work the floors, walls, tables and utensils must be thoroughly washed and cleansed. Egg shells and all other refuse shall be removed from the premises at least once in twenty-four hours.

16. The license granted by the State Board of Health to conduct an egg-breaking establishment shall be framed and conspicuously displayed in the room where eggs are broken.

The result of the systematic canning factory inspection which has been carried on for the last three years, has been very apparent. The enforcement of the law regulating the sale of preparations containing wood alcohol has resulted in a marked improvement in the quality of barbers' supplies and other preparations of this kind. The law, however, has been found to be defective, in that it does not cover certain classes of preparations, such as insecticides, which are applied to the scalp and which may be dangerous if prepared with wood alcohol. It is recommended that the law be so amended as to cover every substance which may be used either internally or externally by man.

One of the most objectionable features of the drug business is the unrestricted sale of narcotic, habit-forming and other dangerous drugs without suitable labeling which will acquaint the purchaser of the character of the compounds he buys. It is unfortunate that so many of our druggists do not realize their responsibilities in this direction, and take more care to comply with the statutory requirements.

During the year the Water Laboratory has been seriously overworked. This is due, in part, to the requirement that samples of water from all public supplies shall be examined at least four times a year; and also because local boards of health and private individuals insist on having large numbers of samples analyzed when there is no good reason for it. The law requiring the quarterly analysis of samples from public supplies should be changed. A great many of our public supplies are taken from deep wells adequately protected against any possibility of pollution, and the quarterly analysis of samples from these supplies is a mere waste of time and money. An attempt was made to amend the law last year, but the amendment failed of passage. It is recommended that this amendment be passed at the coming session of the Legislature. It is also recommended that the Board be given power to make a reasonable charge for the analysis of samples from private sources.

The investigations regarding the purity of shellfish, which are set forth in detail later in this report and also in the reports for 1912 and

1913, have now reached a point where the need for a revision of the methods of examining shellfish is apparent. The Board's investigations have shown that the oysters grown in the waters of this State are almost without exception of satisfactory quality for human food.

A simpler procedure should be devised for securing the abatement of minor pollutions of streams. At the present time, when a pollution is discovered, it is necessary to serve a notice on the owner of the premises on which the pollution exists, ordering him to abate it within ten days. A re-inspection must be made at the expiration of this period for the purpose of ascertaining whether the notice has been complied with. If it has not, the facts may then be referred to the Attorney General's Department for prosecution. It will, therefore, be seen that at least three visits of an inspector are necessary to secure the abatement of a pollution. The original visit is made when the pollution is discovered, another when the notice is served, and still another when a re-inspection is made. This is a costly and time consuming procedure, which could be much simplified by omitting from the law the provision requiring the serving of a notice. In fact, the method laid down by law has been found to be so costly and ineffective that during the last few months a different plan has been followed. When a pollution is reported by an inspector, the person responsible for it is sent a letter, in which he is requested to abate the pollution and to notify the Board when that has been done; and usually, some suitable method of abatement is suggested. Several hundred such letters have now been sent out, and in a very large proportion of the cases, the persons notified have not only promptly complied with the suggestions which were made, but have notified the office on the completion of the work. A formal notice couched in obscure and redundant legal language served on these persons instantly arouses a spirit of opposition in them, as most of them imagine that they are charged with a criminal offense; whereas a carefully worded and courteous letter has no such effect. In cases where pollutions of such a dangerous character that their immediate abatement is necessary are discovered, the law breaks down utterly. Here, where instant action is necessary, nothing can be accomplished, under the most favorable conditions, for at least two weeks. Legislation is needed which will enable matters of this character to be handled promptly and with as little expense to the Board as possible.

Attention has been directed in previous reports to the unsatisfactory operation of water purification and sewage disposal plants due to bad management. Nevertheless, it is almost impossible to persuade local authorities to employ proper men. An act which was prepared at the suggestion of several prominent engineers was introduced in the last Legislature; which provided that operators of water purification and sewage treatment plants should be licensed by the State Board of Health after examination. This act did not pass, but it should be introduced again in the next Legislature.

The work of the Engineering Division has been greatly hampered because not enough men are available to carry on a number of investigations, the results of which would be of great benefit to the State. Among them may be mentioned the sanitary survey of the important rivers for the purpose of securing sufficient data to enable the Board to intelligently advise municipalities regarding the disposal of their sewage. A comprehensive plan for sewage disposal should be worked out for each river in the State. This would result in more satisfactory treatment of municipal sewage, and would, in all probability, save the municipalities considerable money. In the past, municipalities have been permitted too much latitude in determining what should be done with respect to the disposal of their sewage. This has resulted in the construction in some places of plants which are inadequate, and in others, of plants which were unnecessarily costly. It should also be possible for our engineers to keep in constant touch with plants under construction, for the purpose of seeing that the plans which have been approved are carried out. Such supervision is not possible with the present force.

VITAL STATISTICS.

The tables containing the number of births, marriages and deaths during the past year, to be found in the Secretary's Report, as well as the various charts and tabulations showing comparative mortality statistics are evidence of the fact that progressive health work in New Jersey is marching forward year by year. The registration of vital facts has become an important part of the work of each local board of health.

In some states we believe an attorney gives his whole time to the work of prosecuting physicians and midwives who fail to report births as required by law. However, the educational methods employed by this Department have been effective in promoting birth registration from about 70 per cent. to 90 per cent. during the past few years, and still greater improvement is looked for, for the reason that many laws are being placed upon the statute books which make necessary the production of a birth certificate. The recent law granting pensions to dependent widows and their children, has given considerable work to this Bureau, and we are pleased to say that in most every instance certified copies under seal have been furnished, giving the necessary proof required under the law; all of such work being done without fee.

The laws relating to the registration of deaths are all that could be required, but it is necessary to give attention to a revision of that portion of the law regarding burial permits and the transportation of dead human bodies, and data in reference to this matter is now being collected.

The marriage license law is still found to be satisfactory, and while there are a few changes which might be desirable it is nevertheless accomplishing in a general way the results for which it was intended. However, there are still one or two places in the State where the local

officers persist in encouraging runaway marriages, the most notable case being Weehawken, N. J., where the assessor of taxes reports each month a large number of marriages, mostly of couples living in New York City and vicinity. A few amendments to this law are recommended, and an important addition would be one requiring a penalty in cases where clergymen, or others authorized to solemnize marriages, perform a marriage ceremony before the twenty-four hours required by law from the time the license is issued have elapsed. Another amendment should provide a penalty for a registrar or assessor, or any other person authorized by law to issue marriage licenses, in cases where they antedate the time of issuing the said license. The marriage license law should also be further amended to compel the local board of health in the district where a violation occurs to begin prosecution against persons who have violated any of the provisions of the law.

During the year a portion of the old records formerly in the office of the Secretary of State, but transferred to the office of the State Board of Health when it was established in 1878, have been rebound, and a small portion of time has been given to the indexing of these records, which is progressing slowly. These books are made from sheets forwarded to the Secretary of State from various local officers, and, while this Department has daily applications for these old records, there are often errors and omissions found therein. However, their importance is not to be underestimated, and every effort should be made to preserve them indefinitely, and sufficient funds should be provided to at once complete a general index of these old records in order to prevent their constant handling necessary for searching, which is greatly depreciating their value.

THE TUBERCULOSIS EXHIBIT.

October 31, 1914, marked the end of the third year's work provided for by an act* appropriating $10,000 annually to fight tuberculosis. During the year attention has been centered upon the Tuberculosis Exhibit, which has been kept in continuous use. The method of campaigning previously developed has been followed, and the employment of an additional assistant from January 1st to June 30th, and again beginning September 1st, has permitted the usual record of a show a week to be maintained while visiting towns in the more sparsely settled districts of the State.

The Exhibit has stood the wear and tear of campaigning very well and has required little expenditure for repairs except in the case of the motion picture booth. The brittleness of the asbestos board in the booth is the occasion of much breakage and a large repair bill. It is hoped that the Legislature this year may see fit to revise the law so as to permit a travelling show to use an asbestos cloth booth, which affords equally as

*Chapter 12, Laws of N. J., 1910.

much protection from fire as does the asbestos board booth, weighs only about one-sixth as much, and does not require frequent repairs.

The use of local pictures in each community continues to be the most effective feature of the Exhibit, so far as securing action in improving conditions is concerned. Owing to some objection to the use of such pictures, together with heavy snows which prevented their being taken, their use was suspended for a period during the year, but was resumed again upon the opening of the fall campaign.

It has been found by experience, that where living conditions for children are unsatisfactory, one of the best ways to secure their improvement is to show the public the bad conditions under which children are actually living. The best and most effective method of showing such conditions is by means of photographs. Some of the pictures to which there has been the most strenuous objection have been the means of securing the greatest improvement in the living conditions for children. In order that there may be no violation of the rights of people in their own homes, permission is always secured before interior pictures are taken. Persons desiring to be in such pictures are warned that the pictures may be shown to the public.

During the year the regular Exhibit campaign has been conducted in the following cities and towns in the order named: Secaucus, Kearny (one week, two shows), Harrison, Trenton (six weeks), Perth Amboy (two weeks), New Brunswick (two weeks), South River, Chrome (Roosevelt Borough), South Amboy, Morristown, Dover, Madison, Boonton, Elizabeth (three weeks), Roselle, Summit, Bernardsville, Somerville, High Bridge, Washington, Newton, Hackettstown, Phillipsburg, Lambertville, Plainfield (two weeks) and Westfield. The Exhibit was, therefore, open 36 weeks in 26 cities and towns. While the main Exhibit was in storage during the summer school vacation, outdoor shows with slides and motion pictures were given in the parks and playgrounds of Hoboken, Bayonne, Paterson, Newark, the Oranges and Elizabeth.

Upon invitation of the Chairman of the Committee on Scientific Exhibits of the American Medical Association, the Food Exhibit used in connection with the regular Tuberculosis Exhibit was shown at the American Medical Association meeting in Atlantic City during the month of June. Inquiries received since indicate that this Exhibit was the object of interested attention.

Including park shows and a few outside lectures, the total attendance at the Exhibit during the past year was 166,310, which makes a total attendance since the Exhibit was placed on the road in March, 1912, of 504,204. The majority of these people, in addition to seeing the Exhibit, have heard the lectures and have thus received direct personal instruction in the methods of preventing tuberculosis.

There have been 702,489 pieces of literature distributed in connection with the Exhibit and through other channels during the past year. This makes a total of 1,782,617 pieces of literature, both advertising and edu-

cational, that have been distributed during the three years the Exhibit has been in use. Some little annoyance is still experienced by demands for permission to distribute outside literature. The greatest annoyance, however, in this respect, is occasioned by agents of the Metropolitan Life Insurance Company, who sometimes come to the Exhibit and begin distributing their literature without even asking permission.

An important question that is receiving more and more attention in health circles is that of cost in its relation to efficiency. Figuring the cost of the Exhibit in relation to different units of service rendered, and considering the entire cost as applied to each separate unit, we find that the 36 weeks that the Exhibit has been open, exclusive of park shows, have cost $277.77 per week, or $222.22 per week including 9 weeks of park shows. Figured on the basis of days, the cost has been $64.51 per day for the 155 days the Exhibit has been open, exclusive of park shows and outside lectures, or including 44 park shows the cost has been $50.25 per day. Figured on the basis of attendance, the cost has been six cents for each person attending the Exhibit, park shows and lectures. Figured in relation to the number of pieces of literature distributed, the cost has been one and two-fifths cents, while the actual cost of the literature in the way of printing expenses has been about seven-twenty-fifths of a cent for each piece.

Very careful tabulations have been made showing the classification of expenses of the Exhibit and the amount of expenditure required under each item for which expenditures have been made. The tables thus compiled have permitted accurate estimates to be made of future expenses. After a critical study of these estimates, it has been determined that the appropriation will permit the employment of an additional man to act as advance agent and organizer for the campaign. It is planned to make the man thus added to the staff more and more responsible for the Exhibit management, and thus leave the Director of Tuberculosis Work more time to devote to other lines of activity provided for by the statutes.

The systematic Exhibit campaign has been pushed to completion in the northern part of the State during the past year. The campaign through South Jersey will be completed by the end of another year. Thus it has been established that the construction of an Exhibit and its systematic use in all parts of the State, including towns of three or four thousand population and above, requires about four years of time.

By the time the present campaign is completed plans must be matured for further work in preventing tuberculosis. Under the present law several lines of activity may be carried on. In stating how the money appropriated shall be spent, the law specifies that it shall be used "for educational and practical purposes in the study, treatment and prevention of tuberculosis, by

(1) "the publication and distribution of literature regarding and relating to this disease;

(2) "in the creation and maintenance of a State Tuberculosis Exhibit, which shall be at the disposal of all communities in this State applying for its use locally, subject to such regulations as the Board of Health may adopt;

(3) "and in the maintenance of a special tuberculosis inspector or inspectors."

These activities have all been carried on in accordance with the law. When the systematic campaign is completed it may be desirable to prepare some additional literature on tuberculosis for further distribution throughout the State. For example, we may have a special circular on foods for a consumptive, a circular for children, another dealing with the treatment of tuberculosis, and, perhaps, a more extended pamphlet dealing with the entire subject.

After completing the present campaign with the large Exhibit it will, no doubt, be desirable to construct and maintain a smaller exhibit for use in the smaller communities of the State. The expenses of the large Exhibit are too great to justify taking it into small towns or rural communities; but these places must not be neglected in our general scheme of health education.

Among the plans that may be considered for the use of a small Exhibit may be mentioned the possibility of transporting it by means of a light weight auto truck or an auto delivery wagon of such construction as will preclude its use for joy riding. A special generator attached to the engine of such a truck could be made to supply the electric current used in the motion picture machine, and would thus make the show entirely independent of electric wiring. Such an outfit would be ideal for outdoor shows in parks and playgrounds and on streets. The Vermont Board of Health has been carrying a similar exhibit in a large wagon drawn by horses. The wagon is of the van type and has large lettering on the sides advertising the exhibit.

In prescribing the duties of the Tuberculosis Inspector, the law gives wide latitude to the work that may be done under the appropriation. These duties are enumerated as follows:

1. "To enforce existing laws concerning registration of tuberculosis cases,

2. "to advise local Board of Health concerning disinfection,

3. "to inspect hospitals and sanatoria treating tuberculosis patients, and to report on same to the State Board of Health,

4. "and to perform such other duties as may be ordered by the State Board."

The above provisions in the law give wide latitude to the work that may be undertaken for the prevention of tuberculosis. With the completion of a large number of county hospitals, the inspection of such hospitals, with a view to helping them standardize their work, will

become an important matter. Investigations of these hospitals for purposes of standardization, investigation of the visiting nurse service and the clinic or dispensary service for the standardization of home treatment of those patients who are not in hospitals, and the instruction of local boards of health regarding their duties in the care of home cases, may all be undertaken under this appropriation. Special investigations of any kind concerning the tuberculosis problem, or even the treatment of tuberculosis patients, may be undertaken in the discretion of the State Board.

It is becoming more and more apparent to tuberculosis workers, that the prevention of tuberculosis is a far deeper problem than was at first suspected. It is beginning to be realized that all unsanitary conditions, and most other diseases, have a direct bearing upon the incidence of tuberculosis. It is further realized, that tuberculosis prevention is much more a problem of caring for child life than has been heretofore apparent.

In short, experience is convincing the tuberculosis workers that the tuberculosis problem is really co-extensive with the general health problem. The realization of this fact makes desirable an extension of the scope of the educational work now being done with the Tuberculosis Exhibit, so as to include all health subjects. It is hoped, therefore, that the Legislature will authorize the expansion of this service so that it may include all kinds of public health education.

A bill has been drafted for presentation to the Legislature providing for the publication of a monthly bulletin, the maintenance of a press service, the construction and maintenance of a traveling exhibit dealing with some health subject or subjects, the printing and distribution of literature on all phases of health work, the preparation of lectures with slides for loaning purposes, the establishment of a school of sanitation for the instruction of health officials, and the organization of a bureau of public health education for the performance of all the various duties enumerated above.

Already some work has been done in preparation for the establishment of these various services should the Legislature authorize it. As regards the printing of the monthly bulletin, careful estimates show that it is possible to print and distribute a very creditable bulletin that will get information to the public each month for less money than is now expended on the annual report.

An outline for the establishment of a press service to supply information on health subjects to the public press, has been drawn and a general scheme formulated for the maintenance of said service.

The Exhibit material used elsewhere, dealing with health subjects other than tuberculosis, has been acquired and preserved for future use. The State Board of Health is, therefore, ready and anxious to increase its usefulness very greatly by undertaking a scheme of general public

health education, whenever authorized to do so by the Legislature. Such action is urged as the next important step in the public health work of the State.

DECISION BY CHANCELLOR RELATING TO POLLUTION OF DELAWARE RIVER AT PHILLIPSBURG.

In accordance with powers conferred originally by law upon the State Sewerage Commission and transferred in 1908 to the State Board of Health, systematic inspections have been made of the streams in the State from which water is taken for potable purposes. Larger cities were given varying periods of time in which to install disposal plants or otherwise care for sewage so that the purity of the streams might be maintained.

Phillipsburg which is a city located on the shores of the Delaware River, was notified to discontinue such pollution of the river after a certain date. Failing to comply with this order proceedings were instituted in Chancery. The decision will be reviewed by the Court of Errors and, if sustained, will place further efforts to secure pure water upon a firm legal basis.

IN CHANCERY OF NEW JERSEY.

Between

THE BOARD OF HEALTH OF THE STATE OF NEW JERSEY,

Complainant,

and

THE INHABITANTS OF THE TOWN OF PHILLIPSBURG,

Defendant.

ON FINAL HEARING ON PLEADINGS AND PROOFS.

MR. NELSON B. GASKILL, *Assistant Attorney-General,*
For Complainant.

MR. JOHN I. BLAIR REILEY and MR. GILBERT COLLINS,
For Defendant.

WALKER, C.

The complainant in this cause is a *quasi*-corporation created and existing under and by virtue of an act of the Legislature approved *March 31, 1887, P. L. p. 80,* and the various acts amendatory thereof and supplementary thereto.

The State Sewerage Commission was constituted under and by an act of the Legislature approved *March 24, 1899, P. L. p. 636.* The title of this act is important in this litigation. It reads as follows:

"An act to prevent the pollution of the waters of this State by the establishment of a State Sewerage Commission, and authorizing the creation

of sewerage districts and district sewerage boards, and prescribing, defining and regulating the powers and duties of such commission and such boards."

This act was subsequently amended in extense by an act approved *March 21, 1900, P. L. p. 113.*

To this act a supplement was passed, approved *May 7, 1907, P. L. p. 361.*

In and by §1 of the last mentioned act it was provided as follows:

"The State Sewerage Commission is hereby authorized and empowered to inspect any of the waters of this State and if it finds that any of the waters of this State are being polluted in such manner as to cause or threaten injury to any of the inhabitants of this State, either in health, comfort or property, it shall be its duty to notify, in writing, any person, municipal or private corporation found to be polluting said waters that prior to a time to be fixed by said Commission, which time shall not be more than five years from the date of said notice, said person or corporation must cease to pollute said waters and make such other disposition of the sewage or other polluting matter as shall be approved by said Commission; any person or corporation aggrieved by any such finding may appeal therefrom to the Court of Chancery at any time within three months after being notified thereof, and the said court is hereby authorized and empowered to hear and determine such appeal in a summary manner, according to its course and practice in other cases, and thereupon to affirm, reverse or modify the finding of said Commission in such manner as it may deem just and reasonable."

And by §2 as follows:

"The State Sewerage Commission is hereby authorized to apply to the Court of Chancery for writ of injunction to prevent any violation of or enforce the provisions of this act and the act to which this is a supplement, and it shall be the duty of the said court, in a summary way, to hear and determine the merits of said application; and in all such cases to restrain violation of or enforce the provisions of the said acts."

And by §3 as follows:

" 'Waters of this State,' as used in this act and the act to which this is a supplement, shall include the ocean and its estuaries, all springs, streams and bodies of surface or ground water, whether natural or artificial, within the boundaries of this State or subject to its jurisdiction."

By §8 of the amendatory act of *1900, P. L. p. 113,* it is provided as follows:

"It shall be unlawful for any person, corporation or municipality, after the date specified in the notice provided for by the fifth section of this act, to permit or allow any sewage, or other polluting matter, to flow into said waters from any sewer, drain or sewerage system, under the control of said person, corporation or municipality, except under such conditions as shall be approved by the State Sewerage Commission."

Subsequently and by virtue of an act of the Legislature approved *April 16, 1908, P. L. p. 605,* the terms of office of the several members of the State Sewerage Commission were terminated; and by another act approved on the same day *(Ibid)* entitled:

"A supplement to an act entitled, 'An act to prevent the pollution of the waters of this State by the establishment of a State Sewerage Commission, and authorizing the creation of sewerage districts and district sewerage boards, and prescribing, defining and regulating the powers and duties of such Commission and such boards, approved March twenty-fourth, one thousand eight hundred and ninety-nine,' " all the powers and duties theretofore vested in and executed by the State Sewerage Commission were vested in, and were to be executed by, the Board of Health of the State of New Jersey, and it was therein further provided that nothing contained in that act should be held to abate or render invalid any notice or

proceeding, or suit at law or inequity which had been served, begun or instituted by the State Sewerage Commission, prior to the date of the said act, but that the same should continue in full force and effect, and be further advanced and prosecuted in the name of the Board of Health of the State of New Jersey.

The Town of Phillipsburg is located upon the east bank of the Delaware River within the State of New Jersey, which river is numbered among the waters of this State used for potable purposes by its citizens, and is subject to the jurisdiction of this State, as will presently be shown.

The Town of Phillipsburg was incorporated by an act of the Legislature approved *March 8, 1861*, by the name of "the inhabitants of the Town of Phillipsburg."

The State Sewerage Commission, prior to its abolition, investigated a complaint of pollution of the waters of the Delaware River by the flow of sewage and other polluting matter from the Town of Phillipsburg, and found that the river was one of the waters of this State used for potable purposes by its citizens, and that those waters were being polluted by the Town of Phillipsburg in such manner as to cause, and threaten to cause, injury to the inhabitants of this State in their health, comfort and property by permitting sewage and other polluting matter to flow into the waters of the Delaware River from the sewerage systems and drains of the town, and therefore on the eighth day of October, 1906, the said State Sewerage Commission gave notice in writing to the Town of Phillipsburg, (which was duly served on the thirteenth day of October, 1906, on Joseph H. Firth, Mayor of the Town of Phillipsburg), directing and commanding that town to cease polluting the waters of the Delaware River by permitting sewage and other polluting matter to flow therein from the sewers and drains of the town, prior to the first day of October, 1907, being not more than five years from the date of the notice, and that before the date mentioned the Town of Phillipsburg should make such disposal of its sewage and other polluting matter as should be approved by the State Sewerage Commission.

The Town of Phillipsburg has not appealed to the Court of Chancery from the notice to cease from polluting the river from and after October 1, 1906, nor had it, at the time of filing the bill in this cause, ceased to pollute the Delaware, one of the potable waters of this State, nor prior to October 1, 1907, made such disposal of its sewage and other polluting matter as should be approved by the State Sewerage Commission. And this situation continues.

The City of Trenton and various other cities of this State, are now using the waters of the Delaware River for potable purposes, supplying the same to their citizens, inhabitants of New Jersey, who, by reason of the pollution of the waters of that river, as hereinabove set out, are suffering injury in their health, comfort and property, in that they are compelled to expend large sums of money to purify the waters of the Delaware for potable purposes, for the protection of their health, and to exercise unusual precaution to protect themselves from risk of disease arising from pollution of these waters.

The bill prays that the Town of Phillipsburg, by mandatory injunction, may be compelled to cease from polluting the waters of the Delaware River by permitting sewage and other polluting matter to flow therein from its sewerage system and drains, and to make such disposal of its sewage and other polluting matter as shall be approved by the Board of Health of the State of New Jersey, and for other and further relief.

The first defense levelled at the complainant's proceedings is that the State Board of Health, while endeavoring, has not the power, to enforce the notice of the State Sewerage Commission of October 8, 1906, requiring the Town of Phillipsburg to cease polluting the waters of the Delaware by

permitting sewage and other polluting matter to flow therein from its sewers and drains, prior to the first day of October, 1907. The contention is that the attempt to transfer jurisdiction from the State Sewerage Commission to the State Board of Health was nugatory because not within the title of the supplement of *April 16, 1908, P. L. 605.*

With this contention I disagree. I concede that the complainant's right to maintain this suit must rest upon the validity of the act last mentioned, for, surely, if the State Board of Health was not authorized to abate the nuisance of pollution of the Delaware River on September 24, 1908, its bill filed on that day would not lie. The question, therefore, resolves itself into this: Could the Legislature by the supplement of *April 16, 1908, P. L. p. 605,* transfer from the State Sewerage Commission to the State Board of Health the right to enforce the provisions of the original act to which it was a supplement, and which original act clothed the State Sewerage Commission with the power sought to enforced in this suit by the State Board of Health? I think it could, and for this reason:

While the Constitution, art. IV, §7, pl. 4, provides that "every law shall embrace but one object, and that shall be expressed in the title, it was held in *Onderdonk v. Plainfield, 42 N. J. L. p. 480,* that:

"The leading subject of a statute should be fairly expressed in the title, but the means or instruments by which the general purpose is to be attained, or matters merely incidental to it, are not a necessary part of the title."

Although the word "subject" is substituted for "object" in the syllabus, "object" is the word intended, as appears from an examination of the opinion, and "object" is the language of the Constitutional provision; but this is quite immaterial, as "subject" and "object," with reference to this Constitutional provision, have come to be regarded as synonymous. *Sawter v. Schoenthal, 83 N. J. L. p. 499, 500-1.*

The act under consideration in *Onderdonk v. Plainfield* was entitled:

"An act to lay out and open up streets in the Township of North Plainfield, in the County of Somerset, and in the City of Plainfield, in the County of Union."

The act provided for its being carried into effect through the instrumentality of certain commissioners. This was in the body of the act, no mention of the commissioners—the instrumentality for carrying out the act—being made in the title. The Supreme Court said *(at p. 483):*

"It was therefore manifest to all that the object sought could only be gained through the creation of new instrumentalities, and the expression of a purpose of enabling streets to be laid out, necessarily implied the adoption of new machinery. These were merely incidental to the general object of the act."

In *Bumsted v. Govern, 47 N. J. L. p. 368,* Mr. Justice Dixon, speaking for the Supreme Court, said at *p. 373:*

"The Constitutional provision is that 'every law shall embrace but one object, and that shall be expressed in the title.'

"It is not necessary to review the numerous decisions involving the application of this and similar clauses. It is on all hands agreed that its purpose is to require the title of a bill to be such as will inform the public and the members of the Legislature of the object of the enactment, and that this purpose is accomplished when the title fairly indicates the general object, although it does not indicate the means or methods of attaining this object."

and again on *p. 374:*

"The question then is, whether this title was fairly adapted to apprise the public and the members of the Legislature of the general object of the law. I think it clearly was. * * * That was the general object of the act, and that alone was necessary to be expressed in the title. For the

particular method of reaching the end every one was legally bound to examine the body of the statute."

To the same effect are *State v. Town of Union 33 N. J. L., p. 350; Johnson v. Asbury Park, 58 N. J. L., p. 604; Drew v. West Orange, 64 N. J. L., p. 481.*

Now, if it is only necessary to express the general object of a statute in its title, and that in expressing it it is not necessary to indicate the means or method of attaining that object, or name the instrumentality for carrying it out, then, surely, even if such minor or incidental matters are included in the title of a given statute, they cannot operate to deprive the Legislature of its power to amend the given act, in reference to those minor and incidental matters, through amendments of, and supplements to, the original act, appropriately reciting that act's title.

Let me illustrate: If the act under consideration had been entitled "An act to prevent the pollution of the waters of this State" and stopped there, it would have been just as efficacious for the attainment of the Legislative purpose as the title which was adopted, containing these superadded words: "by the establishment of a State Sewerage Commission, and authorizing the creation of sewerage districts and district sewerage boards, and prescribing, defining and regulating the powers and duties of such Commission and such boards." If the short title just suggested had been employed, and in the body of the act alone had provision been made for the instrumentality for carrying out the act, namely, the creation of the State Sewerage Commission, then surely that instrumentality could have been changed by the abolition of that Commission and the devolution of its powers upon the State Board of Health by an act which could have been entitled "A supplement to an act entitled 'An act to prevent the pollution of the waters of this State.'"

It is no answer to say that because the Legislature chose to embrace in the title of the original act a description of the instrumentality through which its general purpose was to be carried out, that therefore in any amendment, having for its object a change of that instrumentality, it would be necessary to express the particular change in the title of the amending act, because the instrumentality originally created was described in the original title; for this reason, and it is all sufficient, that no such trammel rests upon the Legislature, unless it is to be found in a mandate of the Constitution, and there is none such.

Anciently statutes had no titles and the practice of prefixing them to acts of the English Parliament probably commenced in the reign of Henry III, (*State v. Town of Union, supra*); and doubtless they might be omitted from Legislative bills in this State but for the Constitutional provision that the object of every act shall be expressed in its title.

A case quite in point is that of *Drew v. West Orange, supra.* There the act whose constitutionality was attacked was entitled "An act authorizing the inhabitants of townships to purchase or erect a building for township purposes." And Mr. Justice Dixon, speaking for the Supreme Court, said *(64 N. J. L., at p. 482):*

"The second objection is that the title of the act does not constitutionally express the object of the law, since the title states that the inhabitants are to be authorized to purchase, &c., while in the body of the act they are only empowered to authorize the township committee to purchase, &c. We think the object of the law is correctly expressed in the title, the feature of the act above adverted to merely pointing out the agency through which the authority delegated to the inhabitants shall be exercised."

In that case it will be observed the general object expressed in the title was to authorize the inhabitants of townships to acquire buildings for township purposes. In the title the inhabitants of the townships were the

agency or instrumentality described as having power to make the acquisition. In the body of the act quite another agency or instrumentality was set up, namely, township committees, after authorization by the inhabitants of the townships. This title was held good because the Supreme Court did not regard the description of the agency to carry out the object of the act as necessary to be stated in the title, and, it seems to me, held in effect that the agency might be incorrectly described in the title, because in that case the fair intendment of the language used in the title was to point out the inhabitants of townships (in their collective capacity in town meetings, doubtless) as the agency authorized to purchase or erect township buildings, when in fact in the body of the act those agencies were only authorized to effectuate the object of the law by delegating authority to another instrumentality.

To sum it up: On this head of the argument I deduce the rule to be that when in an act of the Legislature, which can constitutionally have but one object and that object must be expressed in the title, superadded words are inserted in the title, describing instrumentalities and other minor or incidental matters, such words cannot operate to foreclose the Legislature from afterwards amending the body of the act in such a way as to affect those instrumentalities, minor and incidental matters, under and by a title which expressly amends the original act, appropriately reciting its title. In other words, because an act in its title expresses objects minor and incidental to its general object, it cannot thereby raise those minor and incidental matters to the dignity and importance of the main object, so as to restrain and limit the Legislature from dealing with that act by way of amendment or supplement relating to those minor and incidental matters unless they too be mentioned in the title of the later act, and thus create a constitutional restriction which does not, in fact, exist.

In this case I think I may pertinently paraphrase the remarks of Mr. Justice Swayze speaking for the Court of Errors and Appeals in *Sawter v. Schoenthal, supra (83 N. J. L. p. 499, at p. 503)* and say:

Everyone must, according to our legal maxim, be presumed to know that an act of the Legislature constitutionally can have but one object and that that object must be expressed in its title, but that if minor and incidental matters are expressed in the title they cannot be held to restrict the law making body in legislating with reference to those minor or incidental matters in subsequent acts amending or supplementing the original act by reference to its original title only without expressing in the title of the amending or supplementing act the change proposed to be made with reference to those minor and incidental matters. With this knowledge no one could help inferring that the object of the supplement of *April 16, 1908, P. L. p. 605*, was to probably change some minor or incidental provision of the original act, and, possibly, the instrumentality through which it was to be enforced, although that object was not expressed in the title of the supplement.

Mr. Justice Swayze goes on to remark that in the known state of the law with which he was dealing the title of the act then under consideration gave notice, not only of its immediate object clearly expressed but of its ultimate object clearly implied. I cannot paraphrase this observation in the case at bar for want of analogous facts, nor is it necessary. A supplement in a certain sense gives no intimation of its object. It is expressed to be a supplement to the original act, reciting the title of that act. The only notice contained in the title of a supplement is, that something germane to the original act is therein enacted. Now, as we have seen in Drew v. West Orange, the title of an original act may incorrectly describe a minor or incidental matter contained in the body of the act, namely, the instrumentality through which the act itself is to be effectuated and carried out. By analogy, the original act "to prevent

the pollution of the waters of this State by the establishment of a State Sewerage Commission" &c., might as lawfully have provided for the carrying out of the object of the act, namely, the prevention of pollution, by making the State Board of Health the instrumentality for carrying it out, instead of the State Sewerage Commission, although the State Sewerage Commission and not the State Board of Health was mentioned in the title, at least so far as any constitutional requirement is concerned. The general object of the act (to prevent pollution of the waters of the State) being expressed in the title—the language in the title pointing out the agency through which the delegated authority should be exercised, expressing something merely incidental, was unnecessary, and, although expressed in the title, its presence there could not control or restrict the enacting clauses. Again, the general object of the act being expressed in the title, namely, to prevent the pollution of the waters of this State, all persons interested in that subject would be obliged to look at the enacting clauses to see what provisions were made for carrying the act into effect (quite aside from the instrumentality created), and it could make no difference to them if they found that the Legislature had, in the body of the act, departed from its gratuitously expressed intention with reference to the instrumentality for effectuating its objects as expressed in the title—that being minor and incidental to the general and paramount object, which was, repeat, the prevention of the pollution of the waters of this State, no matter how—and they would be charged with knowledge too, even if they did not look into the act, that the Legislature might make such departure from expressed intention between title and enacting clauses, in a minor matter—one not referable to the *general object*, or at least not *necessarily* involved in it.

Holding, as I do, that the supplement of April 16, 1908, is valid and efficacious to transfer from the State Sewerage Commission to the State Board of Health the right to enforce the provisions of the original act to prevent the pollution of the waters of this State, it is unnecessary to decide whether the act approved *April 17, 1909, P. L. p. 215* to change and amend the title and body of the supplement of April 16, 1908, which act of 1909 also vests in the State Board of Health the powers and duties theretofore vested in the State Sewerage Commission—constitutionally affected the change contended for by the complainant. For the same reason it is unnecessary to decide whether the same result was accomplished by the act of *April 1, 1912, P. L. p. 547*, to also amend the title of the original act so that the same shall indicate the object of the act to vest in the State Board of Health all the powers and duties theretofore exercised by the State Sewerage Commission. It would seem that these last mentioned acts of 1909 and 1912 were passed because of some doubt as to the validity of the title of the supplement of 1908 so far forth as changing the instrumentality to enforce the principal object of the original act was concerned. Whether so or not, I think the doubts, if they existed, were illusory; but, if not, the transfer of power by one or the other, or both, of these acts (1909 and 1912) may be saved upon the doctrine enunciated by the Court of Errors and Appeals in Sawter v. Schoenthal, supra, but that question, also, it is unnecessary to decide.

The defendant contends that, quite irrespective of the question just considered, the complainant is impotent to enforce the statute against it because the legislation in question does not extend to and comprehend the Delaware River. The act, as has been observed, is "one to prevent the pollution of the waters of this State." These words are in the title and body of the act.

In the supplement of *1907, P. L. p. 360*, giving authority to bring an injunction suit, it is provided in §3:

"'Waters of this State,' as used in this act and the act to which this is a supplement, shall include the ocean and its estuaries, all springs, streams and bodies of surface or ground water, whether natural or artificial, within the boundaries of this State or subject to its jurisdiction."

Chancellor Runyon held in *Attorney-General v. Delaware & Bound Brook R. R. Co., 27 N. J. Eq., 1:*

"The Delaware River became, by conquest, the boundary between the States of New Jersey and Pennsylvania; and being such, and the original property being in neither of them, and there being no convention between them in regard to it, when, in 1783, the King of Great Britain relinquished all claims to government, propriety and territorial rights in the United States, each state, by the rule of International law, had dominion to the middle of the stream."

and also

"New Jersey has no *jus privatum* in the soil of the Delaware River above tide water; that is in the riparian owners, subject to the public easement of navigation, and to such regulations by the Legislature of the waters as the public right of navigation may require. As to the jurisdiction and power of the State over it, the river above tide water is to be regarded as a navigable stream."

This is a direct decision to the effect that New Jersey controls the Delaware River to the middle of that stream. This case was affirmed by the Court of Errors and Appeals, *Ibid. p. 631*, the third syllabus laying it down that:

"The bed of the Delaware River above tide-water, from the easterly bank *ad filum medium aquae*, passed by the grant from Charles II, to the Duke of York, dated March 12, 1664, and is private property."

And in the opinion, Mr. Justice Dixon, speaking for that court, said at *p. 641:*

"Of this class, then, is the Delaware River above the tide; the title to the bed is in the private owner, but is subject to the paramount public right to use the river as a common highway, in which is included the right to so control and change the bed as to preserve and improve the navigability of the water."

If then, while the title to the bed of the Delaware River above tide-water is in the private riparian owners, subject to the paramount public right of user, that use can as well be directed toward purification of the stream as to control for the purpose of navigation.

Wilson, Attorney-General v. Hudson County Water Co., 76 N. J. Eq., p. 543, was a case dealing with the State's ownership of land lying under tide-water, but holds, upon authority, that this ownership extends to arms of the sea within its boundaries and to the centre of waters which are the boundary line between this State and New York *(Ibid. p. 547)*. It of course follows, that where this State does not own, but controls, waters within its boundaries, as in the case on non-tidal waters, that control extends *ad filum medium aquae* to all waters dividing this from any other state. And such is the situation at Phillipsburg, within this State, situated as it is on the east bank of the Delaware River above tide-water. This holding is not inconsistent with any of the provisions of the compact of 1783 between the States of New Jersey and Pennsylvania settling jurisdiction over the Delaware River, *Comp. Stat. p. 5368*. It was expressly decided by this court in *Attorney-General v. Delaware & Bound Brook R. R. Co., 27 N. J. Eq., supra*, that the objects and purposes of the compact were merely to secure the administration of justice and the use of the river as a public highway, the provisions for concurrent jurisdiction having reference to the former only, and were a mere police regulation. This holding was in no wise modified in the Court of Errors and Appeals. *(See S. C. Ibid. p. 631).*

The language of Chancellor Runyon on this particular question in the Delaware & Bound Brook R. R. case is so illuminative and dispositive of it, that I feel justified in quoting from his remarks at some length. He said *(27 N. J. Eq., at p. 12, et. seq.)*:

"In 1817, differences arose between the States in regard to wing-dams and obstructions placed in the river on the New Jersey side by riparian owners, of which Pennsylvania complained on the ground that they were injurious to the navigation. The report of a committee of the General Assembly of this State to that body on the subject, is evidence of the construction which had been put upon the compact of 1783. It was presented by the chairman, Isaac H. Williamson, and it distinctly asserts the right of each state to authorize, without the concurrence of the other, the erection of mills and wing-dams on its own shores, and within its own jurisdiction, not injurious to navigation. *Min. of Assembly of 1817.* And still further, the commissioners appointed by this State to settle, in conjunction with those appointed by Pennsylvania, the differences above mentioned were William S. Pennington, David Thompson, and Elliot Tucker. In their first written communication, dated September 15th, 1817, to the commissioners of Pennsylvania, they say: 'It appears to us that the respective Legislatures of Pennsylvania and New Jersey, notwithstanding the agreement of 1783, have a right to give their assent to, and to regulate by law, the erection, on their respective shores, of all useful piers, docks, wharves, banks, and even mill-dams, or other buildings for the beneficial use of the respective shores; but that in the exercise of this authority they are bound, as well by public law as by the agreement of 1783, to preserve the navigation of the river. We consider the agreement of 1783 nothing more than a declaration that the river Delaware, within the limits prescribed, then was, and should continue to be, a public navigable river, in contradistinction to a private river, and that it must be subject to the same law as all other public navigable rivers that are deemed public highways. We apprehend it to be a mistaken opinion however extensively it may have spread itself, that the whole bed of the river is sacred, and cannot be touched without a violation of the rights of the State we represent. The soil of the river to the midway thereof, at least at and above the falls of Trenton, if not below, is vested by law in the owners of the adjoining land. It is true the same principle of law that vests this private right in the owners of the adjacent soil, also vests in the public the rights of unobstructed navigation. We admit that this private right must be so exercised as not to injure the public right of navigation. It is not every erection on the bed of the river that becomes a nuisance, and is to be construed as a violation of the agreement of 1783; if this was the case, all the piers and docks erected in the river must be destroyed. Docks and wharves judiciously placed on the river, are useful to commerce; in which case they are innocent and lawful erections. But, should they become so far extended as to obstruct navigation, they would become public nuisances, be unlawful, and liable to prostration. We apply the same reasoning to mill-dams, and other erections on the river. Their lawfulness or unlawfulness depends on the fact whether they are or are not obstructions to navigation. We have been more particular in disclosing our opinions on this head, that we might, at one view, enable you to understand the reasoning that led to certain legislative acts of New Jersey relative to wing-dams.'

"The commissioners close a subsequent communication to the commissioners of Pennsylvania, dated September 17th, 1817, as follows: 'Whether the English doctrine, conferring the bed of the river to the middle thereof, on the owners of the adjacent soil, is adopted in this country or not, is a question wholly immaterial in the present inquiry. Whether it is in the

owners of the adjoining land, the representatives of the original proprietors, or the State, is a question to be settled in each state by the laws thereof, and has no bearing on the subject under investigation. It is sufficient that it is in one or another of them. We contend that the agreement of 1783 did not touch the soil, but was confined to questions of jurisdiction and navigation, and that the bed of the Delaware River to the midway thereof, from the first settlement of the country to this hour, has belonged to the State of New Jersey, or some of the citizens thereof, and that the Commonwealth of Pennsylvania never had, and, as we believe, never pretended to have, any title thereto.'

"It appears from these public documents, which respectively have the sanction of two eminent names of the past generation, the first, Governor Pennington and Governor Williamson, that thirty-five years after the making of the compact, the theory of joint ownership of the river was not entertained by this State, and was not regarded as an implication from the compact. It has never been recognized since then. The act of *March 1st, 1820*, to 'prevent obstructions to the navigation of the River Delaware,' *(Rev. L. 708)* cited in support of it, does not recognize it. The objects and purposes of the compact were merely to secure the administration of justice, and to secure to the contracting parties the use of the river as a public highway. The provision for concurrent jurisdiction had reference to the former only. It was a police regulation merely, and gave to neither of the states any dominion or authority whatever over, or right in, or control of, that part of the soil of the river which, by the law of nations, belonged to the other. The construction put by the Court of Appeals of New York, in *The People v. The Central Railroad Co. of New Jersey, 42 N. Y. R. 283*, upon the compact made in 1833, between this State and the State of New York, *(Nix. Dig. 965)*, is in point. By the third article of that compact it was declared that New York should have and enjoy exclusive jurisdiction of and over all the waters of Hudson River lying west of Manhattan Island, and to the south of the mouth of Stuytenduyvel Creek, and of and over the lands covered by the said waters, to the low water mark on the westerly or New Jersey side thereof, subject to certain designated rights of property and jurisdiction of New Jersey, among which was the exclusive right of property in the land under water lying west of the middle of the bay of New York, and west of the middle of that part of Hudson River which lies between Manhattan Island and New Jersey, and exclusive jurisdiction of and over the wharves, docks, and improvements made, or to be made, on the shores of this State, and of and over all vessels aground on the shore, or fastened to any such wharf or dock, except that such vessels were to be subject to the quarantine or health laws of New York. The suit was brought by the Attorney-General, in behalf of the State, to abate as nuisance, and cause the removal of certain wharves, bulkheads, piers, and railroad tracks, and other erections which the defendants had placed in the harbor of New York, and extending into the harbor and the Hudson River about a mile from the New Jersey shore. The complaint claimed that the erections were within the limits and jurisdiction of New York, and were an obstruction to navigation, and injurious to the public health, and were constructed without lawful authority. They were all placed on the west of the designated boundary line. It was held that the jurisdiction conferred upon New York over the waters of the river and bay was a qualified and limited jurisdiction, for police and sanitary purposes, and to promote the interests of commerce in the use and navigation of those waters, and was not designed to confer or create control over the lands or domains of New Jersey, or to give to New York any right to interfere with the complete political or governmental jurisdiction of this State, as a soverign State, of and over her own soil, and its appurtenances, and of and over every

description of property of any appreciable value, within her territorial limits.

The appositeness of the conclusion expressed in that case to the case now under consideration, will be all the more noticeable when it is observed that by the compact just referred to, *exclusive* jurisdiction was given to New York, not only over the waters, *but over the lands covered by the waters*, while, by the compact with Pennsylvania, *concurrent* jurisdiction is given to the contracting parties, and such jurisdiction is *expressly confined to the waters.*

The compact of March 28th, 1785, between Maryland and Virginia, among other things, provides that the Potomac River shall be considered as a common highway for the purpose of navigation and commerce to the citizens of those states, and of the United States, and to all other persons in amity with Maryland and Virginia, trading to or from either of those states; and it establishes concurrent legislation; also for the preservation of fish, and for the performance of quarantine, and keeping open the channel and navigation by preventing the throwing out of ballast, or making any other obstruction. *Laws of Maryland, 1785, c. l.* It has been held that the compact was confined exclusively to matters of jurisdiction and navigation, and left the territorial rights of the parties to it untouched. *Binney's Case, 2 Bland, 99, 126, 127.*

The compact of 1783 gives no jurisdiction to Pennsylvania over the soil of the Delaware within the territorial limits of this State, nor does it confer on her any right therein."

As power to conserve the potable waters of the River Delaware by legislation, enforcible on, in and under the waters flowing within the boundary and subject to the jurisdiction of the State of New Jersey, was not included in the enumeration of rights to be exercised conjointly by the States of New Jersey and Pennsylvania in the compact of 1783, that power was retained by this State by as clear an implication as though it was, by express language, so reserved in the pact.

It is idle for the defendant to ask of what avail it would be to stop the Town of Phillipsburg from discharging its sewage in the Delaware, when the sewage of the City of Easton opposite, and the polluting flow of the Lehigh, are discharged into the same stream in the same locality.

Vice Chancellor Stevens said, in construing a similar statute, in *State Board of Health v. Diamond Mills Paper Co., 63 N. J. Eq., 111, at p. 117:*

"The language here used is plain and unambiguous. The prohibition is against placing in the water of the river anywhere above the point from which the city obtains its supply any factory refuse which will either impair or tend to impair its quality.

"If, at the place of discharge, the factory refuse put into the river impairs it, or even tends to impair it, the prohibited act is done."

And I said, when Vice Chancellor, in *The State v. Town of Phillipsburg, 71 Atl. Rep. p. 750, at p. 752:*

"Because Easton is polluting the river much more than Phillipsburg (which is regrettable) is no ground for denying an injunction, even if issuance of the writ would be 'futile or inequitable' as claimed by the defendant. The act in question has been construed in this court and held to extend to a case of refuse which will impair or tend to impair the quality of the water, "citing *State Board of Health v. Diamond Mills Paper Co., supra.*

The authority given to the State Sewerage Commission (now vested in the State Board of Health) in the act which is being pursued in this case, authorizes the Board, if it finds that any of the waters of this State are being polluted in such manner as to cause or threaten injury to any of the inhabitants of this State either in health, comfort or property, to apply

(after certain preliminary proceedings) to this court for an injunction to prevent violation or to enforce the provisions of the act. So that, as in the statute under consideration in the Diamond Mills Paper Company case, the injury need not be actual but only threatened. In that case the inhibited act was pollution by refuse which would "impair *or tend* to impair the quality of the water" and in this case it is if any of the waters of this State "are being polluted in such manner as to cause *or threaten* injury to any of the inhabitants." Under neither act does actual injury have to be demonstrated.

A word as to the facts: The waters of the Delaware River are used by the inhabitants of this State for potable purposes, and this is so with reference to the supply of drinking water at Trenton. Voluminous testimony was taken and to my mind it conclusively shows that if the waters of the Delaware River at Trenton are not polluted by infusion of sewage at Phillipsburg in such manner as to cause injury to the inhabitants of Trenton, at least injury to those inhabitants is threatened from that pollution, and, therefore, the case, on the facts, is brought directly within the purview of the statute.

"The result reached is that a mandatory injunction must issue in accordance with the prayer of the bill, to compel the Town of Phillipsburg to cease its unlawful act of polluting the waters of the Delaware River by permitting sewage and other polluting matter to flow therein from its sewerage systems and drains, and to make such disposal thereof as shall be approved by the State Board of Health."

REGULATIONS GOVERNING THE CONDUCT AND OPERATION OF SLAUGHTER-HOUSES.

Under the provisions of Chapter 295, Laws of 1910, owners of slaughter-houses are required to obtain licenses from the State Board of Health and the Board was authorized to make rules and regulations relative to the construction and operation of all slaughter-houses. The rules and regulations adopted soon after the passage of the law were found lacking in certain details and therefore on July 28th of the present year revised rules were adopted by the Board.

For the information of the public and to show the detailed control over places in which animals are slaughtered for food purposes, the regulations are printed in full as follows:

1. Every person who operates or conducts or desires to operate or conduct a place where animals are slaughtered for sale for human food shall make application to the Board of Health of the State of New Jersey for a license to operate a slaughter-house abattoir, or place where animals are slaughtered for sale for human food. Such application shall be in writing upon blanks which will be furnished by the State Board of Health upon request, and shall be signed by the person making the application.

Upon receipt of an application for a license to conduct a slaughter-house, together with such other information as may be required by these rules, an inspection will be made of the premises designated in the application. If it appears as a result of this inspection that the building and surroundings are so located and constructed that the business of slaughter-

ing and dressing animals can and will be there conducted in a cleanly manner and without creating a nuisance and in compliance with the provisions of Chapter 217 of the laws of 1907 and its amendments and supplements, a license will be issued.

Should the inspection show that changes or improvements in the building or its surroundings are necessary before the above-mentioned act can be complied with, the applicant will be so notified, and a reasonable time will be given to him to make such changes or improvements. At the end of this time a reinspection will be made. If the reinspection shows that the required changes or improvements have been made a license will be issued; if the building and surroundings at the time of the reinspection do not conform with the requirements of the above-mentioned act and the following rules, the license will be refused.

2. When a slaughter-house is to be erected, the approval of the site should be obtained from the local health authorities within whose jurisdiction the building will be located. Such approval when obtained should be submitted in writing to the State Board of Health when application for a license is made.

3. In the case of new buildings, plans and specifications should be submitted to the State Board of Health for approval when application for a license is made.

4. The person in whose name a license to operate a slaughter-house is issued will be held responsible for any violation of law or of the rules of the State Board of Health which may be discovered in that slaughter-house. If other persons than the licensee are permitted by him to slaughter animals in such slaughter-house they will be regarded as operating under his supervision and he will be held responsible for their acts.

5. A slaughter-house license is not transferable. Should a person holding a slaughter-house license desire to erect a new building, operate in a different place, or sell his business to another, a new application for a license must be made.

6. Persons afflicted with tuberculosis or other communicable diseases shall not be employed in nor shall they be permitted to enter any part of a slaughter-house where animals are slaughtered, dressed, or where the meat of the same is stored or handled. Th manager of every slaughter-house who has reason to believe that any employee is so affected, shall immediately report in writing the facts upon which such belief is based, together with the name and address of the person believed to be affected to the State Board of Health.

7. All slaughter-houses shall be well lighted and ventilated and shall be provided with an abundant supply of pure water. They shall also be provided with an adequate system of drainage. Whenever practicable, connections shall be made with a municipal or other sanitary sewer.

8. All slaughter-houses shall have tight floors made of cement or of tile laid in cement brick, wood or other suitable material which can be flushed or washed clean with water.

9. The ceiling, walls, pillars, partitions, etc., shall be kept in a clean condition, and when necessary they shall be washed, scraped, painted or otherwise treated.

10. Where the floors or other parts of the building, or tables or parts of the equipment, are so old or are in such poor condition that they cannot be readily kept in a clean condition, they shall be removed and replaced.

11. All trucks, trays and other receptacles, all chutes, platforms, racks, tables, etc., and all knives, cleavers, saws and other tools and all utensils,

machinery and vehicles used in moving, handling, cutting, chopping, mixing, canning or otherwise processing meats shall be thoroughly cleansed before using and be kept in a clean condition at all times.

12. Suitable receptacles shall be provided for blood, offal and similar materials and such materials shall be put into the offal tank, or when said tank is not available, removed from the premises as soon as possible, but under no circumstances shall they be permitted to accumulate for more than one day in the summer or two days in the winter. In no case shall they be permitted to accumulate in, under or around the slaughter-house.

13. The outer clothing worn by persons who handle meat or meat food products shall be of material that is readily cleansed and only clean garments shall be worn.

14. All water closets, toilet rooms and dressing rooms shall be entirely separated from compartments in which carcasses or parts thereof are cured, stored, packed, handled or prepared. Where such rooms open into compartments in which meat or meat food products are handled, they must, when this is considered necessary by the State Board of Health, be provided with properly ventilated vestibules and with automatically closing doors. They shall be properly lighted, ventilated and kept in a clean condition.

15. The rooms or compartments in which meats or meat food products are prepared, cured, stored, packed or otherwise handled, in so far as the same is possible, shall be free from odors from toilet rooms, catch basins, casing departments, tank rooms, hide cellars, etc., and shall be kept free from flies and other vermin by screening or other methods.

16. Hides or pelts shall not be stored on the floor of any room used for slaughtering, storing or preparing meats or meat food products, but shall be stored in a room set aside for such purpose.

17. The yards, fences, pens, chutes, alleys, etc., belonging to the premises, whether they are used or not, shall be maintained in a clean condition, The feeding of hogs or other animals on slaughter-house refuse will not be permitted, unless said refuse has been previously sterilized, and no use, incompatible with proper sanitation, shall be made of any part of the premises.

18. Should an animal, before or after killing, be found to be affected with any contagious disease, it shall be immediately removed from the killing room and disposed of in a proper manner by tanking or otherwise, and all knives or other implements and all parts of the room which have come in contact with the animal, or with any part of it, or any of the discharges from it shall be at once disinfected with some suitable disinfectant. (See foot note.)

19. Skins and hides from animals affected with any disease infectious to man must be disinfected, except in case of anthrax or charbon; in which case the hide and all other parts of the carcass must be immediately

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DISINFECTION: For disinfection a 5% solution of carbolic acid, 2% solution of creolin or a 10% solution of formalin is recommended. These solutions may be prepared as follows:

Formalin—

Formalin	13 oz.
Water	1 gallon

Carbolic Acid Solution—

Crude carbolic acid	7 oz.
Water	1 gallon

Creolin Solution—

Creolin	2½ oz.
Water	1 gallon

Knives and similar implements should be immersed in the disinfectant and scrubbed with a stiff brush and then washed with hot water and soap followed by rinsing in clear water.

incinerated. In this case the killing floor upon which the animal was slaughtered shall be disinfected with a ten per cent. solution of formalin and all implements which have come in contact with the carcass must be thoroughly disinfected before being used again.

20. Butchers who dress or handle diseased carcasses, or parts of the same, shall cleanse their hands of all grease and then immerse them in a disinfectant and rinse them in clear water before dressing or handling healthy carcasses.

21. Due care must be taken to prevent any contamination of meats by contact with a contaminated floor. Meats which have become contaminated must be disposed of in the same manner as prescribed for diseased carcasses which must not be sold for food.

22. Carcasses or parts thereof shall not be inflated with air from the mouth and no inflation of carcasses, except by mechanical means shall be allowed.

23. Carcasses shall not be dressed with skewers, knives, etc., that have been held in the mouth. Skewers which have been used must be cleansed before being used again. Spitting on whetstones or steels when sharpening knives shall not be allowed.

24. Only good, clean, wholesome water and ice shall be used in the preparation of carcasses, parts, meats or meat food products.

25. Animals or parts of animals unfit for food shall not be rendered in rooms where animals intended for use as food are killed, dressed, stored or handled, or in rooms directly communicating therewith, and no apparatus for the rendering of edible products shall be installed in rooms where animals intended for use as food are killed, dressed, stored or handled until permission has been obtained from the State Board of Health to install such apparatus.

Hides may be disinfected by immersing them for five minutes in a five per cent. solution of carbolic acid or a one to one thousand solution of bichloride of mercury.

26. Violation of the above rules or any of them may result in the revocation of the license of the slaughter-house in which the violation has been committed.

COUNTY TUBERCULOSIS HOSPITALS.

Progress is being made in the building of tuberculosis hospitals and in the care of tuberculosis patients in hospitals other than county hospitals, as required by law, throughout the State. The counties of Hudson, Essex, Union, Morris, Camden and Cape May now have hospitals in operation. Passaic and Mercer Counties care for their patients in the Trenton and Paterson Municipal Hospitals, respectively. The Boards of Freeholders of Atlantic, Somerset, Sussex, Ocean and Monmouth Counties are paying for the care of patients in hospitals outside the county. Thus, 13 out of the 21 counties in the State have made provision for the care of tuberculosis patients at public expense. As this number includes most of the large counties in the State, the 13 counties that have made such provision represent almost four-fifths (79.7 per cent. according to the census of 1910) of the total population in the State. Considering the difficulties that must be encountered in constructing

county hospitals, these results are most gratifying. Other counties, not included in the lists given above, are taking steps looking toward the building of hospitals, and it is believed that within a short time hospital facilities will be made available for practically the entire population of the State. This will mean a great step forward in the control of tuberculosis.

HOME CARE OF TUBERCULOSIS PATIENTS.

By very close supervision of all tuberculosis patients in the City of Cleveland, the Health Department was able to estimate, a few years ago, that there are eight living cases for each annual death. Dr. Ford, Commissioner of Health, is of the opinion that this estimate is too low; that the proper figure should be ten or twelve, rather than eight. Assuming that the more conservative figure for Cleveland might be applied to New Jersey, the 4,273 deaths in New Jersey during the last fiscal year would, if multiplied by 8, give 34,184 as the possible number of living cases in the State. Of this possible number there were actually reported to the State Board of Health 8,369. It is certain that the actual number is much greater than the number reported, for the reason that many of those reported were reported during the last stages of the disease.

Taking only those reported as a basis for consideration, it is clear that hospital facilities cannot be provided for all of the tuberculosis patients in the State for some years to come. The number of reported cases for the past year will average almost 400 for each county in the State. A large number of them, therefore, must be kept under supervision in their homes.

For purposes of home supervision the visiting nurse and the clinic are agencies that must be employed. That this porblem is receiving consideration is shown by the fact that 32 cities and towns in the State now have visiting nurses doing tuberculosis work, and 17 of the cities in the State have tuberculosis clinics. Ten of the clinics and the visiting nurses in 10 of the cities are supported at public expense. It is highly desirable that the visiting nurse service and clinic service be extended to all parts of the State. In no other way can proper supervision be maintained over tuberculosis patients left in their homes.

MARITIME QUARANTINE AT THE PORT OF PERTH AMBOY.

In the report of last year a full statement was made as to the relation which the State Board of Health bears to the enforcement of the maritime quarantine act of 1911. The Health Officer of the Port appointed by the Governor co-operates with the Federal officer representing the United States Public Health and Marine Hospital Service. The powers and duties of these officers somewhat overlap, although an arrangement

is made by which the Federal officer examines all vessels coming from foreign ports and the local State officer examines the vessels coming from coastwise points. As stated in the report of last year, an effort has been made by the Board to transfer the supervision of this port to the Federal authorities, but as yet no action has been taken by the Legislature for this purpose and therefore the law is still being enforced under the dual arrangement.

Dr. G. W. Fithian is at the present time the Health Officer of this port. The port is somewhat protected from the income of cases of communicable diseases as many vessels enter the port of New York before coming to the port of Perth Amboy and receive an examination by the New York authorities. An arrangement has been made by which a vessel, coming to the port of Perth Amboy, upon which a case of contagious disease occurred may be sent to the New York disinfecting plant for proper disinfection.

The report made by Dr. Fithian for the year ending October 31, 1914, shows that on account of the unsettled conditions of affairs of both Mexico and Europe the number of vessels entering this port has not been as great as under normal conditions.

In carrying out the provisions of the act which has for its object the prevention of the introduction of contagious diseases 110 vessels have been examined. Seventy-eight of these were from foreign ports and 38 coastwise. Ninty-eight were steam vessels and 14 were sailing vessels. The report made by Dr. Fithian gives the names of all the vessels and also the date of entrance. The total receipts from the port for the year amounts to $492.00. The necessity for supervision over this port is undoubted and when the disturbing conditions in foreign countries have ceased the port of Perth Amboy on account of the very large industries located in the city will undoubtedly become one of the important maritime ports in the State.

RICHARD COLE NEWTON, M. D., President,
JACOB C. PRICE, M. D., Secretary,
WM. H. CHEW,
OLIVER KELLY,
HERBERT W. JOHNSON,
ISAAC T. NICHOLS.

Report of Secretary.

VITAL STATISTICS.

POPULATION.

During the last decade the population of New Jersey has increased over 700,000, making an average annual increase of over 70,000.

The figures presented in the following report, showing certain marriages, birth and death-rates, are based on the estimated population.

COMPARATIVE DEATH-RATE OF WHITE AND COLORED.

In 1913 the total estimated population of the State was 2,772,981, the estimated colored population 95,925, the total death-rate 14.22, the death-rate among the white 14.00 and among the colored inhabitants 20.28.

DEATHS.

The death-rate for 1913 shows only a very slight increase over the previous year, the rate per 1,000 inhabitants for the year 1912 being 14.02, and for 1913, 14.22. The number of deaths increased from 37,772 to 39,425. A glance at the chart following, which shows the death-rate in New Jersey from 1879 to the present date, is a remarkable testimonial as to the efficient and thorough administration of health work in New Jersey.

BIRTHS.

The birth-rate falls a little below the figures of the previous year, the rate being 22.15 per 1,000 for 1913 against 22.30 for 1912. The number increased, however, from 60,073 to 61,432.

It is estimated that the registration of births has greatly increased during the past year.

Each year sees added laws which require the use of such certificates, and it is only in the past few years that legislation has been enacted requiring the presentation of certificates of birth for entrance to school, claims for widows' pensions, regulation giving increased pay to soldiers in the Army and Navy of the United States Government, providing that

certificates show they are American born, etc. The calls for copies of these records constantly increase. In addition to their value for legal purposes and other personal uses, their accuracy is necessary for the complete study of infant mortality.

MARRIAGES.

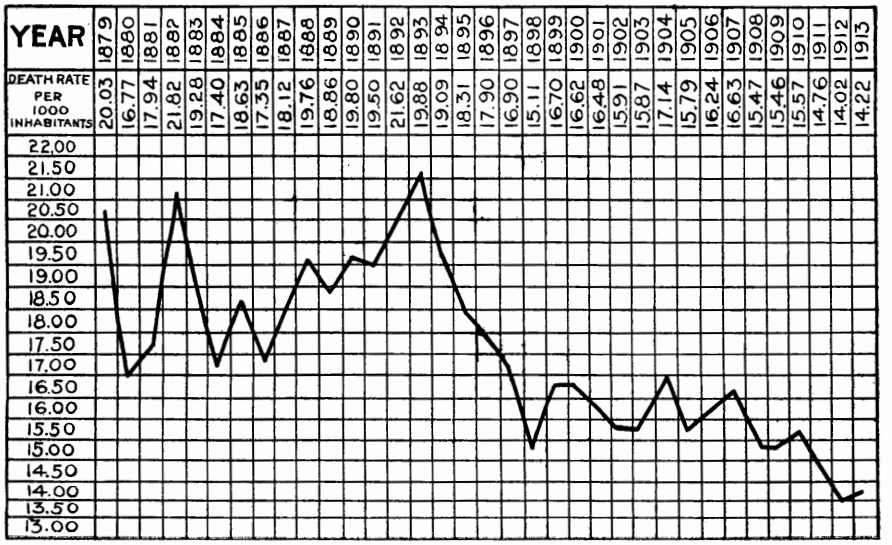
A slight increase is shown in the marriage-rate for 1913 compared with 1912, and as time passes the success of the marriage license law is beyond doubt. The rate is 19.98 for 1913, while it was 19.91 for 1912. The number increased from 26,821 to 27,697.

This Department has had requests from other states for copies of the marriage laws of New Jersey, and we believe that in some instances the act concerning marriage licenses has been used as a basis for similar laws in other states.

The success of the proper administration of our present marriage law depends entirely upon the honesty and ability of the local registrar, who is supposed to see that the requirements of the act are fully complied with.

It is a great temptation for persons in the State of New York to cross the borders of our State and have a marriage quietly performed, but this custom has been practically broken up, with the possible exception of a few districts in Hudson County, where they still have a large number of marriages each month between non-residents. However, no direct violation of the law has as yet been discovered, in these cases, by this Department.

CHART SHOWING DEATH-RATE IN NEW JERSEY, PER 1,000 INHABITANTS FOR THIRTY-FIVE YEARS, 1879-1913.



DEATHS IN NEW JERSEY BY AGE PERIODS, FOR YEAR ENDING DEC. 31, 1913.

AGE PERIODS.																			
Under 1 month.	Under 1 year.	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Total number of deaths.
2,903	4,639	3,144	930	515	875	1,195	1,474	1,543	1,833	1,941	2,065	2,134	2,222	4,944	4,539	2,205	324	..	39,425

THE NUMBER OF DEATHS IN NEW JERSEY FOR THE YEAR ENDING DEC. 31, 1913, FROM TEN SELECTED PREVENTABLE DISEASES, WITH THE PERCENTAGE OF TOTAL MORTALITY IN EACH, WERE AS FOLLOWS:

NAMES OF DISEASES	Deaths.	Percentage of total mortality.
Consumption	3,622	9.19
Pneumonia	3,009	7.63
Diarrhoeal diseases of children	2,440	6.19
Diphtheria	583	1.48
Typhoid fever	276	.70
Whooping cough	386	.98
Measles	216	.55
Scarlet fever	218	.55
Malarial fever	11	.03
Small-pox		

DEATHS FROM CERTAIN SELECTED CAUSES OF DEATH, PER 10,000 INHABITANTS, FOR THE YEARS ENDING DEC. 31, 1912, AND DEC. 31, 1913; ALSO SHOWING AVERAGE NUMBER OF DEATHS FROM SAID DISEASES DURING PAST THIRTY-FIVE YEARS.

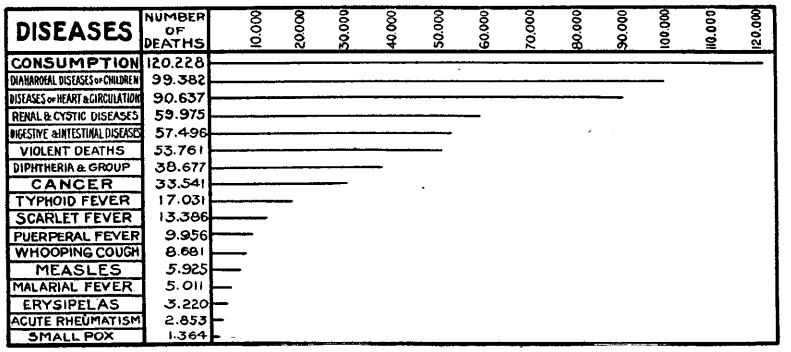
DISEASES.	Average number of deaths for thirty-five years.	Deaths per 10,000 inhabitants during year ending Dec. 31, 1912.	Deaths per 10,000 inhabitants during year ending Dec. 31, 1913.
Consumption	3,435	13.44	13.06
Diarrhoeal diseases of children	2,839	9.14	8.80
Pneumonia*		10.61	10.85
Diseases of heart and circulation	2,590	18.27	20.04
Digestive and intestinal diseases	1,643	8.99	9.34
Diphtheria and croup	1,105	1.79	2.10
Renal and cystic diseases	1,714	11.76	12.31
Violent deaths	1,536	9.85	10.08
Cancer	958	7.52	7.65
Typhoid fever	487	1.22	1.00
Scarlet fever	382	.54	.79
Puerperal	284	1.54	1.66
Whooping cough	248	.78	1.39
Malarial fever	143	.11	.04
Measles	169	1.10	.78
Erysipelas	92	.36	.40
Acute rheumatism	82	.34	.46
Small-pox	39		

*Deaths from pneumonia were not separately recorded until the year 1901.

THE INCREASES OR DECREASES IN DEATHS IN NEW JERSEY, FROM CERTAIN SELECTED CAUSES, FOR THE YEAR ENDING DEC. 31, 1913, COMPARED WITH DEATHS FOR THE PREVIOUS YEAR, ARE AS FOLLOWS:

SELECTED DISEASES.	For year ending December 31, 1912.	For year ending December 31, 1913.	Comparative mortality.
Consumption	3,622	3,622	.....
Diseases of heart and circulation	4,922	5,556	+634
Renal and cystic diseases	3,169	3,414	+245
Digestive and intestinal diseases	2,423	2,589	+166
Diarrhoeal diseases of children	2,464	2,440	− 24
Cancer	2,026	2,120	+ 94
Diphtheria	481	583	+102
Typhoid fever	328	276	− 52
Scarlet fever	146	218	+ 72
Puerperal	415	460	+ 45
Whooping cough	211	386	+175
Erysipelas	97	110	+ 13
Acute rheumatism	91	127	+ 36
Measles	296	216	− 80
Malarial fever	29	11	− 18
Small-pox	2	.....	− 2

CHART SHOWING DEATHS IN NEW JERSEY, FROM CERTAIN SPECIFIED DISEASES, FOR THE PAST THIRTY-FIVE YEARS, ARRANGED IN ORDER OF GREATEST FREQUENCY.



CONSUMPTION.

The death-rate from consumption for the present year is the lowest of which this department has record, and without doubt the lowest death-rate from this disease in the history of the State.

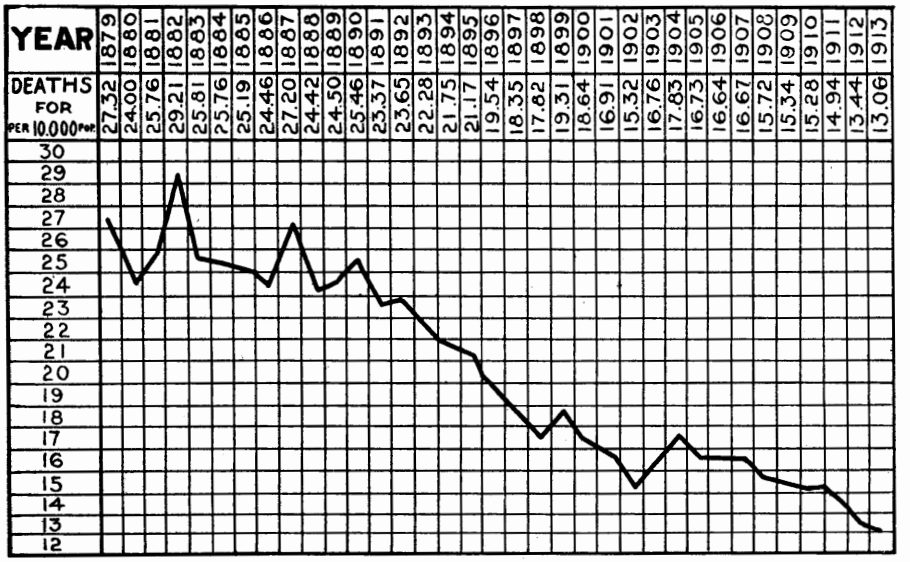
DEATHS FROM CONSUMPTION IN STATE, BY AGE PERIODS FOR THIRTEEN YEARS.

YEARS.	AGE PERIODS.											Totals.
	Under 1 year.	1 to 10	10 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Not stated.	
1901	39	73	241	937	827	510	319	199	87	25	.....	3,257
1902	39	62	227	842	759	504	281	199	76	19	7	3,015
1903	49	81	285	941	877	534	310	191	95	16	1	3,380
1904	67	80	315	983	1,005	575	337	217	78	11	2	3,670
1905	40	89	309	972	915	606	335	197	100	23	1	3,587
1906	62	93	309	953	942	646	339	199	84	26	1	3,654
1907	56	61	256	978	967	682	407	229	90	25	.....	3,751
1908	36	74	272	983	1,013	602	344	197	80	15	.....	3,616
1909	53	68	258	917	976	657	349	220	86	24	.....	3,608
1910	46	74	271	987	1,047	723	407	216	81	25	.....	3,877
1911	43	76	294	1,012	1,077	661	423	211	98	11	1	3,907
1912	32	61	288	891	982	697	365	206	87	13	.....	3,622
1913	24	59	268	928	953	719	411	197	55	8	.....	3,622

AVERAGE ANNUAL DEATH-RATES FROM ALL CAUSES AND AVERAGE ANNUAL DEATH-RATES FROM CONSUMPTION IN NEW JERSEY FOR THIRTY-FIVE YEARS, BY COUNTIES, COMPARED WITH DEATH-RATES FROM ALL CAUSES AND DEATH-RATES FROM CONSUMPTION, FOR THE YEAR ENDING DEC. 31, 1913, PER 10,000 POPULATION.

COUNTIES.	Average annual death-rate from all causes per 10,000 for 35 years.	Average annual death-rate from consumption per 10,000 for 35 years.	Death-rate from all causes for year ending December 31, 1913.	Death-rate from consumption for year ending Dec. 31, 1913.
Atlantic County	167.8	15.94	158.5	10.74
Bergen County	98.0	13.11	112.3	8.83
Burlington County	154.9	17.21	157.5	10.10
Camden County	182.3	21.02	153.9	14.78
Cape May County	137.0	13.12	126.7	9.45
Cumberland County	85.3	18.61	140.9	11.41
Essex County	183.3	24.17	137.1	15.42
Gloucester County	143.7	16.36	136.1	9.97
Hudson County	201.9	23.93	143.3	15.43
Hunterdon County	136.7	14.37	144.6	10.66
Mercer County	173.2	21.47	171.6	17.89
Middlesex County	159.6	16.00	154.4	9.61
Monmouth County	152.0	15.82	156.8	9.31
Morris County	111.8	18.72	159.5	10.28
Ocean County	142.3	18.76	140.9	8.34
Passaic County	175.8	19.74	127.9	10.92
Salem County	143.4	17.88	136.0	13.49
Somerset County	141.4	14.73	139.5	7.19
Sussex County	126.8	13.95	132.7	7.97
Union County	135.4	14.97	137.3	12.86
Warren County	145.9	14.22	139.3	8.92
The State	170.1	19.79	142.2	13.06

CHART SHOWING DEATHS FROM CONSUMPTION IN NEW JERSEY. PER 10,000 POPULATION, FOR THE THIRTY-FIVE YEARS, ENDING DECEMBER 31, 1913.



PNEUMONIA.

The death-rate from pneumonia shows only a small increase over the previous year, and of course is much lower than the average for the past decade. The death-rate per 1,000 inhabitants for the ten years is 13.94, while the death-rate for the present year per 1,000 inhabitants is 11.35.

DEATHS IN NEW JERSEY FROM PNEUMONIA, WITH AGE AT DEATH, FOR THE YEAR ENDING DEC. 31, 1913 WERE:

DEATHS FROM PNEUMONIA.	AGE PERIODS.																		Total.
	Under 1 mo.	Under 1 year.	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	
	80	445	452	69	24	54	73	87	108	132	147	170	142	164	363	338	138	23	3,009

DEATHS AMONG CHILDREN.

The death-rate of children under one year per 10,000 inhabitants, is lower than for any period during the past thirty-five years. However, deaths of children from one to five years of age show a slight increase over the previous year.

There is no doubt that the various Welfare Societies organized for the purpose of decreasing infant mortality are doing excellent work, and in order that these organizations may be of still more benefit it is important that all births be promptly registered, so that valuable information regarding the care and health of the infant may be furnished by the local board of health, or the society in charge of reducing infant mortality, as the case may be.

SOME FIGURES REGARDING DEATHS IN THE STATE IN 1913 ARE:

DEATHS.	NEW JERSEY.											
	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Total deaths.	31,319	31,820	35,298	35,864	35,670	37,408	35,597	36,359	39,494	38,612	37,772	39,425
Deaths under five years.	9,802	9,950	10,913	9,864	11,246	10,867	10,869	11,137	11,648	10,740	10,309	10,686
Deaths under five years from diarrhoea.	1,857	1,603	2,354	2,290	2,365	2,453	2,561	2,350	2,929	2,611	2,464	2,440
Per cent. of deaths under five years to total deaths.	31.30	31.27	30.92	29.13	31.53	29.05	30.53	30.63	29.49	27.82	27.29	27.10
Deaths under five years per 10,000 population.	49.81	44.34	53 00	46.00	51.21	48.33	47.25	47.34	45.91	41.06	38.26	38.54

Deaths from one to five years per 10,000 population, 1913, 11.34.
Deaths under one year per 10,000 population, 1913, 27.20.
The average death-rate per 10,000 population for sixteen years, ending in 1913 of children under five years was 48.20.

DEATHS IN NEW JERSEY FROM DIARRHOEAL DISEASES OF CHILDREN.

AGE PERIODS.	Deaths from diarrhoeal diseases.	Deaths from all causes among children under five years of age.
Under one month.	188	2,903
Over one month and under one year.	1,774	4,639
One to five.	478	3,144
Total.	2,440	10,686

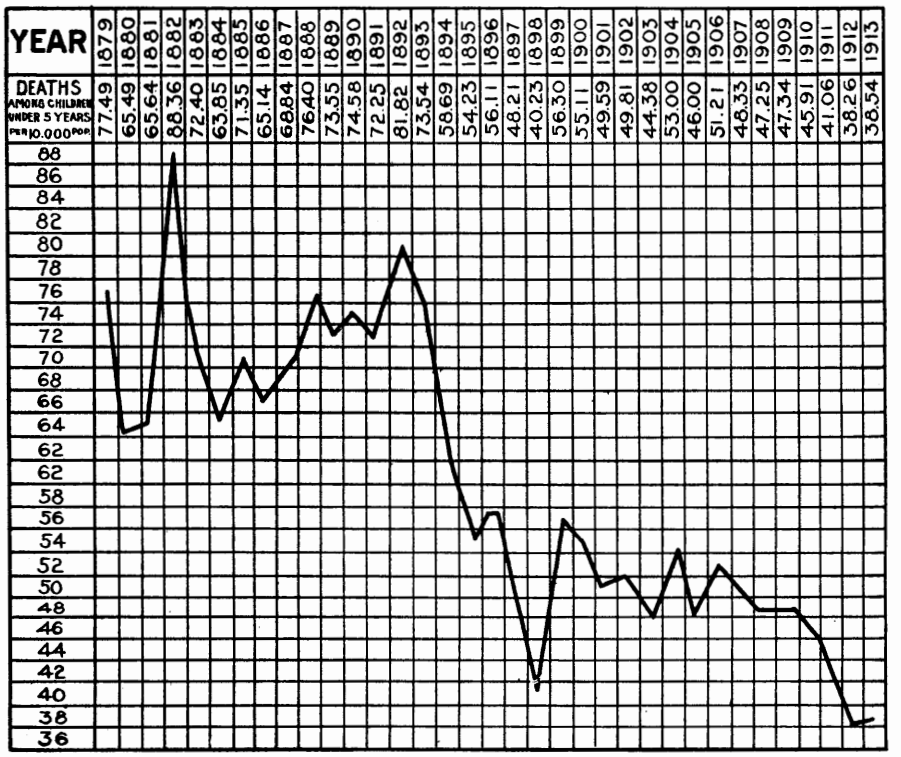
STATISTICS REGARDING INFANT DEATHS IN CERTAIN NEW JERSEY CITIES IN 1913.

NAME OF PLACE.	1909.	1910.	1911.	1912.	1913.			
	Total deaths.	Total deaths.	Total deaths.	Total deaths.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.
Atlantic City	679	800	796	767	838	173	20.64	33.73
Bayonne	678	827	815	850	803	296	36.86	46.60
Bloomfield	152	168	146	140	167	50	29.94	29.22
Bridgeton	210	216	247	189	221	46	20.81	31.59
Burlington	134	150	122	150	144	36	25.00	42.28
Camden	1,480	1,627	1,626	1,519	1,680	527	31.37	52.05
Dover	111	100	98	90	83	31	37.35	38.10
East Orange	322	370	335	317	346	54	15.61	13.54
Elizabeth	1,141	1,124	1,202	1,158	1,158	380	32.82	46.83
Englewood	135	156	140	134	177	30	16.95	26.97
Gloucester City	162	147	131	125	138	38	27.54	36.87
Hackensack	191	228	218	219	235	74	31.49	46.77
Harrison	180	237	194	211	195	68	34.87	43.86
Hoboken	1,241	1,329	1,266	1,140	1,254	336	26.79	45.88
Irvington	127	142	160	151	189	38	20.11	25.86
Jersey City	4,404	4,407	4,384	4,028	4,295	1,265	29.45	43.80
Kearny	207	276	267	270	248	61	24.60	28.12
Long Branch	262	292	284	335	286	59	20.63	42.24
Millville	151	149	166	169	170	49	28.82	38.31
Montclair	277	324	313	318	347	86	24.78	34.88
Morristown	254	296	293	248	287	69	24.04	54.23
Newark	5,516	5,784	5,451	5,430	5,597	1,491	26.64	38.63
New Brunswick	487	496	474	505	555	184	33.15	78.16
North Plainfield	65	78	83	87	82	14	17.07	21.81
Orange	447	525	540	563	516	126	24.42	39.67
Passaic City	783	819	830	909	871	423	49.60	66.53
Paterson	1,888	1,850	1,891	1,822	1,779	423	23.78	31.56
Perth Amboy	432	507	468	517	537	276	51.40	76.97
Phillipsburg	158	213	183	189	172	52	30.23	36.53
Plainfield	295	324	295	298	309	79	25.57	36.24
Rahway	121	99	106	134	132	27	20.45	27.69
Red Bank	102	113	115	121	103	28	27.18	34.66
Salem City	91	94	104	117	115	35	30.43	52.11
South Amboy	94	108	99	100	88	19	21.59	25.48
Summit	97	138	87	139	120	21	17.50	26.61
Town of Union	277	252	233	207	227	58	25.55	24.75
Trenton	1,661	1,969	1,842	1,714	1,927	591	30.67	56.61
West Hoboken	420	386	404	380	397	118	29.72	30.11
West New York	152	169	176	192	209	70	33.49	40.28
West Orange	116	95	106	112	97	31	31.96	24.13

NUMBER OF DEATHS IN NEW JERSEY AMONG CHILDREN UNDER FIVE YEARS OF AGE IN MANUFACTURING DISTRICTS, AND ALSO IN COUNTIES OUTSIDE OF THE LARGER TOWNS, WITH COMPARATIVE MORTALITY.

NAMES OF MANUFACTURING TOWNS	Estimated population 1913.	Number of deaths occurring in children under five years of age.	Number of deaths of children under five years of age for each 1,000 of population.	Population of counties outside of larger cities.	Number of deaths occurring in children under five years of age in counties outside of larger cities.	Number of deaths of children under five years of age for each 1,000 of population in counties outside of larger cities.
Bayonne (Hud. Co.)	63,515	296	4.66	40,560	139	3.43
Beverly (Bur. Co.)	2,069	6	2.90	56,408	230	4.08
Boonton (Morris Co.)	5,527	20	3.62	57,905	174	3.00
Bordentown (Bur. Co.)	4,356	10	2.30	56,408	230	4.08
Bound Brook (Som. Co.)	4,319	26	6.02	28,705	100	3.48
Bridgeton (Cumb. Co.)	14,560	46	3.16	23,933	47	1.96
Burlington (Bur. Co.)	8,515	36	4.23	56,408	230	4.08
Camden (Cam. Co.)	101,243	527	5.21	42,764	109	2.55
Carlstadt (Ber. Co.)	4,231	11	2.60	106,150	294	2.77
Elizabeth (U. Co.)	81,149	380	4.68	26,285	87	3.31
Garfield (Ber. Co.)	13,286	101	7.60	106,150	294	2.77
Gloucester City (Cam. Co.)	10,306	38	3.69	42,764	109	2.55
Hoboken (Hud. Co.)	73,238	336	4.59	40,560	139	3.43
Jersey City (Hud. Co.)	288,827	1,265	4.38	40,560	139	3.43
Lambertville (Hunt. Co.)	4,442	12	2.70	29,314	60	2.05
Lodi (Ber. Co.)	4,945	27	5.46	106,150	294	2.77
Millburn (Essex Co.)	4,043	7	1.73	34,195	78	2.28
Milltown (Mdx. Co.)	1,808	3	1.66	52,220	256	4.90
Millville (Cumb. Co.)	12,791	49	3.83	23,933	47	1.96
Newark (Essex Co.)	385,977	1,491	3.86	34,195	78	2.28
New Brunswick (Mdx. Co.)	23,541	184	7.82	52,220	256	4.90
Orange (Essex Co.)	31,747	126	3.97	34,195	78	2.28
Passaic City (Pas. Co.)	64,935	432	6.65	40,950	126	3.08
Paterson (Pas. Co.)	134,043	423	3.16	40,950	126	3.08
Perth Amboy (Mdx. Co.)	35,857	276	7.70	52,220	256	4.90
Phillipsburg (W. Co.)	14,234	52	3.65	30,621	95	3.10
Plainfield (U. Co.)	21,799	79	3.62	26,285	87	3.31
Rahway (U. Co.)	9,750	27	2.77	26,285	87	3.31
Raritan (Som. Co.)	3,503	17	4.85	28,705	100	3.48
Riverton Bor. (Bur. Co.)	1,927	2	1.04	56,408	230	4.08
Salem City (Salem Co.)	6,717	35	5.21	20,709	55	2.66
South River (Mdx. Co.)	5,484	67	12.22	52,220	256	4.90
Town of Union (Hud. Co.)	23,434	58	2.48	40,560	139	3.43
Trenton (Mer. Co.)	104,396	591	5.66	25,746	59	2.29
Vineland (Cumb. Co.)	5,695	24	4.21	23,933	47	1.96
Wharton (Mor. Co.)	3,402	18	5.29	57,905	174	3.00

CHART SHOWING DEATHS IN NEW JERSEY AMONG CHILDREN UNDER FIVE YEARS OF AGE, PER 10,000 POPULATION, FOR THIRTY-FIVE YEARS.

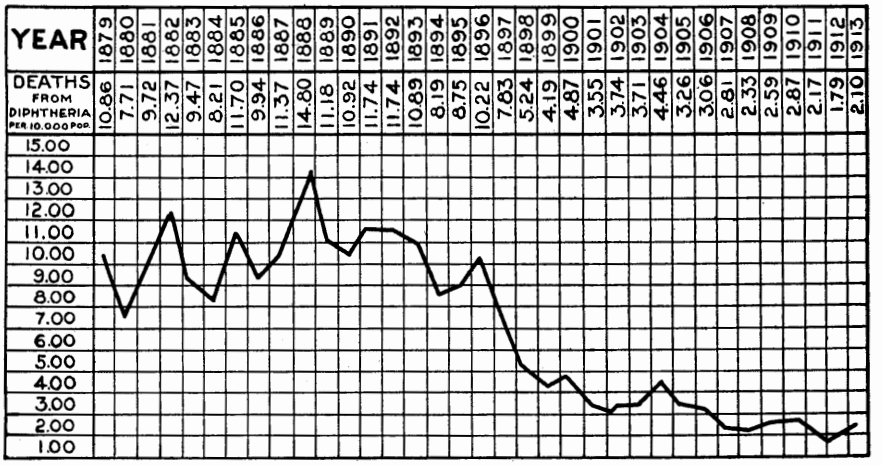


DIPHTHERIA.

A continued low death-rate from diphtheria is shown in the figures for the present year. Excellent work continues to be done by the State Laboratory of Hygiene in examining specimens in cases of suspected diphtheria.

Deaths in New Jersey from Diphtheria with ages of decedents, for year ending December 31, 1913, were: under 1 month, 4; under 1 year, 39; 1 to 5, 348; 5 to 10, 138; 10 to 15, 30; 15 to 20, 6; 20 to 25, 7; 25 to 30, 3; 30 to 35, 1; 35 to 40, 1; 40 to 45, 2; 45 to 50, 1; 50 to 55, 1; 55 to 60, 1; 70 to 80, 1. Total, 583.

CHART SHOWING DEATHS FROM DIPHTHERIA PER 10,000 POPULATION, IN NEW JERSEY, FOR THE THIRTY-FIVE YEARS ENDING DECEMBER 31, 1913.



TYPHOID FEVER.

The death-rate from typhoid fever for the year continues low compared with previous years. However, there is no reason why the deaths from this disease should not be greatly reduced during the coming year, and the small sum now spent in preventing this disease amounts to very little considering the great financial losses in consequence of the great number of deaths therefrom. There were 276 deaths in 1913, against 328 in 1912, 337 in 1911, and 392 in 1910.

It is hoped that additional laws may be passed, or the ones already in existence suitably amended, so that the State Board of Health will have full power to see that the potable waters of New Jersey are kept free from pollution.

THE AVERAGE ANNUAL DEATH-RATES FROM TYPHOID IN 1901-13, AND THE DEATH-RATE IN 1913 IN THE UNITED STATES REGISTRATION AREA AND NEW JERSEY, PER 10,000 INHABITANTS, WERE AS FOLLOWS:

	DEATHS FROM TYPHOID FEVER, PER 10,000 INHABITANTS.													
	Annual average 1901–1913	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Registration area of United States	2.69	3.24	3.44	3.43	3.19	2.81	3.21	3.03	2.52	2.29	2.35	2.10	1.65	1.79
New Jersey	1.64	1.83	2.17	1.92	1.87	1.68	1.86	2.06	1.60	1.28	1.55	1.29	1.22	1.00

DEATHS FROM TYPHOID FEVER IN NEW JERSEY, PER 10,000 POPULATION, BY COUNTIES, FOR THIRTEEN YEARS ENDING DEC. 31, 1913, WITH AVERAGES.

COUNTIES.	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	Average for thirteen years.
Atlantic County	2.67	2.74	2.81	1.97	2.01	1.60	2.30	1.62	1.13	1.53	2.15	1.96	1.14	1.97
Bergen County	.99	1.08	1.16	1.24	1.10	1.15	1.29	.71	.85	1.16	.69	.72	1.00	1.01
Burlington County	2.58	2.23	3.61	2.89	2.58	3.18	4.41	4.04	2.00	3.31	1.33	3.36	1.59	2.85
Camden County	2.11	2.44	1.07	2.46	1.81	2.98	2.99	2.00	1.28	1.97	1.23	1.46	1.88	1.98
Cape May County	2.26	.60	.75	....	1.73	1.65	2 62	.50	1.45	1.52	.49	.48	1.42	1.19
Cumberland County	1.94	2.32	.96	2.29	2.88	1.15	2.29	1.71	1.32	1.99	1.43	1.06	.88	1.71
Essex County	1.93	2.12	2.04	1.41	1.39	1.79	2.00	1.16	1.22	1.21	1.03	.81	.66	1.44
Gloucester County	2.81	2.17	2.16	1.54	1.16	3.14	1.41	1.39	1.09	1 61	3.43	2.60	1.28	1.98
Hudson County	1.74	1.86	1.66	1.99	2.66	1.71	1.58	1.11	.78	.93	.97	.72	.83	1.43
Hunterdon County	1.45	2.03	1.74	1.45	.90	1.80	2.44	.62	.62	1.49	.30	1.78	2.37	1.46
Mercer County	1.75	6.04	5.14	3.87	2.35	3.26	6.69	4.43	3.10	4.14	3.89	3.26	1.86	3.83
Middlesex County	1.47	1.95	1.05	2.63	1.55	.70	1.92	1.68	1.17	.96	1.19	1.73	.96	1.46
Monmouth County	1.92	2.36	1.63	1.95	2.62	2.47	1.99	2.41	2.16	2.22	2.91	2.87	1.62	2.24
Morris County	1.06	1.21	1.75	1.00	2.21	1.75	1.01	.72	1.14	1.34	.92	.78	.25	1.16
Ocean County	1.00	2.98	.49	2.43	3.35	.95	1.41	....	.92	3.28	1.40	1.40	2.32	1.69
Passaic County	2.19	2.50	2.02	.75	1.14	1.33	1.19	1.06	.99	1.16	.76	.65	.63	1.26
Salem County	...	1.96	1.96	3.53	2.28	3.03	1.51	2.62	1.49	1.48	2.58	1.10	1.09	1.89
Somerset County	.60	.59	1.16	.86	2.48	1.35	.27	2.35	2.31	1.80	3.32	.25	....	1.49
Sussex County	.41	2.51	.80	1.97	.43	1.71	1.29	3.94	1.32	1.87	.73	.36	....	1.33
Union County	2.64	2.57	2.32	1.99	1.37	1.66	1.37	2.19	1.67	1.71	.83	1.61	1.36	1.79
Warren County	.85	4.74	1.05	2.35	1.73	1.95	1.43	.71	1.18	2.78	.69	.68	.89	1.69
The State	1.83	2.17	1.92	1.87	1.68	1.86	2.06	1.60	1.28	1.55	1.29	1.22	1.00	1.64

DEATHS FROM TYPHOID FEVER IN NEW JERSEY, FOR YEAR ENDING DEC. 31, 1913, AND IN URBAN AND RURAL DISTRICTS.

	Aggregate population.	Deaths from typhoid.	Deaths from typhoid per 10,000 population.
State	2,772,981	276	1.00
Cities	1,960,277	202	1.03
Rural Districts	812,704	74	.91

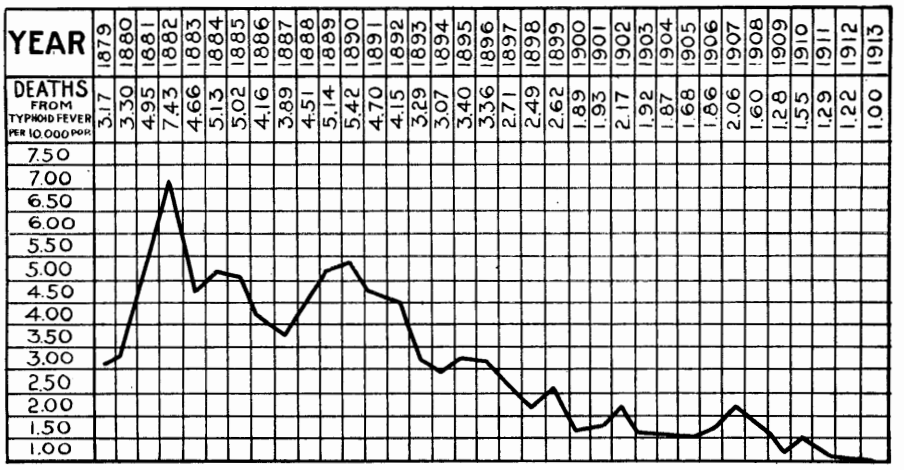
Deaths from Typhoid Fever in New Jersey, by age periods, in 1913 were: Under 1 year, 2; 1 to 10, 21; 10 to 20, 61; 20 to 30, 64; 30 to 40, 58; 40 to 50, 37; 50 to 60, 18; 60 to 70, 10, 70 to 80, 3; over 80, 2. Total 276.

Deaths from Typhoid Fever in New Jersey for the twelve years preceding 1913 were: 1901, 352; 1902, 428; 1903, 388; 1904, 384; 1905, 360; 1906, 408; 1907, 464; 1908, 367; 1909, 301; 1910, 392; 1911, 337, 1912, 328.

Deaths from Typhoid Fever in the counties of New Jersey for year ending December 31, 1913, were: Atlantic, 9; Bergen, 16; Burlington, 11; Camden, 29; Cape May, 3; Cumberland, 5; Essex, 38; Gloucester, 5; Hudson, 49; Hunterdon, 8; Mercer, 25; Middlesex, 12; Monmouth, 16; Morris, 2; Ocean, 5; Passaic, 15; Salem, 3; Somerset, 0; Sussex, 0; Union, 21; Warren, 4.

Deaths from Typhoid Fever per 10,000 inhabitants in the counties of New Jersey for year ending December 31, 1913, were: Atlantic, 1.14; Bergen, 1.00; Burlington, 1.59; Camden, 1.88; Cape May, 1.42; Cumberland, .88; Essex, .66; Gloucester, 1.28; Hudson, .83; Hunterdon, 2.37; Mercer, 1.86; Middlesex, .96; Monmouth, 1.62; Morris, .25; Ocean, 2.32; Passaic, .63; Salem, 1.09; Somerset, 0; Sussex, 0; Union, 1.36; Warren, .89.

CHART SHOWING DEATHS FROM TYPHOID FEVER IN NEW JERSEY, PER 10,000 POPULATION FOR THIRTY-FIVE YEARS.



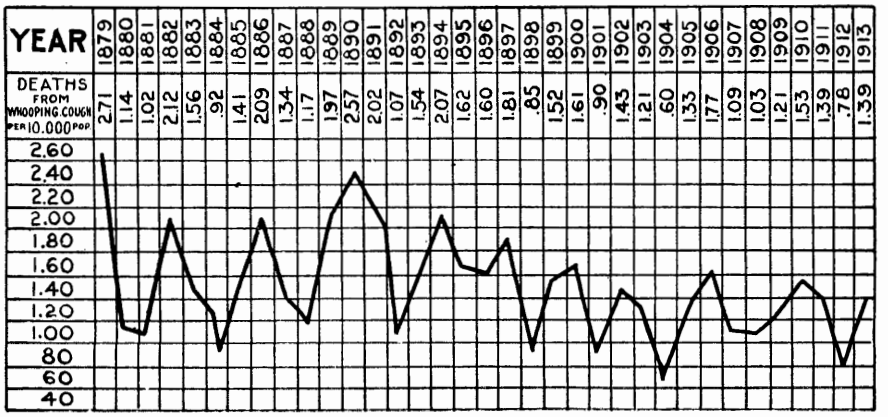
WHOOPING COUGH.

The number of deaths from whooping cough for the past year was 386, and the death-rate per 10,000 inhabitants, 1.39.

A number of local epidemics of whooping cough were prevalent in various parts of the State, throughout the year. However, the control of this disease is very difficult, and for that reason local boards of health make no effort to quarantine cases brought to their attention.

Deaths in New Jersey from Whooping Cough, with ages of decedents, for year ending December 31, 1913, were: Under 1 month, 12; under 1 year, 205; 1 to 5, 153; 5 to 10, 15; 80 to 90, 1. Total, 386.

CHART SHOWING DEATHS FROM WHOOPING COUGH IN NEW JERSEY, PER 10,000 POPULATION, FOR THE THIRTY-FIVE YEARS ENDING DECEMBER 31, 1913.

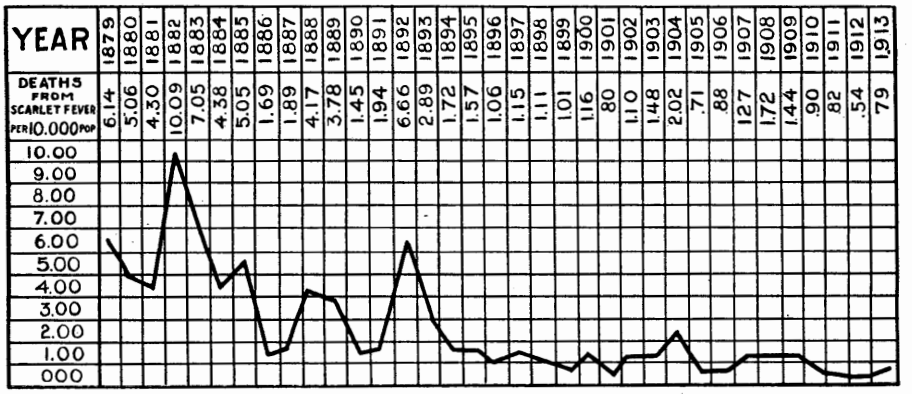


SCARLET FEVER.

The death-rate from scarlet fever for the year ending December 31, 1913, was .79 per 10,000 inhabitants, and the total number of deaths in the State was 218, the largest number (112) occurring in children from one to five years of age.

Deaths in New Jersey from Scarlet Fever, with age at death, for year ending December 31, 1913, were: Under 1 year, 8; 1 to 5, 112; 5 to 10, 53; 10 to 15, 9; 15 to 20, 14; 20 to 25, 6; 25 to 30, 6; 30 to 35, 5; 35 to 40, 2; 40 to 45, 2; 55 to 60, 1. Total, 218.

CHART SHOWING DEATHS FROM SCARLET FEVER IN NEW JERSEY, PER 10,000 POPULATION, FOR THIRTY-FIVE YEARS.

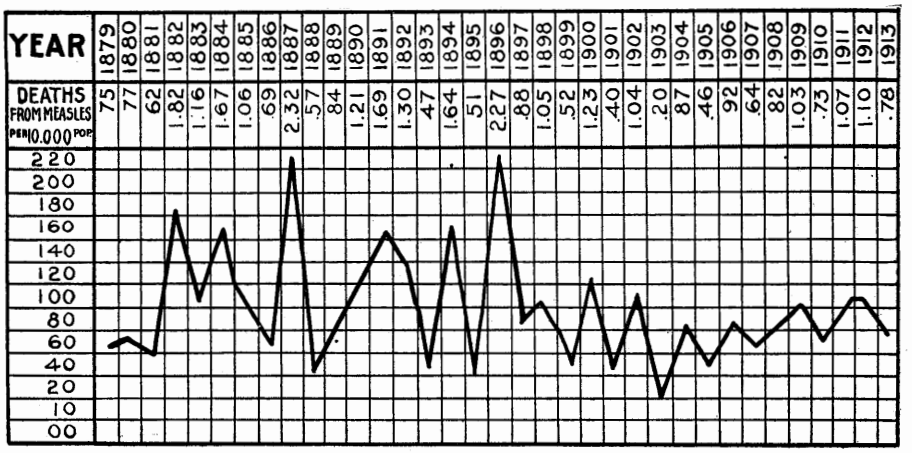


MEASLES.

For the year ending December 31, 1913, 216 deaths from measles occurred in New Jersey, and over one-half of these deaths occurred in children from one to five years of age. The death-rate for the year per 10,000 inhabitants was .78, which is the lowest for any period during the past three years.

Deaths in New Jersey from Measles, with age at death, for year ending December 31, 1913, were: Under 1 month, 1; under 1 year, 62; 1 to 5, 125, 5 to 10, 23; 10 to 15, 2; 20 to 25, 1; 25 to 30, 2. Total, 216.

CHART SHOWING DEATHS IN NEW JERSEY FROM MEASLES, PER 10,000 POPULATION, FOR THIRTY-FIVE YEARS ENDING DECEMBER 31, 1913.



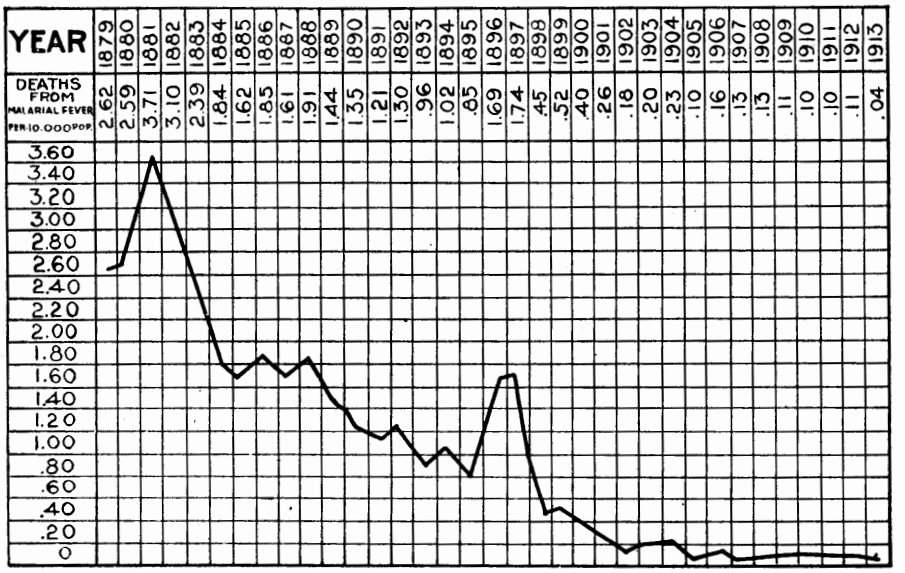
MALARIAL FEVER.

The number of deaths from malarial fever for the year ending December 31, 1913 was 11, and the death-rate per 10,000 inhabitants was .04, which is the lowest for the past thirty-five years, or within the history of this department. In 1912 it was .11, in 1910 and 1911, .10, and in 1909, .11.

It was thought during the past five years that the minimum number of deaths from this disease had been reached. However, there is no doubt that the warfare being waged against the mosquito has had very material effect in reducing the death-rate from this disease.

Deaths in New Jersey from Malarial Fever for thirty-five years have been: 1879, 268; 1880, 293; 1881, 431; 1882, 379; 1883, 290; 1884, 230; 1885, 209; 1886, 243; 1887, 217; 1888, 264; 1889, 203; 1890, 195; 1891, 180; 1892, 198; 1893, 148; 1894, 162; 1895, 144; 1896, 119; 1897, 132; 1898, 82; 1899, 96; 1900, 84; 1901, 50; 1902, 36; 1903, 40; 1904, 47; 1905, 21; 1906, 33; 1907, 29; 1908, 30; 1909, 25; 1910, 25; 1911, 25; 1912, 29; 1913, 11.

CHART SHOWING DEATHS FROM MALARIAL AFFECTIONS, PER 10,000 INHABITANTS, IN NEW JERSEY, FOR THIRTY-FIVE YEARS.



SMALL-POX.

During the year ending December 31, 1913, no deaths occurred in New Jersey from small-pox, and there has been no epidemic from this disease for the past ten years. However, during the past thirty-five years the records show that in only nine of these years has the State been entirely free from this disease. There were two deaths in 1912. The importance of local boards of health requiring vaccination of all persons, especially children, is again urged, and in case the disease appears in a community re-vaccination is recommended.

CANCER.

The accompanying chart, showing the number of deaths from cancer for the past thirty-five years, is quite alarming because of the fact that the death-rate from this disease has almost doubled during the time covered by the records of this department. However, it is hoped that the near future will bring some method of treating cancer which will result in a decreased death-rate from the disease.

DEATHS FROM CANCER IN NEW JERSEY FOR THIRTY-FIVE YEARS, PER 10,000 POPULATION, HAVE BEEN:

YEARS.	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Deaths from cancer.	378	425	451	402	461	484	498	546	574	612	579	640
Deaths from cancer per 10,000 population. . . .	3.70	3.75	3.88	3.37	3.81	3.87	3.89	4.15	4.21	4.45	4.11	4.41

YEARS.	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902
Deaths from cancer.	642	688	723	731	770	811	857	852	946	921	1,042	1,031
Deaths from cancer per 10,000 population. . . .	4.34	4.55	4.69	4.63	4.60	4.71	4.33	4.70	5.10	4.84	5.43	5.24

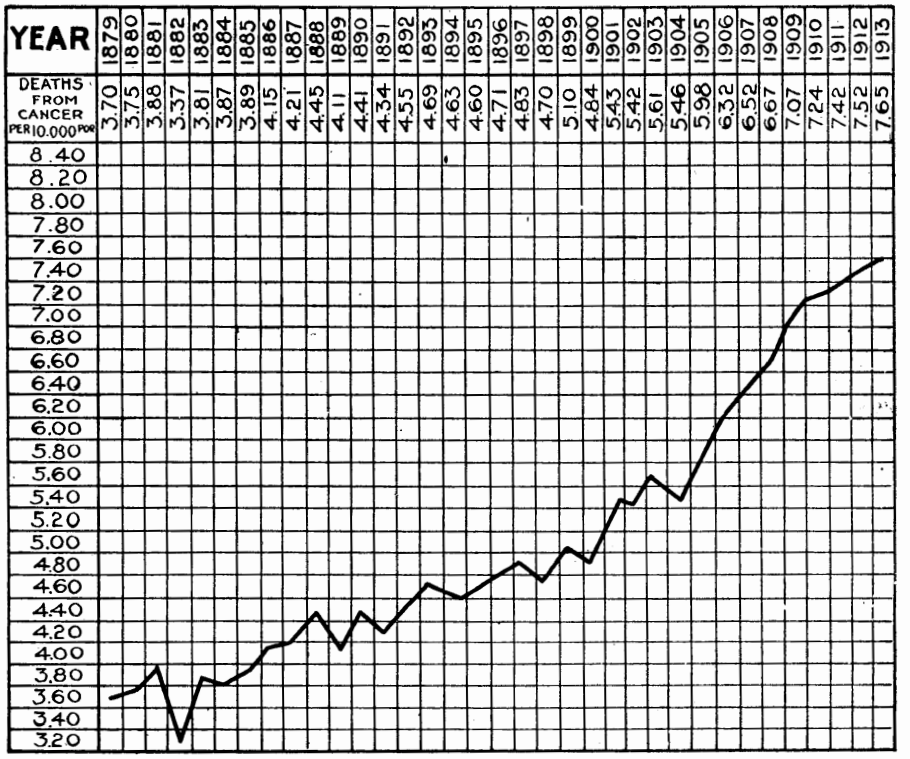
YEARS.	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Deaths from cancer.	1,132	1,125	1,282	1,389	1,466	1,535	1,663	1,838	1,942	2,026	2,120
Deaths from cancer per 10,000 population. . . .	5.61	5.46	5.98	6.32	6.52	6.67	7.07	7.24	7.42	7.52	7.65

DEATHS FROM CANCER IN NEW JERSEY, SHOWING ORGANS AFFECTED, FOR YEAR ENDING DEC. 31, 1913.

CANCER.	Under 1 mo.	Under 1 year	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90	Age not stated.	Totals.
Of the mouth. . .	..	..	1	. . .	. . .	1	. . .	. . .	3	3	7	7	9	19	32	30	4	2	..	118
Of the stomach and liver.	..	..	4	1	. . .	. . .	4	3	12	22	62	66	117	136	250	167	56	1	..	901
Of the intestines and rectum. . .	..	..	3	. . .	. . .	. . .	. . .	8	6	9	17	35	22	38	99	65	22	. . . . .	..	324
Of the female genital organs	..	..	. . .	. . .	. . .	. . .	2	7	11	16	53	49	47	38	57	37	8	1	..	326
Of the breast. . .	..	..	. . .	. . .	. . .	. . .	. . .	1	5	14	14	18	24	24	46	32	9	. . . . .	..	187
Of the skin.	..	..	1	. . .	. . .	. . .	2	. . .	. . .	1	2	2	4	6	11	9	4	. . . . .	..	42
Others.	..	..	5	4	3	2	4	2	6	7	20	18	23	23	51	42	12	. . . . .	..	222
Total.	..	..	14	5	3	3	12	21	43	72	175	195	246	284	546	382	115	4		2,120

Deaths from cancer in New Jersey for the twelve years preceding 1913 were: 1901, 1,043; 1902, 1,031; 1903, 1,132; 1904, 1,125; 1905, 1,282; 1906, 1,389; 1907, 1,466; 1908, 1,535; 1909, 1,663; 1910, 1,838; 1911, 1,942; 1912, 2,026.

CHART SHOWING DEATHS IN NEW JERSEY FROM CANCER, PER 10,000 POPULATION, FOR THIRTY-FIVE YEARS, 1879-1913.



SUICIDE.

The number of deaths from suicide for the year ending December 31, 1913, was 444, a slight increase over the previous year.

DEATHS IN NEW JERSEY FROM SUICIDE, FOR YEAR ENDING DEC. 31, 1913.

MODE OF DEATH.	AGE.																	Not stated.	Totals.
	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90			
By poison	...	...	...	6	12	16	9	10	7	4	7	2	9	3	1	...			86
By asphyxia	...	...	1	4	7	9	8	8	5	16	4	16	20	4	1	...			103
By strangulation	...	...	...	3	3	3	7	6	3	10	15	5	9	3	4	...			71
By drowning	...	...	...	1	2	3	...	2	2	5	7	4	3	2	...	...			31
By firearms	...	...	2	8	10	8	12	14	16	8	7	10	17	4	...	...			116
By cutting instruments	...	...	...	...	...	3	...	7	3	3	4	2	3	1	1	...			27
By precipitation from height	...	...	...	...	...	1	...	...	1	1	1	2	1	...	...	...			7
By crushing	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...			1
Others	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...			2
Totals	...	...	3	22	34	43	36	47	37	48	46	41	63	17	7	...			444

The countries of birth of the suicides were: United States, 138; England, 13; France, 3; Germany, 57; Ireland, 13; Italy, 23; Scotland, 4; Hungary, 21; Sweden, 4; Russia, 22; Holland, 1; other foreign, 9; not stated, 16. Total, 444.

BRIGHT'S DISEASE.

For the year ending December 31, 1913, 3,015 deaths from Bright's disease occurred in the State of New Jersey.

The total number of deaths from Bright's Disease, by years are: 1901, 1,246; 1902, 1,371; 1903, 1,686; 1904, 1,722; 1905, 1,840; 1906, 2,238; 1907, 2,518; 1908, 2,290; 1909, 2,486; 1910, 2,679; 1911, 2,772; 1912, 2,819. The statistics by counties and towns appear in other tables.

CONTAGIOUS DISEASES OF ANIMALS.

During the year ending October 31, 1914, the State Board of Health was called upon to deal with a larger number of cases of contagious diseases of animals than in most any other period of its history. During the summer cases of contagious catarrhal conjunctivitis were discovered in certain counties in South Jersey and it became necessary to establish quarantine for its prevention upon several farms. Almost at the same time cases of anthrax appeared in this section, and precautionary measures were also adopted.

In July the State of New York, through the State Board of Agriculture, issued an order prohibiting the admission of horses into New York State that had not been examined for the purpose of learning whether they were suffering from glanders, and no horse would be admitted until a negative test had been made.

Just at the close of the year cases of Foot and Mouth Disease appeared and, although the major portion of these cases were reported in 1915, it is deemed wise to give in this report a brief statement as to the epidemic up to the date of December 15th in order that the record of this outbreak will appear in this report rather than in a report one year hence.

FOOT AND MOUTH DISEASE.

The history of epidemics of Foot and Mouth Disease shows that it has occurred in nearly every cattle-raising country. Few epidemics have been recorded in the United States, the one of special interest being that of 1902, when herds of cattle in Massachusetts, New Hampshire and Vermont, were affected. During the epidemic 4,712 cases occurred. In nearly every instance the disease has been introduced into the United States from foreign countries. Up to the present by the enforcement of strict quarantine measures the country has been almost entirely free from its ravages. The specific cause of the disease has never been definitely determined.

As the discovery of early cases is essential to effective control of the disease, farmers and cattle owners should be acquainted with its symp-

toms so that an early report may be made to the Federal or State authorities of any suspicious cases. The disease is characterized by a dripping of saliva, followed by eruptions or vesicles in the mouth, which finally break and form small ulcerations. These vesicles also appear upon the udders of cows and upon the feet. Within seventy-two hours after the exposure of one animal to another the disease may appear. Fortunately its duration is seldom over twenty days, but the animals are left in such a condition as to be almost worthless.

When the disease was first discovered in the Chicago Stock Yards the Federal authorities immediately took control and issued a general quarantine. Since that time fifteen States in the Union have either been placed under limited or complete quarantine regulations. The Federal authority extends to all animals of interstate traffic and State regulations apply to the animals within the various States.

Early in November cases of the disease were discovered on the Webber Farm in North Bergen Township, Hudson County. The Federal authorities immediately, cooperating with the State authorities, caused the quarantine of twenty-five animals, together with hogs, sheep and other ruminants located on the premises. Another herd of cattle adjacent to these were placed under quarantine.

The first cases in our State were located in Hudson County and there was conclusive evidence that the infection had come into the State from animals shipped from stock yards in New York. Upon receipt of this information the Board at once issued the following quarantine notice:

To whom it may concern:

The fact has been determined by the State Board of Health and notice is hereby given that a contagious and communicable disease known as Foot and Mouth Disease exists in livestock in the State of New Jersey. At a meeting of the Board of Health of the State of New Jersey on November 10, 1914, under authority conferred by an act concerning contagious and infectious diseases among animals and to repeal certain acts relating thereto, approved May 4, 1886, the following regulation was passed by the Board:

All persons now having in their possession any cattle, sheep or other ruminants or swine shipped into this State since October 1, 1914, are required to hold same in quarantine during the present outbreak of Foot and Mouth Disease or until said animals are released by the State Board of Health. The removal of any of the above mentioned animals from the premises where they are now kept is prohibited under penalty of a fine of not more than $200 or by imprisonment not exceeding one year or both.

All persons now having in their possession any cattle, sheep or ruminants or swine shipped into the State since October 1st, shall immediately notify the State Board of Health of the date of shipment, the place of shipment and the present location of the animals.

All persons owning or having interest in such live stock are directed to report the presence of any of the following peculiar lesions or symptoms: Ulceration of the skin around the hoofs, nostrils, lips, teats or udder. Ulceration of the gums, lips or tongue. If excessive slobbering is noticed in any of the animals in the herd, a thorough examination must be immediately made to determine the presence of ulcers. In case of

doubt regarding the existence of this disease in a herd, the owner should immediately consult a reputable veterinarian.

When it became apparent that large numbers of animals should be destroyed, the State Board of Health, having only $2,000 at its command for the entire supervision of contagious diseases of animals, made a request for additional funds to meet the situation, and $2,500 was allowed from an available emergency fund. The $2,000 recently appropriated were almost entirely expended in the destruction of thirty-seven animals on two farms and in the investigation of many herds for the purpose of learning of the existence of any other cases. With the increasing number of animals to be destroyed, it was found that the money from the emergency fund would be only sufficient to maintain quarantine on premises and to supervise disinfection. The following resolutions were adopted by the Board at a meeting held on November 24, 1914.

Whereas, the Secretary and Assistant Secretary in charge of contagious diseases of animals have again taken up with the Governor the matter relative to the outbreak of Foot and Mouth Disease among cattle in this State and have reported to this Board that the total amount of money appropriated to the Board for the fiscal year beginning November 1, 1914, for the control of contagious diseases of animals has been exhausted in the campaign against Foot and Mouth Disease, and

Whereas, the Governor of New Jersey has verbally promised the Secretary of this Board to allow an additional sum of $2,500 only for controlling the spread of said disease, therefore be it

Resolved, that the State Board of Health is unable to proceed further with slaughtering of any animals affected with Foot and Mouth Disease or exposed thereto or to pay for any hay, straw, or other materials which may have come in contact with infected animals until such time as this Board, through the Governor or the Legislature, is granted an additional sum of money for this purpose, and be it further

Resolved, that this Board instruct its inspectors to maintain a strict quarantine over the premises upon which animals affected with Foot and Mouth Disease may be found for a period of at least twenty-five days after the date of reported exposure, and be it further

Resolved, that this quarantine be maintained under the direction of representatives of this Board only so long as the money now available will permit.

The Federal authorities cooperated with the Board in all matters pertaining to the spread of the epidemic and the State Tuberculosis Commission also gave assistance in every way by placing the men in their employ at the disposal of the State Board of Health for the purpose of rapidly inspecting all herds in the State to which animals had been added from infected States since October 1, 1914.

Following the discovery of the cases of this disease in Hudson County, other herds containing large numbers of animals were found to be affected, and it was evident that it would be impossible to cause the destruction of these animals unless additional funds were available. At this time an opinion was given by the Attorney General of the State that the funds of the Tuberculosis Commission, amounting to nearly

$50,000, could be used for the destruction of cattle. At a conference held December 1, 1914, of the State Tuberculosis Commission and the State Board of Health the following agreement was made:

"The State Board of Health and the Commission on Tuberculosis in Animals today held a joint meeting, at which an agreement was reached to effectually control the outbreak of Foot and Mouth Disease which had found a foothold in New Jersey, by killing forthwith all infected cattle now quarantined, or any other cattle that may hereafter be found affected with the disease."

In locating these cattle the Veterinarian of the Commission on Tuberculosis in Animals assisted the State Board of Health in the inspection of the cattle in the State, and where cases of infection were reported, the premises were immediately quarantined, and all known cases today are held under quarantine by the State Board of Health.

The attention of the Governor and the Attorney General was called to the seriousness of the situation, and the fact emphasized that infected cattle should be immediately slaughtered, and their owners reimbursed, as provided by law. The Federal authorities agreed to pay their portion, which is one-half of the valuation as stated by law, and one-half of the expense of burial and disinfection, the other half to be paid by the State. The Attorney General advised the State Board of Health that they could not incur any expense, as they were without funds, their appropriation being exhausted.

The Governor was urged to call a special session of the Legislature by the President of the State Board of Agriculture. He immediately appropriated $2,500, from his emergency fund, but could not see any immediate necessity of calling an extra session, feeling that his letter to the Bureau of Animal Industry stating that the money would be appropriated at the coming Legislature would be sufficient to guarantee the owners of cattle adequate reimbursement.

Again the Attorney General was appealed to, and his attention was called to Section 7, Chapter 202, Laws of 1911, which empowered "the Commission on Tuberculosis in Animals to cooperate with the Bureau of Animal Industry of the United States in any general or national system which may be adopted by such Bureau for the prevention of the spread of bovine tuberculosis, *or any contagious or infectious disease,* and its eradication in the United States and its territories." Under that section of the law, the Governor and Attorney General ruled that the Commission on Tuberculosis in Animals can use its funds, if they so desire, to reimburse the owners of cattle killed by order of the State Board of Health.

At a joint meeting of the State Board of Health and the Commission on Tuberculosis in Animals, orders were given to immediately kill infected or exposed cattle, and the funds of the Commission on Tuberculosis in Animals were made available to reimburse the owners of slaughtered cattle, as provided by statute.

The State Board of Health and the Commission on Tuberculosis in Animals are limited as to the amount of the valuation of these animals to forty dollars for cattle not registered, and $100 for cattle registered, one-half of which is to be paid by the State of New Jersey and the other half of which is to be paid by the United States Government. The law under which this valuation was based is a very old statute, having been passed in 1886, when the value of cattle was much less than it is today.

The cattle have been ordered killed under this statute, and an appraisement of their value made. The amount provided by the statute will be paid by the State, the appraised value will be placed on file in the offices of the State Board of Health and the Commission on Tuberculosis in Animals.

Proceeding under this agreement, a representative of the State Board of Health was authorized to order the destruction of infected animals. On the Fourth of December information was received from the Attorney General's Department that it was absolutely essential that the Tuberculosis Commission should order and cause the destruction of animals. The representative of the State Board of Health in Jersey City was at this time notified of the opinion and was directed not to order the further destruction of animals.

At a meeting of the representatives of the State Board of Health and the Commission on Tuberculosis in Animals held on December 4, 1914, the State Board of Health made formal request for the Commission on Tuberculosis in Animals to assume the destruction of all infected animals, provision being made that the State Board of Health would supervise and maintain proper quarantine and the disinfection of premises. As a result of this arrangement, the State Board of Health, cooperating with the Federal authorities and the Commission on Tuberculosis in Animals, were able to kill over 500 animals that were either infected with the disease or exposed to it.

Up to December 15, 1914, the cases which have been reported occurred in Essex, Hudson, Hunterdon, Salem, Somerset Counties. It cannot be foreseen at the present time how far-spreading this epidemic will be but the indications are that, having removed various foci of infection, in a short time only scattered cases will have to be dealt with.

It is evident that the laws at present relating to the care of contagious diseases of animals should be revised. The original law of 1886 does not fully meet all the requirements necessary to efficiently control diseases of animals, and the laws of 1911 defining the powers of the Tuberculosis Commission seem in many ways to conflict with the act giving the State Board of Health supervision of contagious diseases of animals. In addition to this the appropriations which are granted for this purpose are insufficient to meet an emergency requiring the expenditure of very large sums of money. This is a matter which should receive the consideration of the coming Legislature and some arrangement should be made by

which a single bureau should supervise all contagious diseases of animals with sufficient funds to handle the problems which may be presented.

HOG CHOLERA.

This disease appeared in large numbers of localities throughout the State. As many farmers failed to make reports to the State Board of Health of cases and employed private veterinarians to advise them as to the care and treatment, the exact number of cases which have occurred cannot be given.

However, the Board was called upon to investigate an epidemic which occurred in the southeasterly part of the State. In the country lying west of the seaside resorts along the Jersey coast, it is the custom for farmers to engage in the raising of hogs. These animals are fed upon the garbage and swill collected from the numerous hotels and boarding houses. The character of this material and the way in which the animals are kept are such that the animals are likely to disease.

Late in the Fall of 1913 after the hotels had closed a report came to the Board that a number of animals affected with hog cholera had been sold to farmers and also a large number had been shipped to Newark, N. J. for slaughter. Dr. Shaw and Dr. Loblein, representing the State Board of Health, made an investigation and it was found that about September 6th three owners of animals began the sale of the animals in their possession, of which the number was 150. As soon as some of them were delivered it was noted by the purchasers that the animals were indisposed and several of them died. A post mortem examination was made of some of these hogs and it was determined that the cases were typical of cholera.

In addition to the hogs which were sold to local parties a large shipment was made to a slaughter-house in Newark. No proof could be secured at the time the animals were shipped that they were diseased and yet there was evidence that the owners of animals, finding that the animals were affected with cholera, hastened to have them slaughtered. The shipment was traced to the slaughter-house and it was learned that the animals in the consignment of hogs from Bay Head were immediately sold.

The unsanitary conditions which were found to exist on premises upon which the hogs were originally kept during the summer undoubtedly had some effect in lowering the vitality of such hogs and thereby lowering their resistance to the chronic infection which it appears from data obtained had existed in this locality for several months. If the owners of hogs in the State could be only induced to notify the State Board of Health as soon as an outbreak of this disease appears in their pens so that the infected and exposed hogs could be treated and prevented from spreading the infection, the result would be a lessening of the loss of animals from this disease.

FORAGE POISONING.

Three deaths from this disease occurred in animals in Cape May County. Upon one of the larger farms in Sussex County ten animals died as a result of eating deadly night-shade.

It is the practice of the State Board of Health when cases of this disease are reported to immediately send a veterinarian to visit the premises and instruct the owner as to the care which should be used in the pasturing of cattle so that they may not come in contact with materials of a poisoning nature.

In some instances the poisoning was due to the use of mouldy corn and the farmers were advised against this practice.

ANTHRAX.

This disease, which has from time to time occurred in Cumberland and Salem Counties in our State, made its reappearance in August, 1913. The first case which was reported was on a farm in Mannington Township, about three-quarters of a mile from Salem, and on the direct road leading from Salem to Woodstown. On the adjoining farm cases were also discovered.

The cause of this disease, as far as can be learned, was due to the bringing of offal from slaughter-houses and dumping it on a meadow on these farms. Some of the offal from this slaughter-house was of animals which had been shipped into the State from Delaware where anthrax has existed for a number of years.

As soon as the cases were discovered the animals were vaccinated with anthrax vaccine, but the use of vaccine appeared to have but very little effect as the animals continued to die, even within twenty days after the second vaccination. The barns on these premises were immediately disinfected and the grounds were covered with quick lime, but the most efficient method of controlling the disease was found to be the keeping of infected animals in separate stables and fields.

There was an outbreak of the disease on Ragged Island below Hancock's Bridge, and on October 9, 1914, five heifers died within one week. This location is one of the places which has been infected for a number of years. Fourteen years ago there was an outbreak on this same island and over twenty-five deaths occurred.

The history of outbreaks of this disease in the southern portion of our State gives conclusive evidence that in all probability the infection is carried from tanneries on the shore of the Delaware River and sometimes from carcasses of diseased animals which are placed in the River and float into the smaller creeks lodging along meadow banks, thus infecting the meadows upon which many cattle graze.

CONTAGIOUS CATARRHAL CONJUNCTIVITIS.

Cases of this disease occurred during the summer of 1914 in Salem and Gloucester Counties. The first cases reported were in a herd of cattle located in Pilesgrove Township, Salem County.

The disease was introduced into this herd by a bull which was purchased by a dealer in September, 1913. The disease spread through the herd, affecting one eye usually, but sometimes both eyes were involved, causing, as a result, total blindness. Some of the calves and cows on the infected premises were sold throughout the winter and during the summer the infected stock mingled with the herds on neighboring farms, until finally the disease had spread over several townships affecting cattle on eight different premises.

As soon as we were informed of the cases, all the premises upon which the disease occurred were quarantined. Dr. Horner employed by this Board examined these cattle once or twice a week and remedial treatment was applied. The infected animals were kept under quarantine and separated from the uninfected animals in the herd wherever it was possible. As a result of these active measures the disease was entirely stamped out.

GLANDERS.

The number of cases of this disease which have been discovered in the State during the year is larger than in any other year in its history. This is due, for the most part, to the fact that the State of New York, for the purpose of eradicating glanders, issued a proclamation in July, 1914, requiring that no animals should be allowed to come into that State unless they had been examined for the purpose of learning if they were infected with glanders, and that for the purpose of showing that such animals had been examined a neckband or some other article should be used to indicate that the animals had failed to respond to the ophthalmic mallein test. As the Federal Government decided that this test was a sufficient and satisfactory one, the New York authorities directed that this test should be applied to all horses coming to New York.

As a result of this proclamation large numbers of animals in the counties of Hudson, Essex and Bergen Counties, lying adjacent to the City of New York, were tested by veterinarians under the direction of the local boards of health in the sanitary districts of these counties. A number of animals responded in some degree to the test, but as they showed no clinical symptoms of the disease the owners were unwilling to have them destroyed, although they were not allowed to use the animals in interstate traffic.

An arrangement was made with the New York authorities for the purpose of confirming the result of the ophthalmic mallein test to have the complement fixation test applied to all the animals which had

reacted to the ophthalmic mallein test. The owners of all animals that were reported as having given a plus three or plus four reaction to the complement fixation test were ordered to have the animals destroyed and a quarantine was placed on premises upon which such animals were located.

It is interesting to note that the postmortem examination in every instance of the animals that had responded to the ophthalmic mallein and the complement fixation tests gave positive evidence of the existence of the disease. The Federal authorities furnished the State Board of Health with the material for the ophthalmic mallein test and this was distributed free of cost to various local boards of health for the use of veterinarians under their employ. The result of the investigation of cases of glanders during the past year indicates that if the disease is to be thoroughly eradicated from our State the ophthalmic mallein test should be applied to all horses within the State and if there are any reactors the complement fixation test should determine whether or not the animals should be destroyed. If this were done it would be possible within a very short period of time to eradicate the disease and this would mean the saving of a large amount of money to horse owners. Already in the larger counties the result of examining the animals which are used in interstate traffic has effected a lessening of the number of cases of this disease which are being reported.

During the year ending October 31, 1914, 225 cases of glanders were reported in the various sections of our State. Of this number 140 occurred in Essex, 56 in Hudson County, 6 in Bergen, 5 in Middlesex, 5 in Somerset, 4 in Morris, 4 in Union, 2 in Passaic and one each in Cape May, Monmouth and Ocean Counties. Ninety-one of these animals were destroyed during the year and 127 premises were disinfected. This report includes all animals which responded to the various tests for the disease, and therefore in some instances includes some animals which were afterwards determined to be either free from the disease or in which the tests were not sufficient to require the destruction of the animal.

Report of the Bureau of Contagious Diseases and Sanitary Inspection.

A. Clark Hunt, M. D., Chief.

To the Board of Health of the State of New Jersey.

Gentlemen:—I have the honor to submit the following report of the Bureau of Contagious Diseases and Sanitary Inspection for the year ending October 31, 1914.

In the report of the Board will be found a full statement of the powers and duties of this Bureau under the various laws relating to health in the State.

In reviewing the work of the year one of the most important advances that has been made is in the reporting of cases of communicable diseases to the State Board of Health. For a number of years on account of ineffective laws it was impossible to place the responsibility of reporting cases of these diseases upon any one individual. When the law under which we now operate became effective, efforts were made to secure more satisfactory statistics and it is apparent that as a result of these efforts we are now able to state that New Jersey is one of the leading states in securing reports of cases of communicable diseases. A review of the statistics on this subject shows conclusively that with the increase that has occurred during the past six years we may expect within a short time over ninety-five percent of all cases will be reported.

The educational work bearing on the restriction of tuberculosis has been carried on during the year with increased interest, and the results are satisfactory. The necessity of the extension of this work so that it may include the placing before the public of information in regard to the restriction of contagious diseases other than tuberculosis is apparent.

As the space allotted in the annual report this year is limited we present only a few of the interesting epidemiological investigations which have been made. These, however, indicate the nature, scope and usefulness of the service and in the tables will be found the total number of investigations. An effort has also been made to formulate deductions from statistics relating to cases of communicable diseases reported to the Board.

The reports of communicable diseases on dairy premises which were investigated are condensed in tabular form as a routine practice in

dealing with this class of cases has been followed for several years. Mention has already been made of the beneficial effect of this mode of procedure in limiting the spread of milkborne diseases.

The employes of the department have rendered efficient service during the year and Mr. D. C. Bowen, who has charge of epidemiological inquiries, has made several very interesting studies which, as indicated in the case of the epidemic of typhoid fever at Bridgeton, N. J., resulted in immediate control of infection. The hearty cooperation and assistance of the Board in the work of the Bureau has been highly appreciated.

EPIDEMIOLOGICAL WORK.

The assistance rendered to local boards of health in the investigation of outbreaks of preventable diseases is probably the most valuable work performed by the Bureau of Contagious Diseases and Sanitary Inspection. Relatively few local boards have trained investigators in their employ, hence valuable time is frequently lost in tracing outbreaks of communicable diseases to their common sources.

In the case of explosive outbreaks due to infected milk, water or other food supply, every hour that passes before the discovery and removal of the source of infection may mean much additional sickness and the sacrifice of human lives.

Prompt assistance is furnished to local boards of health in the study of explosive outbreaks or the undue prevalence of communicable diseases in any locality. It is not only the sanitary district to which aid is furnished that is benefited by this work, but other sections to which the disease might spread are likewise protected.

Investigations were made of sixty-four outbreaks of communicable diseases during the year. The sanitary districts in which these outbreaks occurred are as follows; all data being in the year 1914 unless otherwise indicated:

CHICKEN-POX—Montgomery Twp., Somerset Co., Dec. 9, 1913, and Mar. 26.

DIPTHERIA—Bethlehem Twp., Hunterdon Co., Aug. 5; Cliffside Boro., Bergen Co., Dec. 11, 1913; Chatham Twp., Morris Co., May 27; Florence Twp., Burlington Co., Dec. 20, 1913; Gladstone Boro., Somerset Co., June 12; Manalapan Twp., Monmouth Co., Sept. 2; Woodbridge Twp., Middlesex Co., July 8.

MALARIA—Delford Boro., Bergen Co., Sept. 11; Franklin Boro., Sussex Co., May-June; Hardyston Twp., Sussex Co., May-June; Midland Twp., Bergen Co., Sept. 12; Mt. Oliver Twp., Morris Co., July; Netcong Boro., Morris Co., July; Princeton Boro., Mercer Co., Aug. 19; Princeton Twp., Mercer Co., Sept. 10; Roxbury Twp., Morris Co., July; South Brunswick Twp., Middlesex Co., Sept. 17; Stanhope Boro., Sussex Co., July; West Windsor Twp., Mercer Co., Aug. 25; Westwood Boro., Bergen Co., Sept. 11.

SCARLET FEVER—Bordentown City, Burlington Co., Feb. 11; Deerfield Twp., Cumberland Co., Dec. 19, 1913; East Orange City, Essex Co., Sept. 16; Florence Twp., Burlington Co., Dec. 20, 1913; Harrison Twp., Gloucester Co., Feb. 18; Irvington Town, Essex Co., Sept. 16; Jersey City, Hudson Co., Sept. 16; Landis Twp., Cumberland Co., May 22; Orange City,

Essex Co., Sept. 16; Riverside Boro., Bergen Co., Apr. 7; South Orange Village, Essex Co., Sept. 16; South Orange Twp., Essex Co., Sept. 16; Upper Twp., Cape May Co., Aug. 14; Vernon Twp., Sussex Co., May 28.

SMALL-POX—Avalon Boro., Cape May Co., May 14; Long Branch City, Monmouth Co., April 24; Pemberton Boro., Burlington Co., Apr. 13; Plumsted Twp., Ocean Co., Apr. 15; Pilesgrove Twp., Salem Co., Mar. 11; Swedesboro Boro., Gloucester Co., June 11.

TUBERCULOSIS—West Windsor Twp., Mercer Co., Feb. 11.

TYPHOID FEVER—Bridgeton City, Cumberland Co., May 16; Butler Boro., Morris Co., Oct. 14; Chatham Boro., Morris Co., Jan. 13; Clinton Twp., Hunterdon Co., Nov. 18, 1913, and Sept. 15; Dover Town, Morris Co., Mar. 10; Dunellen Boro., Middlesex Co., Dec. 9, 1913; Dunellen Boro., Middlesex Co., Mar. 4; Florence Twp., Burlington Co., Oct. 7; Hammonton Town, Atlantic Co., Sept. 22; Kearney Town, Hudson Co., Oct. 20; Lebanon Twp., Hunterdon Co., May 4; Maurice River Twp., Cumberland Co., Apr. 1; Mendham Twp., Morris Co., July 2; Piscataway Twp., Middlesex Co., Sept. 18 and Oct. 29; Pittsgrove Twp., Salem Co., Dec. 26, 1913; Pleasantville Boro., Atlantic Co., Aug. 24; Summit City, Union Co., Jan. 13; Trenton City, Mercer Co., Nov. 7, 1913.

PREVALENCE OF COMMUNICABLE DISEASES.

There has been an increase in both the number of reported cases and recorded deaths from some of the notifiable diseases during the year, while other diseases have shown a decrease. The total cases reported, 28,427, is equal to 11.1% over the number during the preceding year. The increase in the recorded deaths from these diseases is but 4.05%, while the estimated increase in population is only 2.7%.

The above figures either mean; first, an actual increase in the occurrence of certain communicable diseases with a diminution in the fatility rate therefrom, or second, greater success on the part of health authorities in securing reports of notifiable diseases.

In the tables that immediately follow it is shown that perfection has not yet been attained in the registration of cases of communicable diseases throughout the State as a whole, for the fatality rate shown for notifiable diseases in certain sanitary districts is surely excessive.

In the tables which show the number of reported cases and recorded deaths by sanitary districts, some municipalities show a relatively high case rate as compared with the number of deaths recorded from the same causes, thus reflecting the excellent results secured by local boards of health in obtaining the cooperation of physicians in reporting their cases. In other municipalities the figures show a relatively high fatality rate as compared with the number of reported cases, thus showing less activity on the part of the local board of health; lack of cooperation on the part of physicians in reporting their cases; an unusual virulent type of infection or less success in the treatment of these diseases in the municipalities in which the fatality rate is excessive.

TYPHOID FEVER.

YEAR.	Population.	Reported cases.	Deaths.	No. of cases per 1,000 population.	Fatality rate per 100 cases.
1909	2,352,522	1,268	301	0.538	23.73
1910	2,537,167	1,134	392	0.446	34.55
1911	2,611,799	1,617	337	0.619	20.84
1912	2,686,389	2,024	306	0 753	15.11
1913	2,765,514	1,825	276	0.659	15.12
1914	2,839,234	1,604	222	0.564	13.84

DIPHTHERIA.

YEAR.	Population	Reported cases.	Deaths.	No of cases per 1,000 population.	Fatality rate per 100 cases.
1909	2,352,522	3,703	610	1.574	16.47
1910	2,537,167	5,072	728	1.959	14.35
1911	2,611,799	5,884	568	2.252	9.65
1912	2,686,389	4,829	458	1.797	9.48
1913	2,765,514	6,374	553	2.308	8.67
1914	2,839,234	6,863	561	2.427	8.17

SCARLET FEVER.

YEAR.	Population.	Reported cases.	Deaths.	No. of cases per 1,000 population.	Fatality rate per 100 cases
1909	2,352,522	4,821	338	1.049	7.05
1910	2,537,167	6,955	229	2.741	3.29
1911	2,611,799	5,335	214	2.042	4.01
1912	2,686,389	3,987	129	1.484	3.23
1913	2,765,514	5,255	227	1.900	4.12
1914	2,839,234	6,552	255	2.307	3.89

TUBERCULOSIS.

YEAR.	Population.	Reported cases.	Deaths.	No. of cases per 1,000 population.	Fatality. rate per 100 cases.
1909	2,352,522	825	*4,228	0.350	512.48
1910	2,537,167	1,221	*4,540	0.481	371.81
1911	2,611,799	2,595	*4,528	0.993	174.48
1912	2,686,389	5,595	4,178	2.082	74.67
1913	2,765,514	7,912	4,037	2.860	51.02
1914	2,839,234	8,369	4,273	2.947	51.05

*These figures are for deaths from tuberculosis of the lungs only and cover the calendar year from January 1st to December 31st. For the years 1912, 1913 and 1914 all forms of tuberculosis are included, and the figures are for the statistical years ending October 31st.

ANTERIOR POLIOMYELITIS.

YEAR.	Population.	Reported cases.	Deaths.	No. of cases per 1,000 population.	Fatality rate per 100 cases.
1911	2,611,799	47	.....	0.016	.....
1912	2,686,389	59	21	0.020	35.59
1913	2,765,514	87	20	0.030	22.98
1914	2,839,234	35	18	0.012	51.42

MENTAL DEFICIENCY AND EPILEPSY.

Reports of cases of mental deficiency and epilepsy were received from eleven sanitary districts in eight counties throughout the State and duplicates of the reports forwarded to the Commissioner of Charities and Corrections, according to the provisions of Chapter 182, Laws of 1912, were as follows:

MENTAL DEFICIENCY—Haddonfield Boro., Camden Co., 1; Irvington Town, Essex Co., 2; Newark City, Essex Co., 73; South Orange Twp., Essex Co., 2; Princeton Boro., Mercer Co., 2; Rahway City, Union Co., 1; Hardyston Twp., Sussex Co., 2. Total, 83.

EPILEPSY—Camden City, Camden Co., 1; Irvington Town, Essex Co., 2; Newark City, Essex Co., 60; South Orange Twp., Essex Co., 1; Princeton Boro., Mercer Co., 1; Dover Town, Morris Co., 1; Paterson City, Passaic Co., 1; Somerville Boro., Somerset Co., 1; Rahway City, Union Co., 1. Total, 69.

INDUSTRIAL DISEASES.

During the past year an increased number of reports of cases of certain industrial diseases were received. Reports were received from four times as many municipalities as in the previous year, indicating a growing familiarity with the provisions of the law and compliance therewith on the part of physicians throughout the State.

Reports received during the year ending October 31, 1914, which were transmitted by the State Board of Health to the Commissioner of Labor, as required by Section 3, Chapter 351, of the Laws of 1912, show the following industrial diseases.

Camden City, Camden Co., Anthrax, 4, Lead Poisoning, 6; Belleville Town, Essex Co., Lead Poisoning 2; Newark City, Essex Co., Arsenic Poisoning, 2, Lead Poisoning 46, Mercury Poisoning, 2; Woodbury City, Gloucester Co., Lead Poisoning 1; Harrison Town, Hudson Co., Lead Poisoning, 1; Jersey City, Hudson Co., Anthrax, 1; Princeton Boro., Mercer Co., Lead Poisoning, 1; Trenton City, Mercer Co., Lead Poisoning, 1; Perth Amboy City, Middlesex Co., Arsenic Poisoning, 1; Lead Poisoning, 37; Woodbridge Twp., Middlesex Co., Lead Poisoning, 2; West Milford Twp., Passaic Co., Anthrax, 1; Peapack-Gladstone Boro., Somerset Co., Lead Poisoning, 2. Totals, Anthrax, 6; Arsenic Poisoning, 3; Lead Poisoning, 99; Mercury Poisoning, 2.

FOLLOW-UP SYSTEM OF RECORDED DEATHS FROM REPORTABLE DISEASES.

By a method of regular checking all certificates of deaths due to reportable diseases against reported cases on file, it is possible to detect a physician's omission to report a case resulting in death for which he has signed a death certificate. In all such cases a circular letter is addressed to the physician asking for an explanation of his omission. That the inauguration of this system has been followed by improved reporting is shown by the figures following: reducing the number of

deaths from cases of communicable diseases that were not reported from 701 in 1913 to 211 in 1914, and the number of physicians who failed to report such cases from 495 in 1913 to 106 in 1914.

Tuberculosis is the one disease that many physicians are loath to report in all of their cases, even though the patient may succumb to the infection. Out of the 211 deaths from non-reported cases of communicable diseases during the year, 195 were caused by tuberculosis in some of its forms, and 142 of these were specified as Pulmonary Tuberculosis, thus showing that the omission was not due to difficulty in making a diagnosis before death. There were 6 deaths in cases of typhoid fever that were not reported; 4 from diphtheria; 3 from Anterior Poliomyelitis; 2 from scarlet fever, and 1 from malaria.

The number of deaths from cases of communicable diseases that were not reported were: 1912, 633; 1913, 701; 1914, 133; Total, 1,447.

The number of physicians who failed to report cases resulting in death were: 1912, 441; 1913, 495; 1914, 107; Total, 1,043.

COMMUNICABLE DISEASES TREATED IN HOSPITALS.

On account of the comparatively large number of cases of reportable communicable diseases treated in hospitals and not reported in accordance with the provisions of Chapter 131 of the Laws of 1912, an investigation has been made for the purpose of learning why the provisions of this Act have not been more fully complied with. The investigation was begun in April, 1913, and completed in February, 1914. The data contained in the inspector's reports was largely gathered during the performance of other work taking him to the district in which the hospitals investigated are located, thus saving much time and expense that would otherwise have been necessary to devote to the work had special journeys been made for this purpose.

The report shows that sixty hospitals, located in thirty-three sanitary districts, were visited. In 46 of these at least some one of the communicable reportable diseases coming within the provisions of the Act is treated. There were but three of these hospitals in which the officials expressed familiarity with the law and had complied with its provisions.

The officials of 27 boards of health interviewed in the districts in which the 46 hospitals are located were but slightly more familiar with the provisions of the law than were the hospital authorities, yet such local board officials are charged with specific duties under this Act. The officials of only five of these 27 local boards of health professed a working knowledge of their duties under the law.

None of the objections made by hospital authorities to the requirements of the law can be given weight against the advantages that would accrue from a strict compliance therewith. The only difficult problem arising in the practical working of the Act is that sometimes experienced by hospital authorities in learning the name of the sanitary

district from which a patient is admitted. It sometimes occurs that the postoffice address of a patient is entered on the record book rather than the name of the sanitary district in which the patient resided. In such instances, the report of the case might fail to reach its proper destination. However, the number of such cases is so small as to be practically negligible when compared to the advantages to be gained by having a local health official informed that a patient sent to a hospital before a diagnosis was made had proved to be a case of communicable disease which he should investigate.

REPORTS OF SPECIAL EPIDEMIOLOGICAL INVESTIGATIONS.

MILK-BORNE INFECTION OF TYPHOID FEVER AT BRIDGETON, N. J.

On May 16, 1914, an investigation was begun at the request of the local board of health of the City of Bridgeton, Cumberland County, to find the source of infection causing a number of cases of typhoid fever. The records showed four cases reported on May 2, three on May 8, one on May 9, two on May 11, two on May 12, and five on May 14; a total of seventeen cases within twelve days.

Immediately upon the inspectors' arrival in the city a conference was held with several members and the inspector of the local board of health. Information in possession of the Board showed that most of the reported cases were among the patrons of Mr. W., a local milk distributor, in whose family two children were then suffering from the disease. An unverified report was current to the effect that a case of typhoid fever had recently occurred on one of the dairies contributing to this distributor's milk supply, but the physician in attendance upon the rumored case at the dairy had stated that his patient was suffering from the grippe, and not from typhoid fever.

The local board of health had issued an order, under date of May 9th, requiring that Dealer W. should discontinue the distribution of milk in the City of Bridgeton, but no action had been taken to bar milk from the city that had been produced on the dairy upon which the rumored case of typhoid fever existed nor from other dairies that formerly contributed to the suspected supply of Dealer W. Hence it happened that milk from these sources had merely been diverted from one distributing station to enter the city through several other local dealers, while the exact source of the infection was still undetermined.

In addition to this, one of the former employes of Dealer W. had gone to work for another local milk distributor, who had taken over a part of W.'s former milk supply, and still another employee had transferred part

of the equipment from W.'s depot to his own home, from which place he continued to supply patrons with milk procured from one of the producers who formerly delivered milk to W. The remainder of W.'s former regular supply was being delivered to a local creamery.

As above stated, the local health officials suspected that infection had been conveyed through milk, but a decided conviction was being expressed by numerous citizens that the public water supply was at fault, the latter conclusion being based on the fact that the water contained some color, and, at times, emitted an unpleasant odor.

In view of these facts, and considering that six additional cases had been reported within the preceding twenty-four hours, the necessity for speedily locating the true origin of the outbreak was urgent. A request was therefore wired to the State Laboratory of Hygiene that a bacteriologist be placed on the ground, in order to save time in handling the specimens that it would be necessary to examine microscopically. This part of the work was further expedited by a fortunate coincidence in that the boat "State Inspector" happened to be lying at the dock at Bridgeton and the laboratory outfit on board proved very helpful in facilitating the work, so that within twenty-four hours following the inspectors' arrival in the city measures had been instituted to prevent further infections taking place, (should the milk supply be found at fault), and the suspected cause from which the outbreak emanated had been located with a degree of accuracy that later investigations established beyond doubt.

The number of cases, and the approximate dates of their onsets are as follows:

April 7-14, 1; April 14, 2; April 12-19, 1; April 15, 1; April 15-22, 2; April 25, 3; April 28, 1; April 30, 1; May 1, 4; May 2, 1; May 3, 1; May 4, 1; May 5, 1; May 7, 1; May 8, 2. Total, 23.

There was a total of twenty-three cases located. Seventeen occurred in homes regularly supplied with milk by Dealer W. In four the infected individuals had procured milk from Mr. W.'s milk depot within the incubation period preceding the onset of illness. In one, milk had been purchased from a store supplied by W. In one, reasonable assurance was furnished showing that the patient had ingested no uncooked milk from any source for a long period prior to recognition of the disease, unless it had been taken in soda water obtained from a source difficult to determine.

Single cases occurred in nineteen houses, and two cases in each of two others. The dates of onsets for the cases occurring two in a house showed that infection had taken place in each case at about the same time, thus excluding secondary or contact infection. Seventeen of the infected individuals are known to have drunk raw milk supplied by W., one to have taken this milk in cereals, one in coffee, and the milk regularly entered the homes of three cases that gave no history of having actually used it. There was only one case in no way associated with this one.

In both cases occurring in the family of Dealer W. the first symptoms of illness were not apparent until about May 6th. There was no history of typhoid infection among the employes. Blood specimens were taken

from all persons on the depot premises who took part in handling the milk during the period of time that infection of the supply must have taken place. These specimens were uniformly negative to agglutination tests for typhoid.

Dealer W. handled about 400 quarts of milk a day, but the daily sales of whole milk did not average more than 216 quarts. The amount representing the excess of supply over that of sales as whole milk was disposed of in the form of cream, butter, pot cheese and skimmed milk.

The daily average amounts of milk procured from the several producers from which the dealer's supply was drawn were: 1. H, 116 quarts; 2. L, 80 quarts; 3. T, 100 quarts; 4. G, 50 quarts; 5. C, 40 quarts; 6. D, 24 quarts. Total daily supply, 410 quarts.

Producers T. and G. began to supply milk to Dealer W. on May 4th and April 15, 1914, respectively. The dates of onset of the first cases in this outbreak preceded the above named dates, thus precluding the possibility of first infection being introduced through either of these two sources of supply.

Dealer W. discontinued to take milk from Producer D. on May 8, 1914, giving as a reason that the amount produced on the dairy was too small to warrant twice daily collections, which were begun by the Dealer during the last week in April. The onset of the two cases of typhoid fever in the dealer's family, together with his knowledge that a rumor was current to the effect that a case of typhoid fever existed on the dairy premises of D., were probably the deciding factors in influencing W. to drop this source of supply.

An investigation on the dairy premises of D. showed that less than 25 quarts of milk a day were being produced thereon. For some time preceding the month of April to May 1st, a grown son of the proprietor had done all of the milking. Milk was transferred from the milking pail directly into cans furnished by the dealer. These cans had been washed at the depot and made ready for use without further cleansing by the producer. On May 1st the milker referred to called a physician on account of a febrile condition that had lasted for some days. Responding to treatment and rest in bed, a normal temperature resulted within four or five days and the patient was about when the inspector called at the farm on May 16th, though feeling rather weak and plainly showing the result of the illness through which he had passed. When questioned on that occasion, the milker acknowledged that he had felt a general malaise at various times during a period of several weeks previous to the more pronounced illness that resulted in calling in medical aid, but this condition had been attributed to loss of proper rest. A blood specimen taken from the person in question on May 16th agglutinated absolutely in a dilution of 1:100, and typhoid bacilli were isolated from a specimen of feces furnished a few days later.

Investigations were made on the remaining five dairies that had contributed to the supply of milk distributed in Bridgeton by Dealer W., with negative results as to history of recent illness on any of the premises.

Blood specimens were procured from all persons who assisted in handling the milk on the dairies that contributed to this supply during the time infection of the milk must have taken place, and these specimens were all negative when tested for Widal reaction.

From a careful study at the depot of Dealer W. it was shown that the proprietor was assisted by three employes in the bottling and distribution of the milk. Two delivery wagons were in use, covering three separate routes, in charge of a different man on each route.

Prior to the last week in April producers brought milk to the depot during the forenoon of each day, but subsequent to this time the dealer made daily collections from the individual places of production. Prior to this change in the arrangement in transporting milk from the producer to the depot the small amounts produced on the dairies of D. and C. were first to arrive at the depot, being received not later than 8 a. m., milk from the other dairies following at intervals up to 11 a. m.

Distributions on Routes One and Two were in charge of Drivers X and Y, respectively, both leaving the depot at an early hour in the morning with milk received and bottled on the preceding day. Driver Z remained at the depot and was present while milk was received from the dairy of D. and C., the milk being at once bottled for distribution on Route Three, upon which about fifty quarts of whole milk were daily distributed. Milk from the D. farm was principally placed in pint bottles, while that from the dairy of C. was put up in quart bottles. Any deficiency in the amount received from the dairy of D. to fill the number of pint bottles required was made up with milk from C.'s dairy and vice versa. Patrons coming to purchase milk at the depot between the hours of 8 and 9 a. m. were most likely to receive that coming from the dairy of D. if purchased in pint bottles, or from C. if in quart bottles.

In plotting out the cases on a map of the city we found them principally located along Route Three covered by Driver Z.

Out of the seventeen cases that occurred in the homes daily supplied with milk by the delivery wagons, ten (59 per cent.) were on Route Three in charge of Driver Z., yet this route distributed less than 22 per cent. of the combined daily sales of whole milk made on the three routes. Four cases occurred among persons who consumed milk procured at the depot and one case had procured milk from the supply at a store.

Another significant fact is that in ten cases milk had been served at the homes of the patients in pint bottles; only in five cases were quart bottles shown to have been regularly purchased, and in four cases the size of the package was not learned. As before stated the bulk of the milk procured from the dairy of D. was placed in pint bottles. Reference has already been made showing how patrons calling at the depot between stated periods in the morning were almost sure to obtain milk, if in pint bottles, from the dairy of D.

The practice at the depot was to pour each producer's milk into the tank of the bottling machine separately, and to draw off this charge before adding milk from another source. However, inasmuch as no wash-

ing of the tank took place between bottling each separate lot, it is a natural inference that infection contained in any individual batch of milk delivered at the depot might readily find its way, to some extent, during the regular process of bottling into milk from other sources.

Having eliminated, to a reasonable degree of accuracy, the possibility of infection of the milk having taken place on the depot of Dealer W., the presumptive evidence gathered in the investigation becomes convincing that the dairy premises of D. was the place from which the infected milk came.

It is an interesting coincidence that this outbreak should have had its origin on a dairy contributing relatively so small amount, (only about six per cent.) of the total amount of milk handled by Dealer W. That infection of the milk should have taken place during the ordinary process of milking by one not known at the time to be harboring the infection of typhoid fever is not at all surprising but emphasizes the dangers ever present in the use of raw milk obtained from a general market supply. Instances of this kind, that are frequently being brought to attention, furnish the strongest arguments in support of the growing requirement that all market milk shall be pasteurized, unless it be produced and distributed under the most cleanly methods and rigid supervision. In this outbreak, infection of the milk took place on what was admittedly one of the best dairies contributing to the supply, quite regardless of the small amount of milk produced thereon. The best methods that prevail on ordinary farm dairies, from which a large bulk of our market milk supply is derived, do not guarantee against infection of the milk by an individual worker who may unconsciously be harboring the infection of a disease transmittable through milk, and a degree of cleanliness and care that will insure this can hardly be brought about by municipal regulations that do not include pasteurization. However, supervision through inspections intelligently and honestly applied afford a degree of protection that is probably worth what it costs.

Observations of local conditions were noted during the study of this outbreak that show the desirability of extending local health administration in the City of Bridgeton so as to embrace a more rigid supervision over the market milk supply, and also to secure the abolishment of existing fly breeding places. Carefully supervised regulations affecting these two important subjects of local health administration would decrease the morbidity and mortality records in the city.

The record of cases of typhoid fever reported from the City of Bridgeton during the five years immediately preceding the present calendar years indicate seventy-one per cent. occurred during the summer and fall months, showing that infection took place during the seasons when flies were most abundant and active. They are:

YEAR.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1909.	0	0	0	0	2	0	1	0	1	0	2	0	6
1910.	0	0	0	0	0	0	2	2	3	5	2	6	20
1911.	6	0	1	1	0	0	6	4	3	2	0	0	23
1912.	1	0	0	0	0	0	3	4	0	1	3	0	12
1913.	1	0	0	0	1	1	1	0	0	2	1	1	8
Totals. .	8	0	1	1	3	1	13	10	7	10	8	7	69

There are no ordinances in the city specifically dealing with the production and sale of milk, hence there is no regular systematic inspection of the places in which milk is produced and handled. As near as ascertained, there are now about fifteen individuals or firms distributing milk in the city. Some of these distributors produce milk on nearby dairy farms and others conduct milk depots within the city limits and procure their supply from small producers in the outlying districts. According to information furnished, as the result of an inquiry, the various producers and dealers doing business within the city distribute to consumers about 4,000 quarts of milk a day. Estimating the population of the city to be about 15,000 persons, this seems under rather than over the probable daily consumption. In addition to the above, the plant of the Arctic Ice and Milk Company is located within the city limits, at which about 20,000 quarts of milk are daily received. Of this amount about 250 quarts reach consumers through the hands of local dealers, the rest being converted into condensed milk and ice cream.

In the several distributing stations in the city, upon which our investigation led, conditions to be commended and condemned stood side by side. On the premises from which the infected milk supply had been distributed, a well ventilated cleanly scrubbed milk house stood in the yard within a few feet of an open privy beneath which there was a large mass of human fecal matter exposed to view and to flies. The bottles in the milk house appeared to have been well washed, but no method of sterilization was available, and it appears to have been the usual practice for dealers to remove empty bottles from infected houses without subjecting them to adequate cleansing. An objectionable open privy was in evidence on each of the milk depot premises visited, notwithstanding available sewer connections at hand. An ordinance has been in force since April, 1913, requiring that the owners of properties lying along the lines of the public sewer shall connect their buildings therewith. This ordinance should not only be enforced but a companion ordinance should be adopted, and rightly enforced, requiring the removal of the surface yard privies that now stand so much in evidence in many parts of the city.

The absence of a public garbage and rubbish collection service in the city results in the accumulation of refuse in back yards that is infrequently removed. These decomposing materials form favorable breeding places for the numerous flies that infest places in which milk and other foods are found exposed for sale. The accumulation of stable manure on

private property within the city limits for indefinite periods of time is perhaps responsible for the most prolific breeding places for the housefly that was found.

The city local board of health as at present composed is an active and progressive body of men who give freely of their time and knowledge to the betterment of local health conditions, but the money appropriated by the city for public health purposes, (about five cents per capita) is entirely inadequate to take care of the most urgent needs of the local health administration.

APPARENT MILK-BORNE TYPHOID INFECTION IN SUMMIT.

On Jan. 13, 1914, an inspector was sent to assist the local health officer in the investigation of a number of suspected cases of typhoid fever. In view of the fact that most of the cases under suspicion were members of families supplied with milk by a dealer on whose route two cases of typhoid fever had occurred about six weeks previously, an immediate investigation was begun.

The dealer in question, designated as B., conducts a dairy in Florham Park from which he has been distributing milk in Summit for twenty-eight years past. At the time of this inquiry about 500 quarts of milk were being daily distributed in Summit, and about eighty quarts in the neighboring Borough of Chatham. The population in Summit is estimated at 9,000, and the records in the local health office show that Dealer B. distributed about seventeen per cent. of the 3,000 quarts of milk daily supplied to the inhabitants by ten licensed milk dealers.

The equipment provided and the methods of handling the milk on the dairy farm in question are well above the average. A steam sterilizer for treating bottles had recently been procured but not yet installed at the time of the inspector's visit. Physical and chemical examinations were made of the water supply, obtained from an artesian well on the premises, but showed no evidence of pollution.

Only one of the six persons who had assisted in the dairy work gave a history of ever having had typhoid fever. A man, sixty years old, who came to the dairy on Jan. 5, 1913, (and who subsequently left on Jan. 23, 1914), stated that he had had typhoid fever in Ireland when a boy. He was the only person assisting with the dairy work who had not been on the premises for at least nineteen years. Blood specimens taken from the six persons above referred to were negative upon test for Widal Reaction.

About 280 quarts of milk were produced daily on the dairy of Dealer B. and this amount was supplemented by milk obtained from two nearby farms that had continuously contributed to the supply of Dealer B. for periods of twelve and eighteen years respectively. Inspections on these dairies failed to show a present or previous typhoid history in any of the persons who were then assisting or who had formerly assisted in the production of milk thereon, and blood specimens taken from each individual worker were negative when tested for Widal Reaction. From Nov. 1, 1913, to

the date of this inspection Dealer B. had also purchased milk on six or seven occasions from a wholesale milk dealer but, owing to the numerous sources from which the wholesale dealer obtained milk, and the absence of known cases of typhoid fever among the patrons of other distributors to whom he sold milk, no investigations were made at the various sources of production, and the data subsequently obtained in the epidemiological study of this outbreak apparently eliminates the milk which passed through the hands of the wholesaler as a probable source of typhoid infection.

In the absence of more complete and definite facts concerning the individual cases in Summit, following the negative results of the earlier investigation of the milk supply, there was a lack of evidence to justify interference with the regular and customary manner in which Dealer B. was then handling milk. However, after a careful investigation of the known and suspected cases in Summit, and a study of the cases that had been recorded in the office of the local board of health for a period of three years immediately preceding this outbreak, presumptive evidence accumulated which warranted issuing an order on Jan. 16th, requiring that all milk delivered by Dealer B. should be pasteurized, that all bottles and utensils used in handling the milk should be sterilized, and that these precautionary measures be continued until the results of the completed investigation were known.

On Jan. 19th a physician was called to see K., one of the milkers on the dairy of Dealer B., and symptoms that developed within the next few days led to taking a specimen of blood that gave a positive Widal Reaction, and on Jan. 25th the patient was sent to a hospital for treatment. As a result of this case the local board of health of Summit excluded the sale of milk from the dairy of Dealer B. from Jan. 25th to Feb. 7th.

Owing to the incomplete records and the absence of sufficient data concerning reported cases of communicable diseases in Summit during former years, it was impracticable to study the local typhoid history prior to the year 1912. The records from Jan. 9, 1912, to Jan. 20, 1914, show nineteen reported cases of typhoid fever in Summit. Four of these cases were among non-residents, persons who were known to have been infected before coming to Summit for treatment in the Overlook Hospital. Of the remaining fifteen cases twelve were in persons who had consumed raw milk procured from Dealer B.; one was a nurse in attendance upon a typhoid patient in a local hospital; one case had no milk from the suspected supply, and in one other case no information was obtainable regarding the milk supply nor source of infection.

It was also learned that four cases of typhoid fever had occurred among patrons of Dealer B. in Chatham, making a total of sixteen cases among patrons of this milk supply within the past two years against seven cases distributed among numerous other dealers.

These sixteen cases were grouped in two distinct outbreaks as follows: From Jan. 9th to and including the month of April, 1912, there were four

cases in Summit and four in Chatham. From Nov. 15, 1913, to Jan. 20, 1914, there were eight cases in Summit. To this number should be added the case that occurred in the person of K., one of the milkers on the dealer's dairy, thus making seventeen cases among consumers of this milk during the period of time covered in the investigation.

An analysis of all of the data that it was possible to gather in the study of these cases pretty clearly indicates that the milk distributed by Dealer B. must have contained moderately small amounts of typhoid infection during two separate periods of time more than one year apart, i. e., for several consecutive months, beginning in December, 1911, and again for a like period dating from the early part of November, 1913.

The only person on the dairy of Dealer B. who gave a history of having had typhoid fever was J. C., sixty years old, who came to work on the dairy July 5, 1913, and left, (without mentioning his intended destination) before this investigation was completed. J. C. claims to have had typhoid fever when a boy. A specimen of his blood, taken on Jan. 13th, did not react with typhoid or para typhoid cultures. A specimen of feces examined on Jan. 22d was negative. No urine was obtained. The mere fact that J. C. claims to have once had typhoid fever offered no proof that he was the source of infection causing the outbreak that occurred among the users of the milk within a month after he came to work on the dairy, and the date of his coming to the dairy positively eliminated him from consideration in the outbreak that began in January, 1912, and that resulted in eight cases within the four months next following.

In considering the case of K., one of the workers on the dairy of Dealer B., as a probable source of the infection, we have the following history: K. had been continuously at work on the dairy since 1895, with no previous known history of typhoid fever. The only history of illness during this time is to the effect that he was sick at the home of his mother, in Summit, for a period of two weeks in January, 1911. No physician was in attendance and the cause of the man's sickness was not known. Upon recovery he returned to the dairy and has worked there uninterruptedly up until the date of his present illness. He claimed to be slightly indisposed when questioned on Jan. 13th, but a blood specimen taken on that date did not react with typhoid or para typhoid cultures. As before stated he was seen by a physician on Jan. 19th. A blood specimen taken on Jan. 24th gave a positive Widal Reaction, and the man was sent to a hospital on Jan. 25th as a typhoid fever patient. A request of the hospital authorities for a specimen of feces and urine was made but was not complied with.

While the case of K. was the only person showing typhoid infection on either of the three dairies contributing to the milk supplied by Dealer B., the weight of evidence at hand tends to show that K. was one of the last persons to contract the infection rather than the source of infection causing other cases among persons using milk from the dairy on which he was employed.

While the investigation failed to discover a source of typhoid infection on the premises of the milk dealer or on the dairies contributing to the

milk supply it has established beyond any reasonable doubt that typhoid infection was distributed in Summit and Chatham through milk delivered by Dealer B.

OUTBREAK OF SCARLET FEVER IN FLORENCE TOWNSHIP DUE TO AN UNUSUALLY VIRULENT TYPE OF INFECTION.

On March 9, 1914, an inspector was sent to investigate a report that scarlet fever was unduly prevalent in the Town of Florence. Upon his arrival the medical member of the local board of health of Florence Township was called upon for information concerning the prevalence of the disease in Florence Township, and for definite information about the then known centers of infection and the measures that had been taken by the local board of health to restrict the spread of the disease.

TYPE AND PREVALENCE OF THE DISEASE.—The information showed that the cases of scarlet fever that had occurred in the Town of Florence had been of a particularly malignant type of the disease, as shown by a record of nine deaths among twenty-three reported cases occurring in ten families during the preceding five weeks.

The outbreak had its beginning in two cases reported in the Town of Roebling during the month of October and one in the month of November, 1913. These early cases were followed by ten cases in Roebling, and by four in Florence during the month of December; three cases in Roebling and four in Florence during the month of January; one case in Roebling and fifteen in Florence during the month of February and four cases in Florence during the first four days of March. From the beginning of the outbreak in October, 1913, to March 4, 1914, forty-four cases and fourteen deaths were reported from Florence Township.

PRECAUTIONARY MEASURES TO RESTRICT THE SPREAD OF THE DISEASE.—No epidemiological study of the cases had been made by the township health official, and the efforts of the local board of health to check the spread of the disease had been unavailing up to the time of this investigation. No separate record book for recording reported cases of communicable diseases occurring in the township had been kept by the secretary of the local board of health, and the only written record available was brief mention of the cases made in the book of minutes of the meetings of the board. Information obtained from individual members of the board showed that one of them had performed terminal disinfection but he was unable to tell, from records or from memory, the dates upon which any particular house had been disinfected or the length of time elapsing from the date of report of the case until disinfection was performed. The actual work of the local board of health to restrict the outbreak appears to have consisted in placing a warning sign on the houses in which cases were known to have occurred and, following notice from the attending physician, to have removed the sign and fumigate with "Dupree Formaldehyde Candles."

As near as could be figured from the most trustworthy information obtainable, isolation of any particular case preceding this investigation had not exceeded ten days in duration.

Following some of the fatal cases, beginning about Feb. 28th, more rigid precautionary measures are said to have been established. They included quarantine, under guard, for all inmates of houses in which cases were known to exist, and closing schools and places of public gatherings in Florence.

The only local health ordinance in Florence Township bearing on communicable diseases was found to be Section Five of a code of ordinances adopted about two years previously. This provided that all houses in which any cases of communicable diseases occurred should have placed thereon a warning sign and further provided a penalty for the removal of any such sign without permission from the local board of health. The ordinance was said to be illegal, owing to a technical error in its adoption. Notwithstanding the unpreparedness of the local authorities and lack of organization, they were advised to take such definite action as seemed to be necessary to check the spread of the disease, depending upon authority found in the statute to enforce such action.

Among the important measures recommended was the lengthening of the period of isolation in all cases of scarlet fever until the board should have reason to believe that the patient was no longer infectious, and the investigation of all known or rumored cases of eruptive fever in order to detect mild non-reported or unrecognized cases of the disease, and to cause a thorough disinfection of all infected premises prior to removal of quarantine or isolation. Immediately following the introduction of these and other preventive measures, the outbreak sharply terminated.

DIPHTHERIA OUTBREAK AT WOODBRIDGE, N. J., DUE TO INFECTION TRANSMITTED THROUGH FOOD HANDLED BY A "CARRIER" CASE.

On July 8, 1914, an inspector was sent to Woodbridge, Middlesex County, to confer with Dr. J. J. Collins, medical member of the board of health of Woodbridge Township, and Mr. J. H. Concannon, inspector, concerning an outbreak of diphtheria.

The records in possession of the local inspector showed that the first case in this outbreak was reported on Jan. 6, 1914, in the person of a child, aged seven years, whose parents conduct a small grocery store at No. 1 Green Street, Woodbridge. Several other children in the family were sent to the home of a relative, in Perth Amboy, before the initial case was reported to the local board of health. From Jan. 6th to July 8th fourteen additional cases were reported, occurring in twelve separate houses located in the vicinity of the Green Street store. A significant feature of the outbreak was that nine of these cases occurred in persons over ten years of age, four over twenty years and one over fifty years.

Information furnished by the local inspector showed that the original case was treated in the living apartments attached to the store and that no attempt was then made to learn if other members of the family were "carriers" of diphtheria bacilli.

The information also showed that the periods of isolation or quarantine in twelve of the fifteen reported cases ranged from two to fourteen days, as follows: one case, two days; one, five days; one, seven days; one, eight days; two, eleven days; three, twelve days; three, thirteen days, and one fourteen days.

Isolation restrictions were withdrawn on one negative laboratory specimen in each case. It was rather remarkable that uniform negative results should have been secured in so short a time after the date of attack, particularly so when positive laboratory reports were received from specimens sent for diagnostic purposes from each patient. Notwithstanding these unusually short isolation periods in most of the cases, the possibility of infection having been spread through some article of food was suggested, rather than that infection had been spread by contact with cases released from isolation too soon. This theory was arrived at from a consideration of the ages of the infected persons, together with the fact that the cases were in persons who had frequented the Green Street store for confectionery and ice cream cones. It was therefore advised that specimens for laboratory examination should be taken from each member of the storekeeper's family and that these specimens should be taken by or under the direct supervision of a representative of the local board of health. This was accordingly done on July 9th, seventeen days subsequent to the release from quarantine of the original case, with the result that four of the six inmates of the shop-keeper's household were found to be diphtheria "carriers." The proprietor, who was most active in waiting upon customers at the store, was one of the four "carriers." Consequently the store and residence was placed under strict quarantine with instruction that business should not be resumed until it should be shown by repeated bacteriological examination that no member of the family was a "carrier" of virulent diphtheria bacilli.

MALARIA.

Owing to an increase in the number of cases of malaria reported from certain districts in the State, and the numerous requests from private citizens and from a few local boards of health that investigations be made into local conditions believed to be responsible for the prevalence of the disease in their respective localities, malaria surveys have been made during the year in nineteen sanitary districts located in Sussex, Morris, Bergen, Mercer, Middlesex, Somerset and Union Counties.

As a result of these surveys it was established that malaria is more prevalent in certain districts in the State than reports have hitherto shown. In some localities the disease has prevailed to an extent that has caused much loss of time to wage-earners, a marked decrease in school

attendance and an economic loss far in excess of the amount it would have cost the localities to have eliminated the mosquitoes that have been responsible for the spread of the disease. Yet in only two of the nineteen sanitary districts in which investigations were made have the local boards of health taken any preventive measures against the spread of malaria, while in seventeen of the districts referred to the local boards of health have disregarded this duty imposed upon them by Chapter 119 of the Laws of 1904, which reads:

"Said local boards shall, within their respective jurisdictions, examine into all nuisances, foul or noxious odors, gases or vapors, water in which mosquito larvæ breed, and all causes of disease which may be known to them or brought to their attention, which, in their opinion, are injurious to the health of inhabitants therein, and shall cause the same to be removed and abated * * * ."

Inactivity on the part of the local health authorities in some cases may be due to failure on the part of physicians to report cases of malaria. Many physicians were interviewed who claimed to have been unaware that malaria is included among the reportable diseases named in Chapter 38 of the Laws of 1911, and naturally, in the absence of such reports, local officials take no action to restrict the spread of the disease.

Preliminary to conducting field investigations in any given locality, the local morbidity records were consulted for reported cases of malaria and a circular letter was sent to practicing physicians asking for information concerning the number and location of malaria cases which they had seen during the preceding six months. Much information concerning the prevalence of malaria in given localities was obtained by this method that did not appear in the files of the local board of health. Information was also obtained by consulting employers of laborers, and members of families who had suffered from malaria infection.

Field work was conducted to locate and map mosquito breeding places within infected areas, making special note and, when practical, classifying specimens of anopheles when found. The data gathered during the surveys was placed in the hands of the local boards of health in the sanitary district to which it related, together with recommendations that measures be instituted to restrict the spread of malaria.

The necessity for concerted action by local boards of health in adjoining municipalities in malaria infected areas became apparent in this work. In certain localities the malaria-carrying mosquito was found to be breeding more abundantly in a sanitary district adjoining that in which the larger number of cases of malaria prevailed. This was particularly so in Sussex and Mercer Counties. In both instances the value of the work done by one board was greatly minimized or entirely nullified by failure of the board in the adjoining infected district to cooperate in the work.

There has been a tendency on the part of physicians and householders to suppress the prevalence of malaria in certain localities patronized by summer boarders, working on the misguided theory that reporting cases and mosquito extermination work result in publicity that would keep

boarders away. This idea is quite erroneous, for surely recreation and pleasure seekers would be far more likely to return to a locality which they had found mosquito free, hence malaria free, than they would be to return to a place from which they had carried away a malaria infection as an unpleasant reminder of their summer the previous year.

COMMUNICABLE DISEASES ON DAIRY PREMISES.

Chapter 380 of the Laws of 1911 requires that certain communicable diseases, when occurring on premises upon which milk or milk products are produced for sale, shall be reported direct to the State Board of Health. The purpose of this Act was the curtailment of the spread of these diseases through infected milk. Theoretically this should be done by the local board of health, but unfortunately the activities of many such boards in rural districts, in which the bulk of market milk is produced, have not progressed to a point that will accomplish this purpose. While the work of supervising these cases entails considerable expenditures of time and money for traveling expenses, when directed from a central point, the results more than compensate for the outlay in the prevention of sickness and death. A trained inspector sent to the dairy is usually able to secure removal or isolation of the patient, and to regulate the methods of handling the milk so that it may be shipped and consumed with safety, where otherwise the milk would be barred from the market or its consumption might be followed by serious results.

On the 69 dairies on which milk-borne infectious diseases have been reported during the past year it was only necessary to prohibit the sale of milk in fourteen cases, and these were mostly premises on which the daily amount produced was too small to warrant the extra expense entailed in carrying out adequate precautionary measures to protect the consumers against infection. The combined amounts of milk produced daily on the sixty-nine premises supervised was 10,786 quarts, and the work has been so effectually done that no case of infection has been traced to the use of this milk. The location of the dairies on which cases have occurred, together with other data relating thereto, is shown in the following table:

SHOWING NUMBER AND LOCATION OF DAIRY PREMISES ON WHICH CONTAGIOUS DISEASES WERE REPORTED AND INVESTIGATED DURING THE YEAR ENDING OCTOBER 31, 1914.

LOCATION OF DAIRIES.		NUMBER OF CASES.							
Sanitary District.	County.	Diphtheria.	Scarlet fever.	Typhoid fever.	Tuberculosis.	Dysentery.	Amount of milk produced on premises daily.	Place to Which Milk Was Shipped.	Action Taken to Prevent Spread of Infection.
Egg Harbor City.	Atlantic.	....	....	1	....	....	25 qts.	Egg Harbor.	Isolation.
Garfield Boro.	Bergen.	1	....	....	....	....	70 "	Garfield.	Patient removed.
Chesterfield Township.	Burlington.	....	1	....	....	....	240 "	Trenton.	Isolation.
Chester Township.	Burlington.	....	....	1	....	....	10 "	Moorestown.	Sale of milk discontinued.
Easthampton Township.	Burlington.	....	....	1	....	....	350 "	Smithville and Merchantville.	Isolation.
Southampton Township.	Burlington.	1	....	....	....	....	260 "	Merchantville.	Isolation.
Springfield Township.	Burlington.	....	....	....	1	....	.....	Wrightstown.	Patient died.
Springfield Township.	Burlington.	....	1	....	....	....	200 "	Philadelphia.	Isolation.
Voorhees Township.	Camden.	....	....	1	....	....	200 "	Daretown.	Isolation.
Voorhees Township.	Camden.	....	2	....	....	....	100 "	Audubon.	Isolation.
Deerfield Township.	Cumberland.	....	....	1	....	....	35 "	Bridgeton.	Isolation.
Deerfield Township.	Cumberland.	....	2	....	....	....	70 "	Daretown.	Sale of milk prohibited.
Deerfield Township.	Cumberland.	....	4	....	....	....	125 "	Bridgeton.	Sale of milk prohibited by local board.
Livingston Township.	Essex.	....	1	....	....	....	300 "	Summit.	Isolation.
Livingston Township.	Essex.	....	1	....	....	....	240 "	The Oranges.	Isolation.
South Orange Village.	Essex.	1	....	....	....	....	80 "	Irvington.	Left to local board.
South Orange Village.	Essex.	1	....	....	....	....	2500 "	The Oranges.	Patient removed.
West Orange Town.	Essex.	1	....	....	....	....	.....	The Oranges.	Patient removed.
Harrison Township.	Gloucester.	1	....	....	....	....	200 "	Audubon.	Isolation.
Harrison Township.	Gloucester.	1	....	....	....	....	16 "	Ewan.	Sale of milk discontinued.
South Harrison Township.	Gloucester.	2	....	....	....	....	utter.	Mullica Hill.	Sale prohibited.
Alexandria Township.	Hunterdon.	1	....	....	....	....	41 "	Milford.	Isolation.
Bethlehem Township.	Hunterdon.	1	....	....	....	....	100 "	West Portal.	Isolation.
Bethlehem Township.	Hunterdon.	1	....	....	....	....	80 "	West Portal.	Sale of milk prohibited.
Bethlehem Township.	Hunterdon.	3	....	....	....	....	50 "	West Portal.	Sale of milk prohibited.
Holland Township.	Hunterdon.	....	1	....	....	....	83 "	Little York.	Isolation.
Holland Township.	Hunterdon.	....	....	....	1	....	60 "	Milford.	Isolation.
Lambertville City.	Hunterdon.	....	1	....	....	....	30 "	Lambertville.	Sale of milk discontinued.
Raritan Township.	Hunterdon.	....	1	....	....	....	125 "	Reaville.	Isolation.
Clinton Township.	Hunterdon.	....	....	1	....	....	160 "	Elizabeth.	Isolation.
Ewing Township.	Mercer.	....	1	....	....	....	Butter.	Trenton.	Isolation.

SHOWING NUMBER AND LOCATION OF DAIRY PREMISES ON WHICH CONTAGIOUS DISEASES WERE REPORTED AND INVESTIGATED DURING THE YEAR ENDING OCTOBER 31, 1914—continued.

LOCATION OF DAIRIES.		NUMBER OF CASES.							
Sanitary District.	County.	Diphtheria.	Scarlet fever.	Typhoid fever	Tuberculosis.	Dysentery.	Amount of milk produced on premises daily.	Place to Which Milk Was Shipped.	Action Taken to Prevent Spread of Infection.
Monroe Township.	Middlesex.	1					20 qts.	Helmetta.	Isolation.
Piscataway.	Middlesex.		1				350 "	New Brunswick.	Isolation.
Woodbridge Township.	Middlesex.		1				2 "		Sale of milk discontinued.
Woodbridge Township.	Middlesex.	1					110 "	Woodbridge.	Sale of milk prohibited.
Middletown Township.	Monmouth			1			120 "	Atlantic Highlands.	Isolation.
Florham Park Boro.	Morris.			1			280 "	Summit and Chatham.	Left to local board.
Mt. Olive Township.	Morris.	1					40 "	Hackettstown.	Sale of milk discontinued.
Montville Township.	Morris.	1					290 "	Montclair.	Isolation.
Montville Township.	Morris.	1					200 "	Boonton.	Isolation.
Passaic Township.	Morris.			1				Morristown.	Left to local board.
Plumstead Township.	Ocean.		1				100 "	New Egypt.	Isolation.
Plumstead Township.	Ocean				1		220 "	New Egypt.	Isolation.
Acquackanonk Township.	Passaic.	1					250 "	Clifton and Passaic.	Isolation.
Alloway Township.	Salem.		4				80 "	Alloway.	Isolation.
Elmer Boro.	Salem.		1				16 "	Elmer.	Isolation
Elmer Boro.	Salem.		1				46 "	Elmer.	Isolation.
Pennsgrove Boro.	Salem.	1					12 "	Pennsgrove.	Isolation.
Pilesgrove Township.	Salem.	1					250 "	Atlantic City.	Isolation.
Upper Pittsgrove Twp.	Salem.		2				80 "	Monroeville.	Isolation.
Upper Pittsgrove Township	Salem.		1				120 "	Philadelphia.	Isolation.
Upper Pittsgrove Twp.	Salem.		1				200 "	Vineland.	Isolation.
Upper Pittsgrove Twp.	Salem.		1				60 "	Pleasantville.	Isolation.
Bedminster Twp.	Somerset.		1				40 "	Lamington.	Sale of milk discontinued.
Branchburg Township.	Somerset.		1				70 "	North Branch.	Isolation.
Franklin Township.	Somerset.	1					50 "	New Brunswick.	Isolation.
Montgomery Township.	Somerset.		1				30 "	Belle Mead.	Isolation.
Frankford Township.	Sussex.	1					280 "	Montclair.	Isolation.
Frankford Township.	Sussex.		1					Branchville.	Sale of milk discontinued.
Hampton Township.	Sussex.	1					40 "	Swartswood.	Sale of milk discontinued.
Hardyston Township.	Sussex.			1			130 "	McAfee.	Isolation.
Vernon Township.	Sussex.			1			280 "	Glenwood.	Isolation.
Vernon Township.	Sussex.		3				480 "	Glenwood.	Isolation.
Vernon Township.	Sussex.		1				50 "	Glenwood.	Isolation.
Vernon Township.	Sussex.		1				120 "	Glenwood.	Isolation.
Wantage Township.	Sussex.				1				Patient died.
Greenwich Township.	Warren.	1					50 "	Bloomsbury.	Isolation.
Lopatcong Township.	Warren.		1				60 "	Phillipsburg.	Isolation.
Phillipsburg Town.	Warren.		1				60 "	Phillipsburg.	Isolation.

MORBIDITY AND
BY COUNTIES FOR THE YEAR

COUNTIES.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chickenpox	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Atlantic	79,943	102	12	75	5	129	4	140	113	41	.....
Bergen	167,355	67	8	292	28	181	7	215	188	284	.....
Burlington	70,282	120	13	151	17	274	18	102	84	133	2
Camden	158,091	106	17	292	27	154	2	409	297	313	.....
Cape May	21,466	20	2	28	2	19	.....	19	22	20	.....
Cumberland	57,588	99	6	91	8	109	4	100	81	11	1
Essex	593,848	346	35	2205	128	2550	62	2812	1078	1810	2
Gloucester	39,579	23	4	37	2	54	2	44	49	27	.....
Hudson	607,115	177	39	1863	175	1,165	42	2,258	1,037	351	.....
Hunterdon	32,815	27	3	71	7	51	1	35	36	22	.....
Mercer	137,767	93	14	217	22	565	37	462	249	99	.....
Middlesex	124,423	77	14	496	42	395	40	293	168	60	.....
Monmouth	99,013	88	16	87	13	115	1	130	135	95	.....
Morris	79,253	45	7	59	7	59	3	153	77	37	.....
Ocean	21,668	12	1	18	1	30	1	37	24	8	.....
Passaic	247,711	60	17	439	37	224	4	553	284	169	.....
Salem	27,567	24	2	30	.....	51	4	15	24	1	.....
Somerset	40,862	10	1	45	11	78	2	56	32	28	.....
Sussex	29,547	10	.....	21	3	35	.....	27	32	.....	.....
Union	157,927	69	8	298	22	207	11	480	231	529	.....
Warren	45,414	29	3	48	4	107	10	19	32	3	.....
Totals	2,839,234	1,604	222	6,863	561	6,552	255	8,369	4,273	4,041	5

MORBIDITY AND MORTALITY
BY SANITARY DISTRICTS FOR THE

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.	
		Cases.	Deaths.	Cases.	Deaths.
Belleville Township	11,698	4	.....	37	2
Bloomfield Town	*17,791	5	.....	106	.....
Caldwell Borough	2,576	.....	.....	1	.....
Caldwell Township	752	.....	.....	.....	.....
Cedar Grove Township	*2,409	.....	.....	.....	.....
East Orange, City	41,728	24	3	115	7
Essex Fells Borough	481	.....	.....	.....	2
Glen Ridge Borough	3,979	1	.....	7	.....
Irvington Town	15,634	4	1	89	5
Livingston Township	*1,025	.....	.....	1	.....
Millburn Township	4,151	1	.....	7	.....
Montclair Town	25,694	20	1	26	1
Newark City	398,813	250	26	1,572	96
North Caldwell Borough	684	.....	.....	.....	.....
Nutley Town	7,171	2	.....	54	3
Orange City	32,453	21	1	84	7
Roseland Borough	*486	.....	.....	.....	.....
South Orange Village	6,879	2	.....	11	.....
South Orange Township	3,805	2	.....	15	.....
Verona Borough	*1,675	.....	.....	12	.....
West Caldwell Borough	497	.....	.....	1	.....
West Orange Town	13,467	10	3	67	5
Totals	593,848	346	35	2,205	128

*No deaths in county.

MORTALITY TABLE.
ENDING OCTOBER 31, 1914.

Smallpox.		Malaria.		Anterior Poliomyelitis.		Trachoma.		Ophthalmia.		Anthrax.	
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
.....	.....	1	.....	.....	1	.....	.....	2	.....	.....	.....
1	.....	81	.....	2	1	.....	.....	30	1	.....	.....
1	.....	6	.....	.....	1	.....	.....	1	.....	.....	.....
.....	.....	4	.....	1	.....	.....	.....	.....	.....	4	1
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	2	1	.....	.....	1	.....	.....	.....
.....	.....	65	1	14	1	58	.....	37	.....	.....	.....
4	.....	1	1	.....	2	.....	.....	.....	.....	.....	.....
.....	.....	7	6	1	1	2	.....	6	.....	.....	.....
.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	158	.....	5	3	3	.....	1	.....	.....	.....
.....	.....	24	.....	2	1	.....	.....	.....	.....	.....	.....
7	.....	8	.....	1	1	.....	.....	.....	.....	.....	.....
.....	.....	17	.....	1	.....	.....	.....	.....	.....	.....	.....
1	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....
5	1	18	.....	2	2	7	.....	.....	.....	1	1
2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
.....	.....	3	1	1	.....	5	.....	.....	.....	.....	.....
.....	.....	330	.....	.....	.....	4	.....	.....	.....	.....	.....
.....	.....	46	2	2	3	.....	.....	2	.....	.....	.....
.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....
23	1	771	14	35	18	79	.....	83	1	5	2

TABLE FOR ESSEX COUNTY.
YEAR ENDING OCTOBER 31, 1914.

Scarlet fever.		Tubercu-losis.		Chicken-pox.		Malaria.		Anterior Poliomyelitis.		*Trachoma.		*Oph-thalmia.	
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
49	6	18	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
81	1	31	28	6	.....	.....	1	.....	.....	.....	.....	.....	.....
15	.....	12	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	25	8	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
154	1	81	37	96	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	6	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
93	1	73	34	45	.....	2	.....	.....	.....	.....	.....	1	.....
14	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21	1	8	3	10	.....	1	.....	1	.....	.....	.....	1	.....
73	.....	71	41	69	.....	5	.....	.....	.....	.....	.....	.....	.....
1,844	47	2,237	778	1,334	1	51	.....	11	1	57	.....	32	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
40	.....	12	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
97	4	131	62	104	.....	4	.....	2	.....	1	.....	3	.....
2	.....	1	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	16	8	55	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	.....	14	13	16	.....	1	.....	.....	.....	.....	.....	.....	.....
.....	.....	10	8	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
39	1	58	17	48	1	.....	.....	.....	.....	.....	.....	.....	.....
2,550	62	2,812	1,078	1,810	2	65	1	14	1	58	.....	37	.....

No smallpox, no hydrophobia, no anthrax. *No deaths in county.

MORBIDITY AND MORTALITY TABLE FOR ATLANTIC COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		*Chickenpox.		Anterior Poliomyelitis.		*Ophthalmia.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Absecon City	913	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....	.....	.....	.....
Atlantic City	51,684	36	10	53	4	102	3	102	75	1	.....	.....	1	.....	.....
Brigantine City	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buena Vista Township	2,723	6	.....	1	1	12	1	3	2	.....	.....	.....	.....	.....	.....
Egg Harbor City	2,102	4	1	3	.....	1	.....	3	5	.....	.....	.....	.....	.....	.....
Egg Harbor Township	823	.....	.....	3	.....	2	.....	1	4	.....	.....	.....	.....	.....	.....
Folsom Borough	232	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galloway Township	2,056	7	.....	1	.....	3	.....	.....	2	.....	.....	.....	.....	.....	.....
Hamilton Township	2,471	.....	.....	.....	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....
Hammonton Town	5,691	23	.....	2	.....	2	.....	6	5	33	.....	.....	.....	1	.....
Linwood Borough	681	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Longport Borough	106	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Margate City	140	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mullica Township	824	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northfield City	1,009	.....	.....	.....	.....	1	.....	2	1	.....	.....	.....	.....	.....	.....
Pleasantville Borough	5,643	26	1	12	.....	4	.....	16	10	5	.....	.....	.....	1	.....
Port Republic City	368	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somers Point City	743	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Ventnor City	791	.....	.....	.....	.....	2	.....	1	1	2	.....	.....	.....	.....	.....
Weymouth Township	899	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Totals	79,943	102	12	75	5	129	4	140	113	41	.....	.....	1	2	.....

Malaria, 1 case in Pleasantville Boro. No smallpox, Trachoma, Hydrophobia or Anthrax. *No deaths in county.

MORBIDITY AND MORTALITY TABLE FOR BERGEN COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		*Chickenpox.		Malaria.		Ophthalmia.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Allendale Borough	1,077			2				2	1						
Alpine Borough	320	1				1		1							
Bergenfield Borough	2,708	1	1					2	3						
Bogota Borough	1,608			6		1		4	1						
Carlstadt Borough	4,372	1		17	2	5		7	3						
Cliffside Park Borough	4,407			25	2	4		4	3	1					
Closter Borough	1,652								1						
Cresskill Borough	586					1			1			2			
Delford Borough	1,136	1		1				2	2	2		9			
Demarest Borough	624					1		2	2						
Dumont Borough	2,479			3		1		6	6	2					
East Rutherford Borough	5,163			1		5		6	6						
Edgewater Borough	3,666	1				5		2	4	17					
Emerson Boro	767			2	1							12			
Englewood City	11,525	14		10		6		24	10	15				1	
Englewood Cliffs Borough	525					2									
Fairview Borough	3,040	1	1	9				5	5						
Fort Lee Borough	5,303					2		10	7						
Franklin Township	2,265			1		1	1		1						
Garfield Borough	14,310	4		21	5	4	1	7	13						
Glen Rock Borough	1,276			1		3		3	3						
Hackensack Town	16,411	9	2	25	3	27	1	30	25	102				2	1
Harrington Township	641	1							1						
Harrington Park Borough	452								1	1					
Hasbrouck Heights Borough	2,559			7		7		3	3					27	
Haworth Borough	739														
Hillsdale Township	1,072			1		1		2	3			3			
Hohokus Borough	488			1				3	1	5		1			
Hohokus Township	1,881			9		4			4						
Leonia Borough	1,842	1				3		2							
Little Ferry Borough	3,153					2	1	3	5	8					
Lodi Borough	5,214	1		9		11		6	5	1					
Lodi Township	*693	1		1	2				1						
Maywood Borough	1,050	1						1	1	7					
Midland Township	1,492			5				8	3	3					

MORBIDITY AND MORTALITY TABLE FOR BERGEN COUNTY—continued.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		*Chicken-pox.		*Malaria.		Ophthalmia.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Midland Park Borough	2,308			3				3	4	3		1			
Montvale Borough	538														
Moonachie Borough	*638			2		1		2	1						
North Arlington Borough	460								1						
Northvale Borough															
Norwood Borough	669														
Oakland Borough	553			2				1		2					
Old Tappen Borough	325								1						
Orvil Township	*970								2						
Palisade Township	1,220	1	1	2		2		2	3			6			
Palisade Park Borough	1,811			4		1		5	2						
Park Ridge Borough	1,570			1				1	1						
Ramsey Borough	1,667														
Ridgefield Borough	1,143					2		2	2						
Ridgefield Park Village	5,841	1		14	2	14		7	5	5					
Ridgewood Village	6,565	8		9	1	6		8	9	84					
Riverside Borough	789			4		12		2	1						
Rivervale Township	*450			1				1	1						
Rutherford Borough	8,506	4		7		14		10	7	5					
Saddle River Borough	490			2					2						
Saddle River Township	3,846			10				3	7						
Teaneck Township	2,770	1		13		2		1	1	21					
Tenafly Borough	3,247	2	1	3		1		3	1						
Union Township	5,586	12	2	45	9	18	2	6	6						
Upper Saddle River Township	252					1			1						
Wallington Borough	4,227			4				8	1						
Washington Township	*100														
Westwood Borough	2,555			18	1	9	1	2	1			47			
Woodcliff Lake Borough	463							2	2						
Wood Ridge Borough	1,300			1		1			2						
Totals	167,355	67	8	292	28	181	7	215	188	284		81		30	1

Smallpox, 1 case in Hackensack Town. Anterior Poliomyelitis, 2 cases, and 1 death in Hackensack Town. No Trachoma. Hydrophobia or Anthrax. *No deaths in county.

MORBIDITY AND MORTALITY TABLE FOR BURLINGTON COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		*Malaria.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Bass River Township	650		1			1							
Beverly City	2,045	1		8	1	9		4	4	4			
Beverly Township	2,462	4		3	1			2	3				
Bordentown City	4,391	4	1	4	1	70		7	6	1			
Bordentown Township	667					12	1						
Burlington City	8,675	18		6		48		6	6	1			
Burlington Township	1,387	3		1		8		2	2	1			
Chester Township	5,245	4	1	13	4	15		14	6	89		2	
Chesterfield Township	1,121	3				6			1				
Cinnaminson Township	1,427	1				1	1	3	3				
Delran Township	782	3	1	3		9		1	1				
Easthampton Township	445	2		1				1					
Evesham Township	1,449	1				4			2	6			
Fieldsboro Borough	498	1				10		1	1				
Florence Township	6,942	37	4	17	3	51	15	7	5		1		
Lumberton Township	1,836	2	1	3		1	1	2	2	3			
Mansfield Township	1,553	2						2	2				
Medford Township	1,802	2				1		2	2				
Mount Laurel Township	1,494	1		3				1	1				
New Hanover Township	939					4			2				
North Hanover Township	655		1										
Northampton Township	5,767	20	2	14	1	5		10	9	16	1	4	
Palmyra Township	2,928	4		31		5		7	5	4			
Pemberton Borough	778			5	2				5				
Pemberton Township	1,658	3		1	1			13	4				
Riverside Township	4,579	3	1	27	3	10		10	5	1			
Riverton Borough	1,973			6		3		2	2	6			
Shamong Township	463												
Southampton Township	1,713			2				2					
Springfield Township	1,242					1		1	1				
Tabernacle Township	507												
Washington Township	620			1				2	3				
Westhampton Township	580												
Willingboro Township	485			2						1			
Woodland Township	524	1							1				
Totals	70,282	120	13	151	17	274	18	102	84	133	2	6	

Smallpox, 1 case in Pemberton Borough. Anterior Poliomyelitis, 1 death in Bordentown City. Ophthalmia, 1 case in Palmyra Township. No Trachoma, Hydrophobia or Anthrax. *No deaths in county.

MORBIDITY AND MORTALITY TABLE FOR CAMDEN COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Malaria.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Audubon Boro.	1,997	3	.....	2	.....	.....	.....	2	4	1	.....	.....	.....
Berlin Township.	*1,611	.....	.....	4	1	5	.....	1	5	.....	.....	.....	.....
Camden City.	103,478	65	11	203	21	76	2	289	192	219	.....	2	.....
Centre Township.	3,639	4	1	2	1	.....	.....	12	7	.....	.....	.....	.....
Chesilhurst Borough.	237	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....
Clementon Township.	3,223	.....	.....	.....	.....	1	.....	5	3	2	.....	.....	.....
Collingswood.	6,600	6	.....	11	1	10	.....	18	13	.....	.....	2	.....
Delaware Township.	1,895	.....	.....	3	.....	2	.....	4	2	.....	.....	.....	.....
Gloucester City.	10,587	4	3	13	1	9	.....	14	20	5	.....	.....	.....
Gloucester Township.	2,444	4	.....	1	.....	.....	.....	23	17	.....	.....	.....	.....
Haddon Township.	1,830	2	.....	2	.....	2	.....	8	9	5	.....	.....	.....
Haddon Heights Borough	2,091	4	.....	1	.....	10	.....	2	1	30	.....	.....	.....
Haddonfield Borough.	4,673	10	.....	19	.....	9	.....	9	5	13	.....	.....	.....
Laurel Springs Borough.	.....	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Merchantville Borough.	2,287	.....	.....	7	.....	18	.....	3	5	26	.....	.....	.....
Oakland Borough.	812	.....	.....	1	.....	.....	.....	1	1	1	.....	.....	.....
Pensauken Township.	4,338	3	.....	19	2	3	.....	10	5	8	.....	.....	.....
Voorhees Township.	1,306	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	.....
Waterford Township.	1,484	1	1	1	.....	2	.....	1	1	.....	.....	.....	.....
Winslow Township	2,970	.....	.....	.....	.....	.....	.....	5	3	.....	.....	.....	.....
Woodlynne Borough.	589	.....	.....	2	.....	4	.....	.....	1	3	.....	.....	.....
Totals.	158,091	106	17	292	27	154	2	409	297	313	.....	4	.....

Anterior Poliomyelitis, 1 case in Camden City. Anthrax, 4 cases and 1 death in Camden City. No Smallpox, Trachoma, Ophthalmia or Hydrophobia. *No deaths in county.

MORBIDITY AND MORTALITY TABLE FOR CAPE MAY COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		*Scarlet fever.		Tuberculosis.		*Chicken-pox.		*Small-pox.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Avalon Borough	345	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Cape May City	2,043	3	1	1	1	5	.....	6	2	4	.....	.....	.....
Cape May Point Boro	*162	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dennis Township	1,731	2	1	1	.....	.....	.....	.....	3	7	.....	.....	.....
Lower Township	1,118	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Middle Township	3,286	.....	.....	1	.....	3	.....	.....	3	.....	.....	.....	.....
North Wildwood Boro	1,180	1	.....	1	1	3	.....	.....	.....	.....	.....	.....	.....
Ocean City	2,042	7	.....	4	.....	.....	.....	2	3	1	.....	.....	.....
Sea Isle City	646	2	.....	7	.....	.....	.....	2	1	4	.....	.....	.....
South Cape May Borough	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upper Township	1,590	.....	.....	.....	.....	3	.....	1	1	.....	.....	.....	.....
West Cape May Borough	797	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Wildwood City	3,577	4	.....	5	.....	4	.....	4	2	1	.....	.....	.....
Wildwood Crest Borough	*103	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woodbine Borough	2,838	.....	.....	8	.....	1	.....	3	4	3	.....	.....	.....
Totals	21,466	20	2	28	2	19	.....	19	22	20	.....	2	.....

No Malaria, Anterior Poliomyelitis, Trachoma, Ophthalmia, Hydrophobia or Anthrax. *No deaths in county.

MORBIDITY AND MORTALITY TABLE FOR CUMBERLAND COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chickenpox.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Bridgeton City	14,677	59	3	20	2	28	3	40	24	2	.....	...	.
Commercial Township	2,707	1	.....	1	.....	.....	.....	2	1	.....	.....	.....	.....
Deerfield Township	3,390	9	.....	4	1	25	.....	1	1	.....	.....	.....	.....
Downe Township	1,403	1	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....
Fairfield Township	1,632	1	.....	.....	.....	3	.....	3	1	.....	.....	.....	.....
Greenwich Township	1,164	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
Hopewell Township	1,801	3	.....	1	.....	3	.....	3	4	.....	.....	.....	.....
Landis Township	7,302	6	1	6	1	26	1	13	11	4	1	.....	.....
Lawrence Township	1,759	2	.....	8	1	7	.....	2	2	.....	.....	.....	.....
Maurice River Township	2,116	1	.....	2	.....	.....	.....	1	3	.....	.....	.....	.....
Millville City	12,904	11	1	31	3	8	.....	16	11	2	.....	1	.....
Stow Creek Township	900	1	.....	1	.....	1	.....	.....	2	.....	.....	.....	.....
Vineland Borough	5,833	4	1	16	.....	8	.....	17	17	3	.....	1	1
Totals	57,588	99	6	91	8	109	4	100	81	11	1	2	1

Ophthalmia, 1 case in Vineland Borough. No Smallpox, Malaria, Trachoma, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR GLOUCESTER COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		*Chickenpox.		Malaria.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Clayton Borough	1,975	1				3		2	3						
Deptford Township	2,756	1		3		1		3	1	1					
East Greenwich Township	1,491	1		2		13	2	1							
Elk Township	1,089					5			2						
Franklin Township	2,928					1		2	2						
Glassboro Township	2,992					2		1	3						
Greenwich Township	970			1		4			1						
Harrison Township	1,728	1		4		5		2	2				1		
Logan Township	1,519			5		2		2	2						
Mantua Township	1,575					2		1	4			1			1
Monroe Township	3,412	1				2		8	5						
National Park Borough	457	1	1	4	1	1									
Paulsboro Borough	2,002	6		3		4		3	2						
Pitman Borough	2,595	2	1	2				4	6						
South Harrison Township	705	1	1	3				1	1						
Swedesboro Borough	1,472	4	1	1				1	7						
Washington Township	1,444	1		1					1						1
Wenonah Borough	706			1				3	1						
West Deptford Township	1,921			4	1	2		1	2	3					
Woodbury City	4,707	3		2		7		7	2	23					
Woolwich Township	1,135														
*Westville Borough				1				2	2						
Totals	39,579	23	4	37	2	54	2	44	49	27		1	1		2

Smallpox, 4 cases in Swedesboro Borough. No Trachoma, Ophthalmia, Hydrophobia, Anthrax. *No deaths in county.

MORBIDITY AND MORTALITY TABLE FOR HUDSON COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chickenpox.		Malaria.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Bayonne City	66,172	7	3	176	21	117	11	178	85	40	.....	1	1	.....	.....
East Newark Borough	3,431	.....	.....	8	.....	6	.....	10	5	.....	.....	.....	.....	.....	.....
Guttenberg Town	6,514	3	.....	26	2	11	.....	27	13	.....	.....	.....	.....	.....	.....
Harrison Town	15,838	5	1	39	2	77	.....	43	21	5	.....	.....	.....	.....	1
Hoboken City	74,209	31	12	190	25	86	2	557	158	62	.....	.....	.....	.....	.....
Jersey City	295,843	67	18	942	81	575	19	984	536	155	.....	3	4	1	.....
Kearny Town	22,706	46	.....	82	6	71	1	64	27	70	.....	3	.....	.....	.....
North Bergen Township	19,285	1	1	58	10	32	1	51	25	3	.....	.....	.....	.....	.....
Secaucus Borough	5,979	.....	.....	4	.....	2	1	23	33	.....	.....	.....	1	.....	.....
Town of Union	24,238	3	1	94	6	55	4	98	25	.....	.....	.....	.....	.....	.....
Weehawken Township	13,789	5	3	31	1	17	1	32	18	.....	.....	.....	.....	.....	.....
West Hoboken Town	40,460	4	.....	131	15	80	2	100	58	12	.....	.....	.....	.....	.....
West New York Town	18,651	5	.....	82	6	36	.....	91	33	4	.....	.....	.....	.....	.....
Totals	607,115	177	39	1,863	175	1,165	42	2,258	1,037	351	.....	7	6	1	1

Trachoma, 2 cases in Jersey City. Ophthalmia, 4 cases in Jersey City, 1 case in Town of Union, 1 case in West New York.
No smallpox, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR HUNTERDON COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Malaria.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alexander Township	1,074	.....	.....	2	1	4	.....	1	3	.....	.....	.....	.....
Bethlehem Township	*980	.....	.....	6	.....	.....	.....	1	.....	.....	.....	.....	.....
Bloomsbury Borough	*600	.....	.....	3	.....	1	.....	1	.....	.....	.....	.....	.....
Clinton Borough	841	.....	.....	1	1	4	.....	1	2	.....	.....	.....	.....
Clinton Township	2,173	3	.....	.....	.....	1	.....	2	1	.....	.....	.....	.....
Delaware Township	1,591	.....	.....	.....	.....	5	.....	1	3	.....	.....	.....	.....
East Amwell Township	1,160	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Flemington Town	2,799	.....	.....	6	.....	6	.....	2	4	.....	.....	1	.....
Franklin Township	1,094	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Frenchtown Borough	990	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hampton Borough	866	.....	.....	1	.....	1	.....	1	1	.....	.....	.....	.....
High Bridge Borough	1,676	.....	.....	10	2	2	1	2	2	.....	.....	.....	.....
Holland Township	1,826	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Kingwood Township	1,326	1	.....	.....	.....	1	.....	.....	1	2	.....	.....	.....
Lambertville City	4,370	14	2	37	2	13	.....	7	7	18	.....	.....	1
Lebanon Township	2,336	.....	.....	1	.....	2	.....	5	2	.....	.....	.....	.....
Milford Borough	.....	.....	.....	.....	.....	8	.....	2	2	2	.....	.....	.....
Raritan Township	1,318	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Readington Township	2,686	3	.....	.....	.....	1	.....	3	3	.....	.....	.....	.....
Stockton Borough	618	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Tewksbury Township	1,683	4	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Union Township	935	.....	.....	2	.....	.....	.....	2	4	.....	.....	.....	.....
West Amwell Township	873	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Totals	32,815	27	3	71	7	51	1	35	36	22	.....	1	1

No Smallpox, Anterior Poliomyelitis, Trachoma, Ophthalmia, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR MERCER COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Malaria.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
East Windsor Township	1,004	1		4				1	1						
Ewing Township	2,152	3	2			14	3	3	7	1					
Hamilton Township	10,098	7		12	2	45	4	30	14						
Hightstown Borough	1,708	1		1		7			1					1	1
Hopewell Borough	1,144			1		2		4	3						
Hopewell Township	3,140	1				6		3	4						
Lawrence Township	2,905	3	1	8		23	1	3	2						
Pennington Borough	685					4		1	2						
Princeton Borough	4,421	14	2	6		4		11	7	44		136			
Princeton Township	1,205	2	1									21			
Trenton City	106,923	61	8	184	20	452	29	403	205	54		1		4	2
Washington Township	1,023					5		3	2						
West Windsor Township	1,359			1		3			1						
Totals	137,767	93	14	217	22	565	37	462	249	99		158		5	3

Trachoma, 3 cases in City of Trenton. Ophthalmia, 1 case in City of Trenton. No Smallpox, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR MIDDLESEX COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Malaria.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cranbury Township	1,391			3		1		1		3					
Dunellen Borough	2,369	12		1		2		5		4		20			
East Brunswick Township	*1,602			4		6		1	2						
Helmetta Borough	730			2	1			3	2	3				1	
Highland Park Borough	2,160			3		12	1	3	5						
Jamesburg Borough	2,510					3		1							
Madison Township	1,652			2		1			2						
Metuchen Borough	2,323	1		4				2	3						
Middlesex Borough		4				8	1		2						
Milltown Borough	1,883	2	1	9	1	34	1	1	1						
Monroe Township	1,483			5		1			1	1					
New Brunswick City	23,592	17	4	57	6	120	19	69	48						
North Brunswick Township	1,039					1			2						
Perth Amboy City	37,102	25	5	256	23	130	9	127	53	47		4		1	1
Piscataway Township	4,128	3	2			2	1	6	4						
Raritan Township	2,783			7		9	4	2	1						
Roosevelt Borough	5,786	2	1	11				8	2						
Sayreville Township	6,586			8	3	3		9	8						
South Amboy City	7,606	1		13	1	7		4	9						
South Brunswick Township	2,406			4		13		6	1						
South River Borough	5,721		1	20	1	21	3	18	10						
Spotswood Borough	*623							1	1						
Woodbridge Township	*8,948	10		87	6	21	1	26	11	2					
Totals	124,423	77	14	496	42	395	40	293	168	60		24		2	1

No Smallpox, Trachoma, Ophthalmia, Hydrophobia, Anthrax.

MORBIDITY AND MORTALITY TABLE FOR MONMOUTH COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chickenpox.		Smallpox.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Allenhurst Borough	353	1				2									
Allentown Borough	619							2	1						
Asbury Park City	*10,150	8	2	7	1	4		25	16	51					1
Atlantic Township	1,085			1					1						
Atlantic Highlands Borough	1,787			3				2	1						
Avon Borough	509	1				1									
Belmar Borough	1,708	2	1			1		1		1					
Bradley Beach Borough	2,423		1			2			2						
Deal Borough	360					1									
Eatontown Township	*2,076	2		8		2		2	2	6					
Englishtown Borough	509							1	1						
Fair Haven Borough		2				1		7	3						
Farmingdale Borough	429	1						1	1						
Freehold Town	3,368	12	1	1		1		6	4	2					
Freehold Township	2,213	4		1	1	1		1	5						
Highlands Borough	1,475	2		1				1		1					
Holmdel Township	927	1													
Howell Township	2,798								2						
Keyport Borough	3,689			5	2	1		2	6	1					
Long Branch City	14,190	18	2	23	3	40		25	22	26		1			
Manalapan Township	1,362	1		3	1				2						
Manasquan Borough	1,539	1		4		9		1							
Marlboro Township	1,826							1	2						
Matawan Borough	1,779	1		2				4	3						
Matawan Township	1,557							2	3						
Middletown Township	7,495	2		1		2		8	11	2					
Millstone Township	1,484					3									
Monmouth Beach Borough	485														
Neptune Township	*5,551	3	2	2		3		6	5			2			1
Neptune City Borough	232							1	2						
Ocean Township	*1,377	3		4		2		2	2	2					
Ocean Grove		2	1			4	1	6	2			1			
Raritan Township	1,671	5	1	2	2			3	4						
Red Bank Borough	8,306	2	1	6	1	8		14	21			3			
Rumson Borough	*1,449	2	1	4		2		1	3						
Sea Bright Borough	1,261	1				23									
Shrewsbury Township	*3,238	4			2										
Spring Lake Borough	704	3		7				2							
Upper Freehold Township	2,094	1	1					1	1						
Wall Township	4,056	3	2	2		2		2	7						
West Long Branch Borough	879									3					
Totals	99,013	88	16	87	13	115	1	130	135	95		7		1	1

Malaria, 7 cases in Long Branch City (where county hospital is located), 1 case in West Long Branch. No Trachoma, Oph-

MORBIDITY AND MORTALITY TABLE FOR MORRIS COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Malaria.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Boonton Town	*4,930			7				4							
Boonton Township	428							3							
Butler Borough	2,326	2		4				4	3			1			
Chatham Borough	2,132	2		2	1				5						
Chatham Township	958							3	1						
Chester Township	1,150							1	2						
Denville Township															
Dover Town	8,360	3		17		17	3	9	4	35		6			
Florham Park Borough	362	1		1		2									
Hanover Township	6,975	4	1	4	1			51	5						
Jefferson Township	1,338					3		1	2			1			
Madison Borough	5,093		1	1	1	4		10	8						
Mendham Borough	*1,129	5		1				2	2						
Mendham Township	*792	2		2						1					
Montville Township	2,179			2		2		2	1						
Morris Township	3,462		1						1						
Morristown Town	12,796	22	4	8	1	17		34	18					1	
Mt. Arlington Borough	299							1	1						
Mount Olive Township	1,209					5		1	1			1			
Mount Tabor Borough				1											
Netcong Borough	1,939														
Passaic Township	2,166	1				5		4	5	1					
Pequannock Township	2,118	1		4				3							
Randolph Township	2,291	1		1	1			4	6						
Rockaway Borough	2,155	1						4	3			7			
Rockaway Township	*4,835			4	2	2		4	2						
Roxbury Township	2,487					1		2	3						
Washington Township	1,803							5	2			1			
Wharton Borough	3,541					1		1	2						
Totals	79,253	45	7	59	7	59	3	153	77	37		17		1	

No Smallpox, Trachoma, Ophthalmia, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR OCEAN COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Small-pox.		Malaria.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Barnegat City Borough	63							1	1						
Bayhead Borough	284	2													
Beach Haven Borough	249	1				1		3							
Berkeley Township	628			1					1						1
Brick Township	2,221	1		2		1		1	3						
Dover Township	2,119	1	1	2	1	7	1	7	5	2					
Eagleswood Township	563	2				1		1	1						
Harvey Cedars Borough	22														
Island Heights Borough	364	1						1	1						
Jackson Township	1,158					1			2						
Lacey Township	561														
Lakewood Township	5,856	3		3		5		17	7	6				1	
Lavalette Borough	58														
Little Egg Harbor Township	285					1									
Long Beach Township	134			1											
Manchester Township	1,373					7									
Ocean Township	388														
Plumstead Township	1,028	1				1		1	1			1			
Point Pleasant Beach	1,023			9				2	1						
Seaside Heights Borough															
Seaside Park Borough	108														
Stafford Township	886					4		1							
Surf City Borough	43														
Tuckerton Borough	1,217					1		1	1						
Union Township	1,037							1							
Totals	21,668	12	1	18	1	30	1	37	24	8		1		1	1

Ophthalmia, 1 case in Lakewood. No Anterior Poliomyelitis, Trachoma, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR PASSAIC COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chickenpox.		Smallpox.		Malaria.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Acquackanonk Township	15,614	4	.....	48	4	15	.....	39	17	.....	.....	.....	.....	.....	.....
Haledon Borough	2,560	.....	.....	8	.....	3	.....	8	2	.....	.....	.....	.....	.....	.....
Hawthorne Borough	4,065	1	.....	4	1	9	.....	3	1	1	.....	.....	.....	.....	.....
Little Falls Township	4,287	1	.....	4	.....	2	.....	4	1	4	.....	.....	.....	.....	.....
North Haledon Borough	790	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....
Passaic City	68,323	10	7	105	15	76	3	142	72	99	.....	4	1	1	.....
Paterson City	136,857	43	10	247	14	107	1	338	169	65	.....	1	.....	7	.....
Pompton Township	4,894	1	.....	4	1	3	.....	5	6	.....	.....	.....	.....	9	.....
Pompton Lakes Borough	1,097	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Prospect Park Borough	3,366	.....	.....	5	1	5	.....	8	9	.....	.....	.....	.....	.....	.....
Totowa Borough	1,443	.....	.....	14	1	1	.....	1	1	.....	.....	.....	.....	1	.....
Wayne Township	2,492	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....
West Milford Township	1,923	.....	.....	.....	.....	.....	.....	3	2	.....	.....	.....	.....	.....	.....
West Paterson Borough	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Totals	247,711	60	17	439	37	224	4	553	284	169	.....	5	1	18	.....

Anterior Poliomyelitis, 1 case and 1 death in Passaic, 1 case and 1 death in Paterson. Trachoma, 7 cases in Paterson. Anthrax, 1 case and 1 death in West Milford Township. No Ophthalmia, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR SALEM COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Small-pox.		Ophthalmia.	
		Cases.	Deaths.	Cases.	Deaths.	Cases	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alloway Township	1,510								1						
Elmer Borough	1,126	2				25		7	3						
Elsinboro Township	436														
Lower Alloway Creek Township	1,277														
Lower Penns Neck Township	1,717	4				1		1	3						
Mannington Township	1,569							1	1						
Oldsmans Township	1,356	1						2	3						
Pennsgrove Borough	2,163			21										1	
Pilesgrove Township	1,834		1	3		1	3					2			
Pittsgrove Township	2,586	3				1									
Quinton Township	1,056			1					1						
Salem City	6,751	7	1	1		12		2	7						
Upper Penns Neck Township	703	2		1					1						
Upper Pittsgrove Township	1,779	3		2		11	1	2							
Woodstown Borough	1,704	2		1					4	1				1	
Totals	27,567	24	2	30		51	4	15	24	1		2		2	

No Malaria, Anterior Poliomyelitis, Trachoma, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR SOMERSET COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Malaria.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Bedminster Township	2,478			1		1		1		4			
Bernards Township	4,683	1	1	7	3	3		4	1	4			
Bound Brook Borough	4,435			12		21	1	5	5	11			1
Branchburg Township	963					2							
Bridgewater Township	2,207			1	1			2	1				
East Millstone Township	375												
Franklin Township	2,467	1		3	1	7		1	1				
Hillsboro Township	2,366	2		1	1	2		4	3				
Millstone Borough	158												
Montgomery Township	1,744				1			1	3	7			
North Plainfield Borough	6,518			1		13		12	6				
North Plainfield Township	1,041			1				5	1				
Peapack-Gladstone Borough		1		6	2	2		1	1				
Raritan Town	3,447	2		3	2	1		4	2				
Rocky Hill Borough	520			1					1				
Somerville Borough	5,283	3		7		9		14	6	2		3	
South Bound Brook Borough	1,092			1		17	1	2					
Warren Township	1,085								1				
Totals	40,862	10	1	45	11	78	2	56	32	28		3	1

Anterior Poliomyelitis, 1 case in Bernards Township. Trachoma, 5 cases in Bernards Township. No Smallpox, Ophthalmia, Hydrophobia, or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR SUSSEX COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Malaria.		Trachoma.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Andover Borough	1,249								1				
Andover Township	555							1					
Branchville Borough	720					3			1				
Byram Township	1,558			4	1	5		1					
Frankford Township	1,009			1		3							
Franklin Borough				4		2		1	1	243		4	
Fredon Township	453	1				3							
Green Township	1,199												
Hampton Township	710	1		2	1	1			1				
Hardyston Township	6,631					3		1	3	67			
Hopatcong Borough	163												
Lafayette Township	734					2		3					
Montague Township	589					1		1					
Newton Town	4,503	5		10		1		8	9				
Odgenburg Borough					1					3			
Sandyston Township	842							1	4				
Sparta Township	1,552							4	3	7			
Stanhope Borough	1,146					1		2	1				
Stillwater Township	781	2											
Sussex Borough	1,127							1					
Vernon Township	1,696	1				10		1	2	10			
Walpack Township	255								1				
Wantage Township	2,075							2	5				
Totals	29,547	10		21	3	35		27	32	330		4	

No Chickenpox, Smallpox, Anterior Poliomyelitis, Ophthalmia, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR UNION COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Malaria.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Clark Township	534			1								1			
Cranford Township	*3,641			1		4		7	4	112					
Elizabeth City	83,729	27	4	195	17	99	5	245	125	267		1	1	1	2
Fanwood Borough	492														
Fanwood Township	1,836					2			1						
Garwood Borough	1,561			4		2		5	2						
Kenilworth Borough	*779	1		3				3				1			
*Hillside Township				10				2	2	1					
Linden Borough	775	2		7	1	3		2	2						
Linden Township	2,701		2	6	1	6	1	3	2						
Mountainside Borough	401	1	1				1		3						
New Providence Borough	968							1	4						
New Providence Township	582			9		2		6	4			16			
Plainfield City	22,215	18	1	14	1	40		82	27	79		18			1
Rahway City	9,888	2		20	1	12	1	46	18	10		9	1		
Roselle Borough	3,190			5		5		3		1					
Roselle Park Borough	3,859	1		2		10		10	4	5					
Springfield Township	1,345			4		3	1	4	3						
Summit City	8,024	13		3	1	4	1	40	22	8				1	
Union Township	4,063			2		3		9	5	1					
Westfield Town	7,344	4		12		12	1	12	3	45					
Totals	157,927	69	8	298	22	207	11	480	231	529		46	2	2	3

Ophthalmia, 1 case in Plainfield City; 1 case in Summit City. No Smallpox, Trachoma, Hydrophobia or Anthrax.

MORBIDITY AND MORTALITY TABLE FOR WARREN COUNTY.
BY SANITARY DISTRICTS FOR THE YEAR ENDING OCTOBER 31, 1914.

SANITARY DISTRICTS.	Estimated Population.	Typhoid fever.		Diphtheria.		Scarlet fever.		Tuberculosis.		Chicken-pox.		Malaria.		Anterior Poliomyelitis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Allamuchy Township	699								1						
Alpha Borough		2		3	1	4			1	1					
Belvidere Town	1,680	4		10	1			1	1						
Blairstown Township	1,863		1			1			3						
Franklin Township	1,806					2	1			1					
Frelinghuysen Township	1,351								1						
Greenwich Township	944			1		1									
Hackettstown Town	2,812	3		10		2		1	3				1		
Hardwick Township	433														
Harmony Township	1,813			2		1									
Hope Township	1,194								2						
Independence Township	892														
Knowlton Township	1,823					1									
Lopatcong Township	823								1						
Mansfield Township	1,241					3			1						
**Oxford Township	3,828	2		1		2		3	2					1	
Pahaquarry Township	185			1											
Phillipsburg Town	14,344	17	2	17	2	78	9	11	11	1					
Pohatcong Township	3,037			1		3									
Washington Borough	3,676	1		2		8		2	3						
Washington Township	970					1		1							
**White Township									2						
Totals	45,414	29	3	48	4	107	10	19	32	3			1	1	

**White Township taken from Oxford Township. No Smallpox, Trachoma, Ophthalmia, Hydrophobia or Anthrax.

Report of the Bureau of Creamery and Dairy Inspection.

GEORGE W. McGUIRE, CHIEF.

To the Board of Health of the State of New Jersey:

GENTLEMEN: I have the honor to submit the following report showing the work of the Bureau for the year ending October 31, 1914.

The enactment by the last legislature of a law designated as Chapter 78 of the Laws of 1914 was designed to meet and correct some conditions on dairy premises which were a menace to the purity of the milk supply. Previous to the enactment of this law, health officials did not have sufficient means at their disposal to bring about an improved environment of cattle and thus assure a more healthy product. This law not only defines the proper lighting and ventilation of dairy barns, but provides for cooperative action of State and local boards of health in dealing with dairymen who disregard simple sanitary precautions in handling this delicate food product.

The main objects of this law are to require better lighting, ventilation and air space in cow stables and to insure a pure water supply for the use of the animals and for the cleansing of all vessels and containers used in the dairy. It is thought that a strict observance of these provisions will diminish the amount of tuberculosis and other diseases among dairy cattle and will otherwise improve the condition of the public milk supply. The law requires that stables shall have at least two square feet of lighting surface per cow. In order, however, that animals may receive the full purifying benefit of light and air, it is very desirable that all cow stables be equipped with enough windows to afford each cow four square feet of lighting surface. These windows should be so placed in the stable that the light will be equally distributed throughout the room.

The enforcement of this feature of the act has had the effect of improving many stables which were found to be dark, poorly ventilated and without adequate air space. Those dairymen who have reluctantly complied with the orders of the Board regarding these requirements have later expressed their satisfaction, since they have noted the dif-

ference in the comfort their animals enjoy without being exposed to injurious drafts or stable odors.

The law also makes it mandatory upon all dairymen to send to the office of the State Board of Health, at least once a year, a certificate signed by a duly licensed veterinarian, showing the physical condition of all their dairy animals. This is a reasonable requirement, and one which will be more strictly enforced during the coming year. During the part of the year in which this law was operative, we endeavored to notify as many cattle owners as possible of its provisions and requested them to send in their certificates. This took much time and considerable correspondence, but the indications at the end of the year are that there will be a general compliance with the law hereafter. The records of the office show that under the law there were 13,235 dairy animals physically examined, of which 216 were pronounced to be tubercular, 49 to have udder diseases and 6 to be suffering from other diseases. In every case the diseased animals were either destroyed or removed from the herds until they had fully recovered from their disorders.

The following table shows the number of veterinary certificates which have been received during the year; the number of animals passing veterinary examination, including those tuberculin tested; the number of diseased animals and the character of the disease with which they were suffering:

VETERINARY REPORTS RECEIVED, 1913-14.

COUNTY.	Veterinary certificates received.	Number of animals examined.	Number of animals passing physical examination.	Number of animals not passing physical examination.	Number of animals tuberculin-tested.	Number of animals reacting to tuberculin-test.	Number animals pronounced tubercular on physical examination only.	Udder diseases.	Retained after-birth.	Thrush-foot.	Eye cancer.	Hoof-rot.	Total number of diseased animals.
Bergen	43	695	681	14	262	8	.....	12	...	...	...	...	20
Burlington	26	510	505	5	66	9	.....	1	...	...	...	...	10
Camden	10	306	306	.....	185	6	.....	...	...	...	...	...	6
Essex	56	2,129	2,071	58	1,752	68	2	1	...	...	...	...	71
Gloucester	7	103	103	.....	23	.....	.....	...	...	...	...	...	.....
Hudson	3	32	30	2	19	2	.....	...	...	...	...	...	2
Hunterdon	3	52	52	.....	.....	.....	.....	...	...	...	...	...	....
Mercer	24	277	277	.....	51	.....	.....	...	...	...	...	...	....
Middlesex	36	1,017	995	22	606	32	.....	6	...	...	...	...	38
Monmouth	75	798	794	4	221	.....	.....	4	...	...	...	...	4
Morris	71	1,297	1,286	11	500	22	.....	5	2	1	...	...	30
Ocean	5	85	83	2	.....	.....	.....	2	...	...	...	...	2
Passaic	34	543	537	6	54	2	1	3	...	...	...	...	6
Salem	18	195	191	4	37	.....	2	2	...	...	...	...	4
Somerset	26	464	449	15	150	10	2	2	...	...	...	1	15
Sussex	122	2,444	2,425	19	144	10	9	...	1	...	...	...	20
Union	13	268	256	12	241	12	.....	...	...	...	...	...	12
Warren	20	223	222	1	28	.....	.....	1	...	...	...	...	1
Broome, N. Y.	50	803	799	4	.....	.....	3	1	...	...	...	...	4
Orange, N. Y.	33	909	898	11	.....	.....	1	9	...	...	1	...	11
Bucks, Pa.	5	85	85	.....	28	15	.....	...	...	...	...	...	15
Total	680	13,235	13,045	190	4,367	196	20	49	3	1	1	1	271

The act above referred to also requires the State Board of Health, at the request of any local board of health, to inspect all dairies and furnish the records of the inspections to such local boards. It further makes it the duty of the State Board of Health, "whenever it shall ascertain that milk or cream is produced for sale or distribution which contains any unhealthful or unclean ingredient, etc., or which is stored in an unclean manner or place," or which is produced from cows which are kept or stabled under unclean or unhealthful conditions, etc., "to notify the local board of health having jurisdiction over the place where such milk or cream is distributed or sold." It then becomes the duty of the local board of health receiving such notice to prohibit the sale of such milk or cream within its jurisdiction. This feature of the law has worked exceedingly well since it has been operative. Under its provisions, the milk of 57 dairies was prohibited from sale by this Board on account of the discovery of extremely unsanitary conditions calculated to render the milk unwholesome. Twelve of these dairymen took steps to improve their premises and methods, and were, after several re-inspections of their premises, permitted to resume the production and sale of milk. Subsequent reports on these dairies show that the owners have profited by the prohibition which was temporarily placed upon their supply and that they are now conducting their business along efficient sanitary lines. Forty-five of the fifty-seven dairymen retired from the business rather than meet the Board's requirements.

The following table shows the number of dairy inspections made during the year and the action taken by the Board on 350 dairies in which conditions obtained which were detrimental to the purity of the milk supply:

Total number of dairy and milk depot inspections, 3,672; dairymen given one month to improve the sanitary condition of their premises, 293; dairymen complying within the time-limit, 112; dairymen given an extension of time to meet the Board's requirements, 59; dairymen retiring from the business rather than meet the Board's requirements, 48; time-limits pending at the close of the year, 51; dairymen prohibited from producing milk for sale, 57; dairymen whose milk had been prohibited from sale, who later met the Board's requirements, 12; dairymen summoned before the Board to show cause why they should not be prosecuted, 5.

The above act also has had the effect of clearing away the doubts which existed regarding the validity of a supplement to the act establishing State and local boards of health, approved April 23, 1897, which supplement did not expressly confer the power to license milk dealers and did not contain as full a description of the conditions under which the sale of milk should be prohibited. The present act expressly confers the power of licensing on any local board of health and gives a more full and complete statement of conditions under which such board may prevent the sale of milk within the limits of its jurisdiction. Any new local ordinances regarding the sale and handling of milk should be based on the provisions of this act.

On April 1, 1914 the Board changed the form of the score card used in rating dairies to a score card practically the same as that used by the Dairy Division of the United States Department of Agriculture. The system of scoring dairy farms has long been in use in this department, and has been found to be one of the best methods of detecting milk troubles. It calls the attention of the farmer to each item of his equipment and methods, and enables him to correct any evil which may be brought to his notice by the inspector. It has the advantage of separating the items under Equipment and Methods, the total score being much greater for methods than for equipment.

EQUIPMENT.	SCORE	
COWS (8).	Perfect.	Allowed.
1. Apparently in good health	1	.....
2. If examined by veterinarian, and certificate furnished. Date	2	.....
3. (If tested with tuberculin within a year and reacting animals are found and removed.) Date	3	.....
4. Food (clean and wholesome)	1	.....
5. Water (clean and fresh)	1	.....
STABLES (18).		
6. Location: Well drained	1	.....
7. Free from contaminating surroundings	1	.....
8. Tight, sound floor and proper gutter	2	.....
9. Smooth, tight walls and ceiling	1	.....
10. Proper stall, tie, and manger	1	.....
11. Provision for light: Size of windows ..... (Four sq. ft. of glass per cow, 4; three sq. ft., 3; two sq. ft., 2; one sq. ft., 1. Deduct for uneven distribution.)	4	.....
12. Ventilation (Provision for fresh air: Controllable flue system, 3; windows hinged at bottom, 1.5; sliding windows, 1; other openings, 0.5.)	3	.....
13. Cubic feet of space per cow Dimensions of stable.....ft. (500 ft., 3; less than 500 ft., 2; less than 400 ft, 1; less than 300 ft., 0.)	3	.....
14. Provision for controlling temperature	1	.....
15. Bedding	1	.....
UTENSILS (9).		
16. Construction and condition of utensils	1	.....
17. Water for cleaning (Clean, convenient and abundant.)	1	.....
18. Small-top milking pail	5	.....
19. Milk cooler	1	.....
20. Clean milking suits	1	.....
MILK ROOM OR MILK HOUSE (5).		
21. Location: Free from contaminating surroundings	1	.....
22. Floor, walls, and ceiling	1	.....
23. Light, ventilation, screens	1	.....
24. Separate rooms for washing utensils and handling milk	1	.....
25. Facilities for steam, 1 (hot water, 0.5)	1	.....
	40	.....

METHODS	Perfect.	Allowed.
COWS (8).		
26. Clean	8	.....
CLEANLINESS OF STABLES (16.)		
27. Floor	2	.....
28. Walls	1	.....
29. Ceiling and ledges	1	.....
30. Mangers and partitions	1	.....
31. Windows	1	.....
32. Stable air: Freedom from dust	3	.....
33. Freedom from odors	2	.....
34. Cleanliness of bedding	1	.....
35. Barnyard: Clean	1	.....
36. Well drained	1	.....
37. Removal of manure daily to 50 feet from stable	2	.....
MILK ROOM OR MILK HOUSE (3).		
38. Cleanliness of milk room	3	.....
UTENSILS AND MILKING (17).		
Care and Cleanliness of Utensils:		
39. Thoroughly washed	2	.....
40. Sterilized in steam for 15 minutes	3	.....
(Placed over steam jet, or scalded with boiling water, 2)		
41. Protected from contamination	3	.....
42. Clean, dry hands	3	.....
43. Udders washed and wiped	6	.....
(Udders cleaned with moist cloth, 4; cleaned with dry cloth or brush at least 15 minutes before milking, 1.)		
HANDLING THE MILK (16).		
44. Cleanliness of attendants in milk room	2	.....
45. Milk from each cow immediately removed from stable and cooled	4	.....
46. Cooled below 50° F.	5	.....
(51° to 55°, 4; 56° to 60°, 2.)		
47. Stored below 50° F.	3	.....
(51° to 55°, 2; 56° to 60°, 1.)		
48. Transportation below 50° F.	2	.....
(51° to 55°, 1.5; 56° to 60°, 1.)		
(If delivered twice a day allow perfect score for storage and transportation.)	60	.....

Equipment ..... + Methods .....Final Score.....

.....

Inspector.

Note 1.—If any exceptionally filthy condition is found, particularly dirty utensils, the total score may be further limited.

Note 2.—If the water is exposed to dangerous contamination, or there is evidence of the presence of a dangerous disease in animals or attendants, the score shall be 0.

DISINFECTION OF STABLES: The enforcement of the rules which the Board adopted last year relative to the disinfection of stables in which tuberculous animals had been housed has taken a large share of the inspectors' time during the year. The State Commission on Tuberculosis in Animals reported to us for disinfection 181 stables, in

which 363 cows had been condemned and destroyed. The department made a special effort to see that this work was thoroughly done, as we realized that unless every detail of the cleaning process was carried out, disinfection was impossible.

When a stable is reported to us we at once communicate with the owner and request him to procure disinfecting materials and set a day when a representative of the Board can be present to supervise the work. It frequently happens that when the inspector arrives at the barn, he finds that either the owner has already attempted to disinfect the premises himself or that he asks for delay, making various excuses. This adds to the expense, as in the first instance the work may have to be done over again and in the second case another trip to the farm becomes necessary.

During the month of August we were notified that 52 animals in a dairy of 143 cows had reacted to the tuberculin test and would be destroyed. These animals were housed in four stables and had been looked upon as an exceptionally fine herd, and the milk commanded a premium over ordinary market milk. The managers of the dairy desired to replace the condemned animals with new stock and were anxious to take every precaution against the infection of the remaining and the new animals; consequently they gave us all possible assistance in the work of disinfection. The method of disinfection, as given in the report of the inspector who supervised the work, is practically the same as that pursued in every case where sufficient facilities are afforded to us to do the work properly.

REPORT OF DISINFECTION OF DAIRY PREMISES OF MR. ———

This dairy consisted of 143 cows, 52 of which were recently condemned and destroyed by the State Commission on Tuberculosis in Animals. The cattle were housed in four stables, and we proceeded to clean and disinfect one stable at a time. All the interior surfaces, such as wooden stanchions, framework around them, cement floor, manure gutter, side-walls, ledges and ceiling were thoroughly scraped; the scrapings disinfected and removed from the building. The wooden stanchions were then scrubbed with a hot solution of sal soda. The concrete feeding and watering gutters, the aisle between the stanchions and the floor and manure gutters were scrubbed in the same manner. The entire surfaces of the barn, including floor, gutters, side-walls, ceiling, stanchions, partitions, windows, etc., were then sprayed with a ten per cent solution of carbolic acid, and the interior surfaces of the walls and ceiling lime-washed. The wooden cupboards containing scrubbing brushes, curry-combs and the men's clothing were all thoroughly cleaned and disinfected. The hides of the cows were then wiped off with a mild disinfectant. During the progress of the work one barn was kept empty, and after the cattle were thoroughly cleaned and disinfected, they were returned to the disinfected barn. The other barns were treated in the same manner. The approaches to the cow stable were plowed up and a coating of lime spread upon the surface of the ground.

A. I. GOEHRIG, Inspector.

The following table shows the number and location of cow stables which have been disinfected under the supervision of officers of this Board:

Bergen, 3; Burlington, 8; Cape May, 1; Cumberland, 1; Essex, 4; Gloucester, 3; Hunterdon, 12; Mercer, 16; Middlesex, 7; Monmouth, 4; Morris, 15; Passaic, 1; Salem, 1; Somerset, 9; Sussex, 79; Union, 2; Warren, 15. Total, 181.

PASTEURIZATION: It has been found that if milk is heated to 140° or 145° F. and held at that temperature for 20 minutes, this will destroy the germs of tuberculosis, typhoid fever, scarlet fever and other infectious deseases, and also that heating milk to this temperature does not change its food value. Pasteurized milk, however, should be bottled as soon as the process is finished, placed in cold storage and delivered to the customer in as fresh a condition as possible.

Investigation into the methods employed by milk dealers has shown that much of the so-called pasteurized milk is nothing more than milk which has been heated to a temperature of 150° F. for a period of from 30 seconds to 1 minute and then immediately cooled. We have also found that frequently less care is given to the handling of pasteurized milk than to raw milk. This is accounted for by the fact that the sole motive of the dealer in heating the milk is to enhance its keeping qualities, losing sight of the primary object of pasteurization, which is the destruction of bacteria.

In view of the above facts, the Board, at a meeting held March 10, 1914, adopted the following rule under authority given them by Chapter 139 of the Laws of 1906:

"Milk and cream shall be pasteurized by heating to a temperature of 140 degrees F. for a period of 20 minutes, and thereafter immediately cooled to a temperature of 50 degrees F. or below. Pasteurizing apparatus shall be equipped with accurate and reliable temperature recording devices, and the temperature records shall be kept by the operators of the pasteurizers, and shall be open to inspection at all times to representatives of the Board of Health of the State of New Jersey."

In pursuance of the above rule the Board revoked all licenses which had been granted to creamery owners who professed to pasteurize milk and notified them that new licenses would be granted only when it was proved to the satisfaction of this department that the milk and cream handled in said creameries was pasteurized in compliance with the above rule. There are in the State 61 establishments equipped with apparatus to pasteurize milk, and all of them immediately took steps to install machines equipped with holding devices and temperature recorders.

These pasteurizing plants have been frequently visited by our inspectors and the records which are kept on file have been carefully scrutinized. Where there is very careful management these records show that the work has been well done, but in other cases it has been necessary to insist strongly on better methods. In several instances the temperature recording charts were not dated, and for that reason were useless to us in determining the degree of efficiency that was daily obtained in the pasteurizing process. In others, the thermometers on the machines were found to be very inaccurate, one of them being

seventeen degrees out of the way in comparison with a tested thermometer. In some instances, the recording thermometers were not satisfactorily adjusted, rendering the records absolutely useless. Other creamery operators were quite unfamiliar with the operation of the new machines and had difficulty in keeping uniform temperature-charts.

Thirteen of the 61 creameries having these machines have not as yet been licensed, and will not be until we find that the machines do uniform work and the records are carefully preserved.

It is intended during the coming year to take samples of milk for bacteriological examination at various stages in its handling, in order to determine the efficiency of the different machines employed and at the same time to learn whether the milk is exposed to contamination before and after the process. Some work of this character was done during the month of October, and below will be found statements showing the effectiveness of the process in four creameries:

CREAMERY No. 1—Trenton October 15, 1914.

The apparatus used in this creamery consists of a cylindrical tank in which the milk is heated to a temperature of 140° F., and whence it flows to a horizontal tank in which cross-partitions retard the flow of the milk. It requires thirty minutes for the milk to pass through this tank to the cooler. The first figures show the temperature of the milk, the second the bacteria found per cc.

LOT I.—Sample of mixed milk from two receiving stations on the Belvidere railroad, shipped to Trenton in a refrigerator car. Part of this milk had been previously pasteurized at the receiving stations, but the samples were taken at the Trenton plant, 47° F., 600,000; sample taken from retarder after heating for thirty minutes, 140° F., 90,000; sample taken from milk cooler outlet after pasteurization, 36° F., 90,000; sample taken from bottle immediately after filling, 44° F., 100,000.

LOT II.—Sample taken from receiving vat in creamery, representing the raw mixed milk of fifty nearby farms, 54° F., 250,000; sample taken from retarder after heating for thirty minutes, 145° F., 5,000; sample taken from milk cooler outlet after pasteurization, 34° F., 5,000; sample taken from bottle immediately after filling, 45° F., 10,000; sample taken from delivery wagon on street, pasteurized and bottled the day previous, iced, 5,000.

The mixed milk from the receiving stations referred to above was at least 36 hours old when pasteurized at the Trenton creamery, and nearly 60 hours old when delivered to the consumer. The mixed milk of the nearby farms which was received at the city creamery was only 15 hours old when pasteurized and nearly 35 hours old when delivered to the consumer. An examination of the above figures shows that much lower counts were obtained in the fresher milk from the local farms than were obtained in the milk from the shipping stations, notwithstanding that the latter milk had been twice pasteurized.

CREAMERY No. 2—Trenton October 14, 1914.

The absolute method of pasteurizing milk is employed in this creamery. The milk, when received from the farmers, is placed in a horizontal tank

equipped with hollow spiral tube or coil of pipe through which hot water is pumped. The milk is thus heated to the desired temperature, and held there for the required period, when it is pumped through pipes to the cooler and immediately cooled to 40° F. The bacteriological examination at this creamery showed the following counts of bacteria per cc.:

Sample of mixed milk from farms, taken before pasteurization, 62° F., 850,000; sample from pasteurizing machine, after the milk had been held for twenty minutes, 142° F., 20,000; sample taken from milk cooler outlet after pasteurization, 40° F., 25,000; sample taken from bottle immediately after filling, 46° F., 40,000; sample of mixed milk from farms before being placed in the pasteurizing tank, which had been allowed to set on the creamery floor for one and one-half hours, 63° F., 3,100,000; sample taken from delivery wagon on street, pasteurized and bottled the day previous, iced, 5,000.

It will be noticed that there was an increase of 15,000 bacteria per cc. in the short time between the discharge of the milk from the cooler until it was bottled. This increased bacterial count may have been caused by imperfectly washed bottles in which the milk was placed, or the unsterilized pipes through which it passed before reaching the bottle filler. It was also observed during this inspection that the operator inserted his fingers into the empty bottles when transferring them from the cases to the bottle filler. Any one of these conditions may account for the increase in the bacterial count per cc. in the short time between the discharging of the milk from the cooler until it was bottled.

CREAMERY No. 3—Hopewell. October 19, 1914.

The method of pasteurization used in this creamery is as follows: The milk is heated to a temperature of 140° F. in a tubular heater, from which it is pumped to an upright cylindrical tank. The milk enters at the top of the tank, and when it is filled, flows out at the bottom and up through a pipe to the second tank. When the latter is also filled, the milk flows out at the bottom to the cooler. It takes approximately thirty minutes for the milk to pass through the two "holding" tanks before the pasteurization process is completed. Bacteria per cc. were as follows:

Sample of raw mixed milk from farms, taken from receiving tank in creamery, 66° F., 350,000; sample taken after pasteurization, at outlet of holder vat, 138° F., 50,000; sample taken at milk cooler outlet after pasteurization, 46° F., 30,000; sample of pasteurized milk taken from a can in refrigerator, 42° F., 100,000.

The recording thermometers on this machine were not properly adjusted, and it was necessary in determining the temperature of the milk to use our own standard thermometer. The examination of samples of milk from this creamery showed that the bacteria in the raw milk was reduced from 300,000 per cc. to 50,000 per cc. after heating for thirty minutes. A sample of pasteurized milk taken from a can in the refrigerator one hour later showed that while the milk had been sufficiently cooled (42° F.), it had a bacterial count of 100,000 per cc. This is undoubtedly accounted for by the fact that the cans had been improperly washed, and is another

illustration of the fact, which many seem to overlook entirely, that pasteurization, however excellent in itself, is merely one of the steps in caring for milk, and by no means does away with the necessity of absolute cleanliness and constant care in its handling.

CREAMERY No. 4—New Brunswick. October 26, 1914.

The form of apparatus used in this creamery is a system of three upright cylindrical tanks. The milk flows from the first or heating tank into the second and third tanks which are used for cooling. The tanks are equipped with a device which keeps the milk in a rotary motion. The bacteria per cc. were as follows:

Sample of night's milk delivered by farmers to creamery, 56° F., 100,000; sample of morning's milk delivered by farmers to creamery, 62° F., 400,000; sample taken from heating section after pasteurization, 155° F., 10,000; sample taken from cooling section after pasteurization, 52° F., 45,000; sample taken from bottle immediately after filling, 54° F., 35,000; sample taken from delivery wagon on street, pasteurized and bottled the day previous, 48° F., 100,000.

The method of pasteurization employed in this creamery is the "flash" system. It does not meet with the requirements of the Board's rule, and the figures obtained in the examination of milk samples show that the work is not as efficiently done as it is in those machines in which the milk is held for a longer period.

CREAMERIES: All of the 195 establishments in the State which come under the classification of creameries have been visited during the year. It was impossible to give to each of them the careful supervision that was desirable, on account of the increasing demands on the time of our inspectors for dairy inspection. Three hundred and forty-four inspections were made altogether, including re-inspections of creameries in which there were found to be improper methods of handling milk. It was necessary to summon five operators before the Board to show cause why their licenses should not be revoked. This procedure gave the Board an opportunity to interview these dealers, who generally retired with the feeling that if they desired to continue the business it would be necessary for them to live up to the sanitary rules of the Board. In one case a dealer was refused permission to continue in the business and he closed up his establishment. The others took immediate steps to improve conditions and subsequent inspections showed that they were making honest efforts to conduct the business of handling milk according to the rules of the Board.

The inspection of creameries is a very important function of this Bureau, and it is to be regretted that more of our time cannot be devoted to this work. Most of the pasteurizing of milk takes place in licensed creameries and as the demand for pasteurization is increasing it is thought that the time will soon be here when the greater part of market milk will be so treated. Notwithstanding the safeguards that are imposed by health bodies, there will always be cases where unsafe milk

will be sold under the name of pasteurized milk, and this calls for a constant supervision of all creameries.

The pasteurization of milk should take place only a few hours before delivery to the consumer, and the milk should be placed in sterile containers and kept at between 40 and 50° F. The law relative to the production and sale of certified milk requires that the containers be marked with the day and date of its production, and for reasons quite as valid, pasteurized milk containers should be marked with the date and hour of pasteurization. This reform can only be brought about when we have the means to enforce such regulations, but at present, as has been already stated, the steadily increasing demand for dairy inspections interferes with any additional work of this character.

Following is a list of the creameries in the State, by counties, showing those in which milk is pasteurized and those in which raw milk is handled; those pasteurizing milk having a "p." after them, receiving stations being indicated by a "r. s." and city milk plants by "c. p.":

ATLANTIC COUNTY: Atlantic City—Abbott's Alderney Dairies Co., (p); A. J. Levin, (c. p.); Edward T. Price, (p.); J. C. Smith, (p.); Supplee's Alderney Dairies Co., (p.); Wilson Dairy Co., (p.).

BURLINGTON COUNTY: Columbus—E. R. Supplee's Sons, (r. s.); Pemberton—Peter Cosgrove, (r. s.); Wrightstown—McEwan Milk Co., (r. s.).

CAMDEN COUNTY: Audubon—Suburban Dairies (p.); Camden—William E. Cramer, (p.); Garden State Dairies Co., No. 1, (p.); Garden State Dairies Co., No. 2, (p.); Lawnton Dairy Co., (p.); Merchantville—E. S. Perkins, (p.).

CAPE MAY COUNTY: Ocean City—George Abbott, (c. p.).

CUMBERLAND COUNTY: Bridgeton—Bridgeton Condensed Milk Co., (p.).

ESSEX COUNTY: Fairfield—Fairfield Dairy Co., (kumyss factory); Irvington—Samuel Lemmerman, (r. s.); Newark—Harry T. Backus, (c. p.); Botkin and Durling (c. p.); Anthony Celestano, (cheese factory); Wolf Cohn, (c.p.); Max Goodman, (cheese factory); Halprin Bros., (c.p.); Jacob Max, (c. p.); William Provost, (p.); Newark Milk and Cream Co., (p.); Seiler Bros., (c. p.); Bernard Silverman, (c. p.); Levi Smith, (c. p.); Roseland—Henry Becker, (c. p.).

HUDSON COUNTY: Hoboken—F. W. Jansen, (c. p.); Keystone Dairy Co., (p.); Jersey City—B. Bischoff, (c. p.) Greenfield Dairy Co., (c. p.); Howell Condensed Milk Co., (p.); McDermott Dairy Co., (c. p.); Union Hill—J. Gorman and T. Butts, (kumyss factory); O. T. Root, (kumyss factory); Weehauken—Thomas J. MacIntyre, (kumyss factory).

HUNTERDON COUNTY: Annandale—Annandale Milk and Cream Co., (r. s.); Baptistown—George H. Scott, (condensory); Barbertown—William Strouse, (skimming station); Bloomsbury—C. W. Vannatta, (p.); Califon—Phillips & Waldron, (p.); Cherryville—C. R. Peterman, (butter factory); Clinton—James Wyckoff, (p.); Clinton Twp.—B. E. Tine, (r. s.); Clover Hill—Levi Smith, (p.); Everittstown—George H. Scott, (r. s.); Flemington—Seiler Bros., (p.); Frenchtown—Robert Harberson, (r. s.); Hamden—J. J. Hummer, (r. s.); Hampton—Marchant Bros., (p.); Hoffmans—Isaac W. Hoffman, (r. s.); Holland—Holland Dairy Ass'n, (r. s.); Idell—William Strouse, (butter factory); Jutland, George N. Robinson, (p.); Lebanon—George Clark & Son, (r. s.); Little York—Kostenbader & Co., (r. s.); Locktown—Locktown Dairymen's Ass'n, (butter factory);

Milford — Henry Hauptfuehrer, (r. s.); Mt. Pleasant — George H. Scott, (r. s.); New Germantown—A. C. Durling, (r. s.); Oak Grove—C. R. Peterman, (skimming station); Oak Summit—H. O. Smith, (butter factory); Pattenburg—George N. Robinson, (p.); Pittstown—Empire State Dairy Co., (r. s.); Readington—Farmers' Exchange Co., (p.); Ringoes—Harbison Dairies Co., (r. s.); William Strouse, (butter factory); Rosemont—T. Elwood Clark, (skimming station); Sergeantville—T. Elwood Clark, (butter factory); Stockton—Harbison Dairies Co., (r. s.); Sunnyside—James Wyckoff, (r. s.); Tewksbury Twp.—Samuel Tiger, (r. s.); Three Bridges—Amwell Valley Dairy Co., (p.); C. W. Vannatta, (p.); White House—A. C. Durling, (p.).

MERCER COUNTY: Harbourton—Samuel A. Burns, (butter factory); Hopewell—Hernig & Northrup, (p.); Trenton—Alpha Buttermilk Dairy, (c. p.); Castanea Dairy Co., (p.); H. S. Longacre, (c. p.); Charles W. Schmidt, (p.); Snyder Pasteurized Milk Co., (p.).

MIDDLESEX COUNTY: Franklin Park—Samuel Adler, (p.); Highland Park—W. W. Ten Eyck, (p.); New Brunswick—New Brunswick Hygienic Milk Co., (p.); John Paulus, (p.); Perth Amboy—Perth Amboy Milk & Cream Co., (p.); Three Mile Run—Clayton M. Quick, (r. s.).

MONMOUTH COUNTY: Allentown—J. E. Wilson, (r. s.); Colt's Neck—Colt's Neck Creamery Co., (r. s.); Davis—Wills-Jones Dairy Co., (r. s.); Long Branch—Martin McCue, (p.); West End—Slawson-Decker Co., (p.).

MORRIS COUNTY: Flanders—William McLaughlin, (r. s.); Carl Heinle, (r. s.); German Valley—Sylvester Dilts, (r. s.); J. T. Welch, (p.); Middle Valley—George Clark & Son, (r. s.); Millington—Swain Bros., (r. s.); Morristown—Luther Kountz, (butter factory); Naughright—DuBois Bros., (r. s.); Troy Hills—H. T. Backus, (r. s.).

OCEAN COUNTY: New Egypt—Leo G. Balzereit, (r. s.).

PASSAIC COUNTY: Clifton—John Lotz, (c. p.); Haledon—Heman Tilch, (c. p.); North Haledon—D. H. Peth, (c. p.); Passaic—Dubnoff & Ratner, (c. p.); Paterson—John J. Bowers, (c. p.); Cornelius Dooren, (c. p.); Otto C. Fulboam, (c. p.); George Marklin & Son, (c. p.); Alex. McCoid, (c. p.); Richfield—J. G. Sprattler, (r. s.); Wayne Twp.—Morris Felley, (r. s.).

SALEM COUNTY: Alloway—F. A. Shiveler, (p.); Daretown—Abbott's Alderney Dairies Co., (r. s.); Elmer—Cooper H. Oliphant, (r. s.); William Kelly, (r. s.); Harmersville—J. Q. Davis, (skimming station); Monroeville—Wilson Dairy Co., (p.); Quinton—Abbott's Alderney Dairies Co., (r. s.); Salem—Abbott's Alderney Dairies, No. 1, (r. s.); Abbott's Alderney Dairy Co., No. 2, (r. s.); J. Q. Davis, (c. p.); Sharptown—William Richman, (p.); Woodstown—Supplee's Alderney Dairies Co., (p.).

SOMERSET COUNTY: Belle Mead—Farmers' Exchange Co., (p.); Bernardsville—Heman Childs, (r. s.); Flagtown—J. Max, (p.); Lamington—Luther Childs, (r. s.); Lyons—Luther Childs, (r. s.); Montgomery—Farmers' Exchange Co., (r. s.); Neshanic—Halprin Bros., (p.); North Branch—George W. Fields, (p.); Pottersville—A. C. Durling, (r. s.); Raritan—DuBois Bros., (r. s.).

SUSSEX COUNTY: Ackerson—R. F. Stevens Co., (r. s.); Andover—Fulboam Dairy Co., (r. s.); Augusta—T. O. Smith's Sons, (p.); Baleville—Alex. Campbell Milk Co., (r. s.); Bevans—Seiler Bros., (r. s.); Branchville—Borden's Condensed Milk Co., (r. s.); Clove—William Richman, (r. s.); Glenwood—Brown & Bailey, (p.); Greensville—Sheffield Farms Dairy Co., (r. s.); Hamburg—Diamond Dairy Co., (r. s.); Huntsville—Borden's Condensed Milk Co., (r. s.); Lafayette—Newark Milk & Cream Co., (r. s.); McAfee—H. S. Chardavoyne, (r. s.); Monroe—William Provost, (r. s.); R. F. Stevens Co., (r. s.); Montague—Seiler Bros., (r. s.);

Mulfords—Beakes Dairy Co., (p.); Newton—Ideal Dairy Co., (p.); Papakating—Borden's Condensed Milk Co., (r. s.); Price's Crossing—Reid Ice Cream Co., (r. s.); Quarryville—Horton-Lewis Cream Co., (p.); Roys Crossing—Fulboam Dairy Co., (r. s.); Sparta—Ideal Dairy Co., (p.); Stillwater—McDermott Dairy Co., (r. s.); Sussex—Beakes Dairy Co., (p.); Horton-Lewis Cream Co., (p.); Dennis Reardon, (r. s.); Swartswood—George Lodes, (r. s.); Tranquility—Central Dairy Co., (r. s.); Vernon—Reid Ice Cream Co., (r. s.); Warbasse—Keystone Dairy Co., (r. s.); Woodruff's Gap—Keystone Dairy Co., (r. s.).

UNION COUNTY: Plainfield—Welsh Farms Dairy Co., (c. p.); George M. Christian, (kumyss factory).

WARREN COUNTY: Allamuchy—Alex. Campbell Milk Co., (r. s.); Belvidere—Castanea Dairy Co., (p.); Blairstown—Empire State Dairy Co., (r. s.); Keystone Dairy Co., (r. s.); Bridgeville—H. A. Rauch, (p.); Broadway—George L. Savidge, (p.); Changewater—R. F. Stevens Co., (r. s.); Delaware—F. W. Janssen, (p.); Great Meadows—Beakes Dairy Co., (p.); Hackettstown—Alex. Campbell Milk Co., (r. s.); Hainesburg—Brooklyn Milk Co., (r. s.); Hixon—C. Vanherwarde, (r. s.); Hope—Castanea Dairy Co., (r. s.); Johnsonburg—Sheffield Farms Dairy Co., (r. s.); Marksboro—Central Dairy Co., (p.); Vails—Keystone Dairy Co., (r. s.).

ICE CREAM FACTORIES: There are in the State 640 ice cream factories which come under the provisions of the creamery law. This is an increase of 57 over the number reported last year. In dealing with applicants for licenses to manufacture ice cream we have followed our usual course of not recommending permits until we were satisfied that the materials used in the manufacture were so handled that the finished product would not become unwholesome. The major part of the time devoted to ice cream factory inspections is taken up in educational work along these lines.

Many persons, when first engaging in this business, know little about it and less about the importance of modern sanitation. If a disposition is shown to observe the rules of the Board and the applicant has the ability to do good work he is advised regarding the equipment of his factory and the handling of the product. Usually such persons, under the oversight of an inspector, eventually conduct a more sanitary plant than some of the large and more experienced dealers, but they are not licensed until we are assured that they are qualified to do efficient work, and consequently there are always a number of factories in operation without licenses.

Under existing laws ice cream factories are inspected by both the officers of the State Board of Health and the Department of Labor, and, while the relations of the two departments engaged in this work are most amicable, the duplication of labor seems to be unnecessary, and in the interest of economy it would be better if one or the other of the departments were given entire charge of the ice cream factory inspection.

If such an arrangement were made and thorough work done, either department should be given a competent man for the work, as under present conditions all of the ice cream factories cannot be reached. Ice

cream is made in most of the drug stores in the State, and the conditions and surroundings in some of them are very unsatisfactory. It would require the entire time of one inspector to properly look after these establishments.

Following is a summary of the work done during the year in connection with ice cream factory inspection:

Ice cream factories in New Jersey, 640; factories licensed during the year, 110; factories still unlicensed, 156; total number of factories licensed, 484; licenses revoked, 38; inspections made, 745; time limits given for improvement, 12; operators summoned before the Board, 3.

DAIRY INSPECTION.

Forty-six local health boards have applied to us during the year for investigation into their milk supplies. We have complied with all the requests of these boards and have furnished them records showing the conditions found on each dairy contributing to the local milk supply. Below will be found some comparative statements showing the rating of dairies supplying these localities for different years.

The per cent of improvement on most of these farms is greater than appears by the figures, which is accounted for by the change made in the form of score card which the Board adopted and which has been used since April 1st. The equipment and Methods are classified on the new score card, and it is rather more difficult to attain a high mark on this than on the old style of card.

Asbury Park.—Two inspections have been made of the dairies supplying Asbury Park with milk during the past year. The local board rendered valuable assistance to us in the investigation of these dairies by providing an automobile. The city health officer accompanied our inspector on his tours of inspection and was thus enabled to view the conditions on the several premises, and to be in a position to advise his board concerning any action which the State found it necessary to take in enforcing measures for the betterment of the supply.

The first inspection of these dairies was made in the winter season, and the second inspection in the summer time when the usual large number of health and recreation seekers were sojourning at this resort. One hundred and twenty-seven dairy premises were inspected, and the average score of those inspected during the winter season was 64.50%, while the average score of those inspected during the summer was 63.25%. As a result of these inspections, thirteen dairymen were required to improve conditions within a short specified time; the production of milk for sale was prohibited in four dairies; one of the latter subsequently met the requirements of the Board and was permitted to resume the business.

Comparison in the scores of dairies supplying Asbury Park in 1913-14 is: Poor (scoring below 50%), 1913 8.2%, 1914 9.4%; fair (scoring between 50 and 70%), 1913 83.8%, 1914 68.5%; good (scoring 70% and above), 1913 8.0%, 1914 22.1%.

ATLANTIC CITY.—Four hundred and eighty-five New Jersey dairies contribute to the milk supply of Atlantic City, and they were all inspected during the year. The average score of these dairies was 56.75%, which is a slight increase over last year. This is a very fair showing for this large number of dairies. This result was brought about by the repeated inspection of a number of the poorer ones, the owners of which profited by the re-inspections and were thus enabled to increase the ratings of their dairies. Specified time limits were given to fifty-two dairymen to improve conditions on their premises, out of which fifteen complied with the orders of the Board, the milk of six dairies was prohibited and ten dairymen retired from the business rather than meet the Board's requirements. At the time of writing this report, the time limits of twenty-one dairymen have not expired, and a re-inspection will be necessary to determine whether or not their milk will be allowed to be sold.

The Atlantic City board of health rendered valuable service during the whole of this inspection by furnishing an automobile. This enabled us to do the work much more rapidly than could have been possible with a horse and wagon. Realizing that his city can have no more valuable asset than a pure milk supply to furnish to the army of health and recreation seekers which sojourn at this resort throughout the year, Health Officer Guion took a special interest in our efforts to improve this supply, and if the interest which the local board of health has shown continues in the same proportion, Atlantic City will ultimately be able to offer its citizens as pure a milk supply as is furnished by any other municipality in the State.

The following table shows the per cent. of improvement in the Atlantic City dairies: Poor (scoring below 50%), 1913 28.3%, 1914 18.1%; fair (scoring between 50 and 70%), 1913 67.4%, 1914 77.1%; good (scoring 70% and above), 1913 4.3%, 1914 4.8%.

BERGENFIELD.—Three dairies were inspected at the request of the local board of health of Bergenfield. This is the first request we have had from this board for an investigation of their milk supply. There are only three dairies contributing to the supply of this borough, the highest score being 54.75% and the lowest 40.50%. Average score, 50.00%.

BLOOMFIELD.—Nine dairies supply this town with milk. They were all inspected during the past year, and showed a great improvement over the first inspection made in 1912. The average score of all the dairies supplying milk within the jurisdiction of the Bloomfield board of health was 71.75% as against 64.00% in 1912.

The average score of the dairies supplying Bloomfield since 1912: Poor (scoring below 50%), 1912 18.7%, 1914 0.0%; fair (scoring between 50 and 70%), 1912 31.3%, 1914 33.3%; good (scoring 70% and above), 1912, 50.0%, 1914 66.7%.

BORDENTOWN.—There are twenty-two dairies contributing to the milk supply of the City of Bordentown. The dairies supplying milk to this city were regularly inspected from 1907 to 1913, and our records show that

great improvement was made in the quality of the milk supply up to that time. During 1913, however, a change was made in the form of the city government, and through a misunderstanding no inspection was made of these dairies for nearly two years. The average score below demonstrates the fact that unless regular periodical inspections are made of dairies, they will deteriorate. It is our intention, and the wish of the Board of Commissioners of Bordentown, to have regular periodical inspections of the dairies supplying this city hereafter.

Several samples of the milk of each of the dairymen contributing to this supply were taken for bacteriological examination, and the results obtained will be of value to us in our future inspection of these dairies. When the time for the next inspection arrives, a more thorough history of the methods in handling this milk supply will be secured, and the dairymen will be instructed in measures to prevent the high counts which were obtained in most of the milks examined:

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 9.1%; fair (scoring between 50 and 70%), 1913 80.0%, 1914 90.9%; good (scoring 70% and above), 1913 20.0%, 1914 0.0%.

BURLINGTON.—There were thirty-two dairies inspected for Burlington during the year, besides several re-inspections of dairies that did not come up to the requirements of the Board. In the average score below it will be noticed that the percentage of poor dairies was largely increased. This was accounted for by the fact that several new dairies were added to the number engaged in furnishing the Burlington supply, and it will take a considerable time to bring them up to the proper state of sanitation. Several of them have been given a specified time to improve conditions, and a re-inspection is now due.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 3.2%, 1914 12.5%; fair (scoring between 50 and 70%), 1913 90.3%, 1914 75.0%; good (scoring 70% and above), 1913 6.5%, 1914 12.5%.

COLLINGSWOOD.—Thirty-seven dairies were inspected during the year, all of which enter into the milk supply of Collingswood. There are nine local dairies. The score below shows that this supply has deteriorated during the past year, one of the causes of which is that a number of dairies furnishing the mixed milk of a creamery had never been inspected before. During the last inspection of the Collingswood supply we found it necessary, in order to get a true condition of the sources of supply, to inspect every dairy supplying this creamery with milk, with the result that a number of time limits were given for improvement, and a reinspection will no doubt have the effect of changing the figures in the statement below:

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 10.8%; fair (scoring between 50 and 70%), 1913 93.3%, 1914 83.8%; good (scoring 70% and above), 1913 6.7%, 1914 5.4%.

DOVER.—One hundred and fourteen dairies were inspected during the year for the City of Dover, and the average score was 63.25%. The milk

supply of this city is drawn from seventeen local dairies, and part of the milk of ninety-seven dairies supplying four creameries. The score below will give a good idea of the condition of this supply, the excellence of which has been brought about by the active cooperation of the local board of health:

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 2.3%, 1914 4.4%; fair (scoring between 50 and 70%), 1913 54.5%, 1914 75.4%; good (scoring 70% and above), 1913 43.2%, 1914 20.2%.

DUNELLEN.—At the request of the local board of health of Dunellen five dairies were inspected during the year. The average score of these dairies was 66.75%.

EAST ORANGE.—We were requested to inspect six dairies for this municipality during the past year, the average score of which was 70.75%.

FAIR HAVEN.—Nineteen dairies were inspected at the request of the Fair Haven board of health, and the average score of these dairies was 67.50%.

Comparison in the scores of dairies supplying Fair Haven in 1913-14: Poor (scoring below 50%), 1913 4.2%, 1914 5.3%; fair (scoring between 50 and 70%), 1913 75.0%, 1914 57.9%; good (scoring 70% and above), 1913 20.8%, 1914 36.8%.

FRANKLIN.—The local board of health requested an inspection of the dairies supplying their town with milk, as a result of which six dairies were inspected, showing an average score of 65.50%. One dairy scored but 29.50%, and the conditions were so deplorable that the State Board excluded the milk produced on this dairy from sale.

GLEN ROCK.—At the request of the local board of health of Glen Rock, three dairies contributing to this supply were inspected and an average score of 57.75% was shown. One dairy scored but 39.00% and the owner was notified to improve his dairy conditions within a given time, which has not as yet expired.

HACKENSACK.—There were five dairies inspected at the request of the Hackensack board of health, and the average score was 71.50%.

HADDONFIELD.—The local milk supply of Haddonfield is drawn from seven local dairies and the mixed milk of a creamery. The average score of all these dairies was 58.50%. A number of the dairies supplying this creamery had never been inspected before, which accounts for the decrease in rating from 1913 to 1914.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 11.4%; fair (scoring between 50 and 70%), 1913 69.2%, 1914 80.0%; good (scoring 70% and above), 1913 30.8%, 1914 8.6%.

HOPEWELL.—The dairies supplying Hopewell have been annually inspected for several years and the average score last year was found to be 65.25%.

IRVINGTON.—The final score of the eighteen dairies supplying Irvington with milk was 77.25% as against 74.75% last year. During the year it was necessary to prohibit the sale of milk of two dairies and in three cases a specified time was given in which to improve conditions.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 16.7%, 1914 50.0%; good (scoring 70% and above), 1913 83.3%, 1914 50.0%.

JERSEY CITY.—Twenty-one dairies and two creameries were inspected for the board of health of Jersey City with the result that the milk of one dairy was prohibited from sale, and in thirteen instances short time limits were given to the owners of the dairies to improve their premises. Notices were also given to the managers of the two creameries to improve their methods in handling milk. The average score of these dairies was 54.25%, and it will be necessary in order to secure a better supply from these dairies to make several re-inspections.

LAKEWOOD.—The final average score of the seven dairies supplying Lakewood with milk was 73.00%. It was necessary during the investigation to notify three of the owners to improve the sanitary condition of their premises within a short time.

LAWRENCEVILLE SCHOOL.—There are six dairies contributing to the supply of the Lawrenceville School, which have been regularly inspected for a number of years. Each year we are able to note the steady improvement in the sanitary condition of the premises on which the milk is produced. The final score this year was 72.25%. It was necessary to exclude the milk of one large dairy. Subsequently, however, on account of greatly improved conditions, the milk was again permitted to be sold.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 80.0%, 1914 16.7%; good (scoring 70% and above), 1913 20.0%, 1914 83.3%.

LONG BRANCH.—The final score of the thirty-four dairies supplying Long Branch with milk was 63.50%. The milk of one dairy was excluded from sale, and a short time limit given one other for improvement.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 8.2%, 1914 8.8%; fair (scoring between 50 and 70%), 1913 63.3%, 1914 64.7%; good (scoring 70% and above), 1913 28.5%, 1914 26.5%.

MADISON.—During the last few years, there has been a considerable improvement in the milk supply of this borough. The final average score this year was 83.50%, being approximately five points higher than last year. The supply of this borough is an excellent one, and considerable pride is taken by the local board of health to keep its dairies up to a high grade.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 0.0%, 1914 10.0%; good (scoring 70% and above), 1913 100.0%, 1914 90.0%.

MANASQUAN.—We were requested to examine the dairies supplying Manasquan with milk, with the result that five dairies were inspected, showing an average score of 61.75%.

MORRISTOWN.—We were requested to make a special inspection of three dairies contributing to the Morristown milk supply, which resulted in an average score of 68.00%. It was necessary to give a specified time to the owner of one dairy to improve conditions.

NATIONAL PARK.—Two inspections were made of the three dairies supplying National Park with milk, and the first inspection showed an average score of 44.75%. It was necessary to use urgent measures for the improvement of the premises producing this milk, and several inspections were made. A final inspection showed an average score of 53.75%. Other inspections will be necessary to bring this supply up to what it should be.

NEW BRUNSWICK.—There are 131 dairies contributing to the milk supply of New Brunswick. These have all been inspected during the past year, and their final average score was 59.25%. A reorganization of the New Brunswick board of health took place in 1913 and as they were without a sanitary inspector for some time, the milk supply was neglected. After the appointment of a new sanitary officer we were requested to furnish a new record of the dairies supplying this municipality, and a complete inspection was made. Several re-inspections were made of the many dairies which had fallen back to low scores. It was necessary to notify 27 dairymen to improve their dairy conditions within a specified time. On re-inspection the milk of one dairy was excluded from sale, and one dairyman retired from the business until he was able to meet the Board's requirements. It is believed that the coming year will show a better condition of the dairies supplying this city with milk, since the present sanitary officer is giving us much assistance, and is insisting upon this Board's recommendations being carried out. Records of the bacteriological examination of the milk handled by all the dealers in New Brunswick have been furnished us by the local board. These results were printed in the local press, and those dairymen whose milk showed high counts are endeavoring to improve their methods in handling milk.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 2.8%, 1914 16.8%; fair (scoring between 50 and 70%), 1913 60.6%, 1914 68.7%; good (scoring 70% and above), 1913 36.6%, 1914 14.5%.

PASSAIC.—During the past year 136 dairies were inspected at the request of the local bureau of health of Passaic. This milk is principally shipped into Passaic from three creameries. The average score of these dairies was 65.75%. The board of health of Passaic has been doing splendid work during the past year in cooperation with this Board, with a view to improve its milk supply. It was necessary to exclude the sale of milk of five dairies and to give time limits for improvement in nine instances.

PATERSON.—We were requested this year to examine conditions on fifty-seven dairies supplying the City of Paterson with milk. The final average score of these dairies was 64.00% as against the first score made (55.00%). The sale of milk was prohibited in four dairies and six others discontinued rather than meet the requirements of the Board. Two were given a specified time to meet our requirements. The health officer of Paterson rendered us valuable assistance in this work.

PERTH AMBOY.—Three hundred and fifty-nine dairies contribute to the milk supply of Perth Amboy, and they were all inspected during the past year. The average score of these dairies was 65.00%. All of this supply, with the exception of fourteen dairies, is derived from creameries in Hunterdon County. Seven of the local dairies were given a specified time to improve conditions and thirty-seven of the dairies supplying the Hunterdon County creameries were required to improve their methods within a certain time.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 3.7%, 1914 3.9%; fair (scoring between 50 and 70%), 1913 81.7%, 1914 77.2%; good (scoring 70% and above), 1913 14.6%, 1914 18.9%.

PRINCETON.—A marked improvement has been made in the milk supply of the City of Princeton. Two general inspections of all the dairies have been made during the past year. The figures obtained in these two inspections give a good idea of the difference between the old and the new score card, as the conditions on these premises were practically the same on both inspections. The first inspection of the forty-four dairies showed an average score of 73.00% on the old score card, and on the last inspection the average was 69.25% on the new score card. During the year it was necessary to recommend a specified time for the improvement of four dairies, and the discontinuance of one dairy which scored 47.50%.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 29.3%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 68.3%, 1914 58.5%; good (scoring 70% and above), 1913 2.4%, 1914 41.5%.

RAHWAY.—An improvement has been made in the milk of the nine dairies supplying the City of Rahway. We have annually inspected this supply for a number of years and the statement below will show the ratio of improvement in the condition of the dairies:

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 75.0%, 1914 55.6%; good (scoring 70% and above), 1913 25.0%, 1914 44.4%.

RAMSEY.—Seven dairies contributing to the supply of Ramsey were inspected during the year, and the final average score was 72.00%. It was necessary in five cases to recommend a specified time limit for the improvement of dairy conditions and the milk of one dairy was prohibited from sale.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 44.4%, 1914 14.3%; fair (scoring between 50 and 70%), 1913 55.6%, 1914 0.0%; good (scoring 70% and above), 1913 0.0%, 1914 85.7%.

RIDGEWOOD.—The average score of the six dairies supplying Ridgewood with milk was 74.50%. It was necessary to give a time limit to the owner of one dairy for the improvement of conditions.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 33.3%, 1914 71.4%; good (scoring 70% and above), 1913 66.7%, 1914 28.6%.

RIVEREDGE.—During the month of August a score was made of three dairies supplying Riveredge with milk, at the request of the local board of health, and the average score was 42.75%. The conditions on all of these dairies were very satisfactory, and one month's time was given to the owners to improve conditions. Two of the dairies have since met all the requirements of the State Board of Health, and in the other dairy the sale of milk was discontinued by the owner rather than meet the Board's requirements. The average score of the two dairies now supplying Riveredge is 82.25%.

SALEM.—The milk supply of Salem has steadily improved during the past few years and the average score of the dairies supplying this city is now 64.75%. The following statement will show the percentage of poor, fair and good dairies for 1913 and 1914:

Poor (scoring below 50%), 1913 10.0%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 85.0%, 1914 92.9%; good (scoring 70% and above), 1913 5.0%, 1914 7.1%.

SEASIDE PARK.—During the summer a complaint was received from a resident of Seaside Park concerning the character of the milk which was being sold. An inspection of the premises complained of showed that the conditions under which milk was produced were calculated to render it unsafe. Only one dairy was inspected and it scored 44.50%. Under a re-inspection, it was found that the owner had carried out many of the recommendations made by the Board, and his score was raised to 56.00%. The milk dealer who distributed the product of this dairy was also required to better the conditions on his premises, and a re-inspection later showed that the milk was receiving more protection.

SOUTH AMBOY.—In the month of March our attention was directed to the unsanitary condition of a number of dairies in South Amboy. This was the first inspection of the dairies supplying the city with milk. This supply is drawn from seven dairies which are located wthin the city limits, three dairies outside the jurisdiction of the local board of health, and a one cow dairy. When the seven city dairies were first visited, it was not thought that it would be possible to ever improve the conditions sufficiently to permit the sale of the milk produced in them. The average score of the first inspection of these dairies was 35.75%, but as the investigation progressed, it was found that these dairymen were susceptible

to the instruction given them by the inspector and were capable of conducting sanitary dairies. A re-inspection showed surprising results, and that the dairies were being intelligently conducted. The final average score of these seven dairies was 72.25%. The milk of one dairy was permanently excluded from sale.

The scores of the other three dairies contributing to this supply were as follows: No. 1, 62.50%; No. 2, 78.50%; No. 3, 60.00%.

One dairyman who kept only one cow (score 39.50%), maintained his place in a filthy condition and the local board of health was requested to abolish it.

SOUTH ORANGE.—The milk supply of South Orange is derived from 333 dairies. All of the milk of these farms is not consumed in South Orange, but much of it is delivered from creameries and milk shipping stations in New York and New Jersey. In order to show a true condition of the entire milk supply it was necessary to inspect each dairy contributing to it. Last year the milk of 108 dairies furnished this supply, and their average score was 79.50%. The average score of the 333 dairies inspected this year was 74.75%. The above statement is explanatory of the statement below, in which it will be observed that the 1914 scores are lower than those in 1913.

The milk supply for South Orange is derived from the following creameries: Roseland, Essex County; Branchville and Lafayette, Sussex County, N. J., and Brisbin, Nichols and Whitney Point, N. Y. In the inspection of the dairies supplying the last three creameries, the local board of health of South Orange bore that portion of the expenses of our inspectors which was incurred outside of the State of New Jersey.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 0.6%; fair (scoring between 50 and 70%), 1913 9.3%, 1914 23.7%; good (scoring 70% and above), 1913 90.7%, 1914 75.7%.

SOUTH ORANGE TOWNSHIP, Essex County.—Thirteen dairies were inspected for South Orange Township during the year, the average score of which was 73.00%. It was necessary during this investigation to give one dealer a short time in which to improve conditions.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 0.0%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 33.3%, 1914 46.2%; good (scoring 70% and above), 1913 66.7%, 1914 53.8%.

SOUTH RIVER.—Sixteen dairies supply milk for the Borough of South River, and they were all inspected during the year with an average score of 54.75%. In this investigation it was necessary to exclude the milk of three dairies. One producer, however, was later permitted to sell milk after having brought his premises and his methods up to the requirements of the Board. There has been a vast improvement in the hygienic quality of the milk furnished this community, as the statement below will show.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 82.8%, 1914 31.2%; fair (scoring between 50 and 70%), 1913 17.2%, 1914 62.5%; good (scoring 70% and above), 1913 0.0%, 1914 6.3%.

TEANECK.—We had the first request from the board of health of Teaneck for an inspection of their milk this year. In response to their request we examined the conditions on seven dairies, and their average score was 49.75%. The conditions on four dairies were so bad that a time limit was given for their improvement. Their re-inspection is now due.

TRENTON.—Two hundred and thirty-four dairies were inspected during the year for the City of Trenton. The average score of these dairies was 60.50%. During the investigation, twenty-eight dairies were given a specified time to improve conditions, and the milk of five dairies was excluded from sale.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 10.0%, 1914 8.1%; fair (scoring between 50 and 70%), 1913 81.0%, 1914 82.5%; good (scoring 70% and above), 1913 9.0%, 1914 9.4%.

VINELAND.—During the month of April an inspection was made of the dairies supplying Vineland with milk. In response to this request nine dairies were inspected, with an average score of 49.25%. Five of these dairies were located within the borough limits, and the conditions were so deplorably filthy that the sale of milk was immediately stopped.

WALLINGTON.—At the request of the board of health of Wallington, eight dairies were inspected during the year. Owing to the very unsanitary conditions existing on three of them, the sale of milk was immediately prohibited. It was also necessary to notify three of the five remaining dairymen to improve conditions on their premises within a short specified time. Upon a re-inspection it was found that two of these dairymen had complied with the Board's requirements, and a re-inspection is due of one other dairy.

WEST HOBOKEN.—At the request of the local board of health, an investigation was made into the sanitary conditions existing on two dairy premises, and by action of the State Board of Health, their milk was excluded from sale and the dairies have been discontinued.

WESTWOOD.—Three inspections have been made of the dairies supplying Westwood, and the last average score of these dairies was 76.75%.

The rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 16.7%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 16.7%, 1914 0.0%; good (scoring 70% and above), 1913 66.6%, 1914 100.0%.

WOODBURY.—There have been several inspections of the dairies supplying Woodbury with milk, and the last inspection showed that there was a great improvement in the sanitary conditions under which the milk was handled by these producers. The average score of the eleven dairies was 62.75%.

Rating of dairies for 1913 and 1914 was: Poor (scoring below 50%), 1913 10.0%, 1914 0.0%; fair (scoring between 50 and 70%), 1913 90.0%, 1914 81.8%; good (scoring 70% and above), 1913 0.0%, 1914 18.2%.

CERTIFIED MILK: There are six certified milk plants in New Jersey, in which there are produced daily about eight thousand quarts of milk. This constitutes about one per cent. of the estimated 800,000 quarts in the State.

Milk which is subjected to such rigid control as certified milk must be and will perhaps always be limited to a very small percentage of the total supply, since it cannot be sold at a price which the ordinary consumer can afford to pay. There is a certain demand for this grade of milk among a small proportion of the consuming public, but its chief sale is for use in sick-rooms and hospitals, or when prescribed by physicians for infant feeding. There, therefore, should never be any diminution in the restrictive measures which control the production and handling of certified milk, for undoubtedly, when milk is handled by the laboratory methods directed by a medical milk commission, its value as a substitute for mothers' milk cannot be equaled.

The greatest menace to a certified milk supply is the danger of dairy mismanagement, especially after the business has grown to large proportions. It is much easier to get good results from a 50-cow dairy than it is from one of 500 to 1000 cows. In the one case it is necessary to supervise the work of only four or five men, whereas in the other there are from 75 to 100 men employed. If there is any neglect of sanitary precautions on the part of management or employees, the value of the product is menaced. The waste of the dairy must be properly disposed of, the personal habits of the employees carefully looked after and the health of the cows conserved. The discovery of the presence of tuberculous animals in considerable numbers in a certified barn means that the confidence of the consumers is lost and the business thus damaged.

During the latter part of the year a local board of health reported that a large number of tuberculous animals has been discovered in a certified dairy located within their jurisdiction, and requested this Board to see that the dairy was properly cleaned and disinfected after the diseased animals had been removed. An investigation into the conditions of this dairy was made, and while it was found that the methods employed in handling the milk at the barns and at the dairy house were satisfactory, and in fact well done, there were other conditions existing on the premises which were not in keeping with either the equipment or methods of a certified milk plant. This was the more reprehensible because of the fact that on a previous inspection, a year or more before, the attention of the company was called to these unsanitary conditions, and this Board insisted upon an immediate compliance with their recommendations for the improvement of the sanitation of the dairy. In response to the Board's orders a great deal was done to place the surroundings of the dairy in a sanitary condition. Very much of this work was subsequently nullified, however, by an evident neglect on the part of the management. Our investigation showed that out of the 710 cows in the herd which had been tested in October, 190 reacted

and were condemned. A number of these cows had been tested with tuberculin prior to their shipment to this dairy and had passed the test, and it was claimed by the company that in testing the cows in New York State, dishonest measures had been taken to prevent their reacting to the tuberculin test. It was found that the dairy company was not responsible for the presence of these diseased cows in the herd, as it had in good faith accepted the results of the New York veterinary test. In view of this situation the medical milk commission which supervises the output of this dairy adopted the following regulations regarding the purchase of new animals:

"That in the future all cows brought to the plant after the initial test preceding the purchase must be segregated and not admitted to the certified milk herd or used for certified milk until they shall have successfully passed a second tuberculin test, at the end of two months."

It is asserted that most of the tuberculous animals found in this herd were housed in the non-certified barns. If this is correct it seems to be a strong argument in favor of confining the production of certified milk to establishments for this purpose only and of prohibiting the carrying on of other lines of dairying on the same premises. Only about one-half of the milk which is produced on these premises is certified to by a medical milk commission. The balance is sold as ordinary milk at a lower price and all of it is handled in the same bottling room, in the same apparatus and by the same men as the certified milk.

The situation brought to light by the investigation of this dairy emphasizes the necessity of adopting stringent legal measures to prevent the indiscriminate handling of various grades of milk in a certified milk plant.

Foot and Mouth Disease: The outbreak of Foot and Mouth Disease which occurred in this State during the latter part of the year, and which still exists, called for the services of every inspector employed in this Bureau, and at the present time they are engaged in inspecting dairies in districts which have been exposed to infection. Their work consists in advising dairymen regarding measures for safeguarding their animals, performing quarantine duty, and assisting in the disinfection of infected premises.

In consequence of this outbreak the work which had been planned for the investigation of the milk supplies of many municipalities will be seriously interfered with. It is to be hoped that the outbreak will soon be under control, as many municipalities are dependent upon our activities to keep their milk supplies in good condition.

Report of the Bureau of Food, Drugs, Water and Sewerage.

R. B. FITZ-RANDOLPH, CHIEF.

To the Board of Health of the State of New Jersey:

GENTLEMEN: I herewith present the report of the Bureau of Food, Drugs, Water and Sewerage for the fiscal year ending October 31, 1914.

The laws which the Board enforces through the Bureau have been found defective in some particulars, and recommendations for certain changes in them have already been transmitted to the Board. Two years' experience in directing the work of the Bureau has convinced the writer that it is so large as to be unwieldy, and its operations cover such a wide range that it is difficult for one man to adequately supervise them all.

It is becoming a common practice, in the control of epidemics of diphtheria, for physicians, health officers, and medical inspectors of schools to take large numbers of specimens for the purpose of locating carriers. A word of warning regarding the interpretation of the Laboratory findings is needed in this connection. Our experience, gained by the examination of many thousand specimens from suspected carriers, has shown that implicit confidence must not be placed upon the result of one, two, or even three or more examinations of this sort. A single set of cultures from all the children in the room of a school in which have occurred cases of diphtheria will locate most of the carriers, but not all. A second set, taken soon after the first, will show still others; and some of the children in whom diphtheria bacilli were found on the first examination will be free on the second. A third and fourth set of cultures will show like discrepancies. This method of detecting carriers is very useful, if the results of the examinations are interpreted with caution and not too much reliance is placed on negative findings. A word of warning is also needed with respect to the interpretation of results on specimens from persons having sore throats. It should

always be remembered that this method of diagnosing diphtheria is not absolutely reliable. It is the best we have; it is much more dependable than any other; but cases of true diphtheria occasionally occur from which the diphtheria bacilli are not recovered on the first or even the second culture, and sometimes diphtheria-like organisms are found in cultures from the throat which are not virulent and presumably incapable of causing the disease, but which cannot be distinguished from the diphtheria bacillus by microscopical examination alone, or by any other procedure which can be carried on with sufficient expedition to make the results of any value to the physician. These facts are well established. They have been known to bacteriologists for years. They are stated here because some of our physicians do not seem to be aware of them, and demand a degree of accuracy of the Laboratory findings which is entirely beyond that of the best available methods.

DELAYS IN THE RECEIPT OF SPECIMENS: We have been annoyed this year to a greater extent than ever before by serious delays in the receipt of specimens forwarded by mail. This is undoubtedly due to the fact that these specimens are regarded as parcel post matter by many postmasters, and are forwarded in parcel post sacks, which are not handled as expeditiously as first class matter. The postal regulations require that specimens for bacteriological examination be pouched with first class mail. A statement to this effect is printed on the outside of every outfit supplied by the Laboratory; but, in spite of these precautions, the delays are occurring more frequently than ever before. These delays are a serious inconvenience to the physician who needs his report just as promptly as he can get it. They are due to causes entirely beyond our control. Specimens are handled as rapidly as is consistent with careful work after they reach the Laboratory, and it is difficult to see how our present system could be improved in this respect, unless a night force were employed, which is at present impossible. Physicians are advised to deliver specimens personally at the post office, and to call the attention of the postal authorities to the regulations printed on the outfits. If this is done, most of the unnecessary delay will be avoided.

The present style of outfit used for the collection of specimens from suspected cases of diphtheria is unsatisfactory in a number of respects, but it cannot be changed until the postal regulations are modified. A form of outfit which would resemble an ordinary letter would be most suitable, as it would then be more likely to be handled with letter mail.

The work of the Bacteriological Laboratory is described in detail in the report of the Chief Bacteriologist, which follows:

FOOD AND DRUGS: The enforcement of food and drug laws in New Jersey has always been carried on under the supervision of the State Board of Health. The first of these laws of any importance was an act regulating the sale of milk, passed in 1882. The oleomargarine

law was enacted in 1886, and following this a number of other laws were passed regulating the sale of particular foodstuffs. In 1901, the first comprehensive food and drugs act was adopted, and organized pure food work in this State really began in that year; the work which had been done previous to that time having been almost entirely on milk and oleomargarine. The act of 1901 was modelled in most respects after one in force at that time in Massachusetts, and was a very satisfactory piece of legislation. In 1907, this act, which had meanwhile been amended and supplemented every year since its passage, was superseded by another, resembling very closely the Federal Food and Drugs Act of 1906. This new act, while an improvement in many respects over previous legislation, and possessing the important advantage of substantial uniformity with the Federal Act and the laws of a number of other States, had almost all the weaknesses and imperfections of the Federal Law, and in some respects was decidedly inferior to the act of 1901. It has been amended and supplemented in various particulars since its passage; the most important of the supplements being the so-called "Sanitary Act" of 1909, which followed closely the Indiana Law, and which has been the basis of much of the best work done during recent years.

The Bureau also enforces certain other laws relating to the food supply and those relating to slaughter-house, cold storage and shellfish inspection, further mention of which will be made later.

The scope and purpose of the activities of the Bureau of Food, Drugs, Water and Sewerage are somewhat different from those of food and drug departments in other states. The nucleus of the organization is the Laboratory of Hygiene, which carries on three distinct lines of work; the bacteriological examination of specimens sent by physicians throughout the State from suspected cases of communicable diseases; the analysis of samples of food and drugs; the analysis of samples of water from public and private supplies, and the analysis of sewage and sewage treatment plant effluents. This combination into one of what, in most places, would constitute three distinct laboratories is of great advantage in the enforcement of food laws, as it puts at our disposal, beside the usual force of chemists common to such laboratories, trained bacteriologists who have rendered important services in the bacteriological examination of foods, particularly of milk, cold storage products and shellfish; and also unusually complete facilities for the examination and control of waters, not only those used for drinking purposes, but also those used in the preparation and handling of foods.

In the early days, the Bureau followed the traditional lines adopted by most food and drug departments throughout the country. Samples of food and drugs were collected by the inspectors and analyzed in the Laboratory. Prosecutions were instituted against those persons found violating the law; the Attorney-General conducting such prosecutions for the Board. For a number of years, these prosecutions averaged about 250 a year, resulting in the annual collection of from $10,000.00

to $15,000.00 in penalties. During the last few years, prosecutions have been fewer in number, as conditions have greatly improved during that time. Little attention was paid to the sanitary side of the food industries, or to the relation of foods to the public health. This was due to the lack of suitable legislation. With the passage of the Sanitary Act in 1909, the policy of the Bureau changed markedly. The grosser forms of food adulteration had then been checked to a considerable extent by the previous work. The enforcement of the Federal Food and Drugs Act had had a remarkable effect in limiting this type of adulteration in this State, where a large proportion of our foods and drugs enter, at one time or another, into interstate commerce. The Sanitary Act gave the Bureau broad power to control the manufacture, handling and sale of food, and investigations were soon begun along these lines. These cannot be described here at any length. We have made extensive inquiries into the manufacture of soft drinks and their handling and sale at retail; the handling of perishable foods when offered for sale at retail, particularly the exposure of foods to dust, dirt and flies outside of stores; the manufacture of canned goods, catsup, etc.; the manufacture of vinegar; the preparation of flavoring extracts and similar condiments; the manufacture of bread, bakers' products and confectionery, and the sale of drugs and toilet preparations containing wood alcohol, etc. Most of this work has for its object the *betterment of conditions,* and not primarily the punishment of offenders, although numerous prosecutions have been instituted to compel obedience to the law and the regulations of the Board, where persuasive measures have failed. The work is educational and constructive in character.

Perhaps the best illustrations of the work of the Bureau along these lines is to be found in the supervision which has been exercised over the canning factories in the State during the last four years. There are about 80 canning and catsup factories in the State, most of which handle tomatoes as their main crop, although in some of them a large variety of vegetables and fruits are packed. In 1910, inspections were made of about half of these places; and, while their condition, taken as a whole, was by no means bad, numerous objectionable features were met with, both in the construction and equipment of the buildings; the methods of manufacture, and the housing, care and management of the help. As a result of these inspections, a set of tentative rules regulating the industry were prepared, authority for making such rules being given by the Sanitary Act; and a conference with representatives of the canning industy was held, at which these rules were discussed at length. This discussion developed the fact that the tentative rules needed changing in a number of particulars. Changes were made, and a second conference with the canners was held. Some slight differences of opinion between the canners and the Board still needed adjustment, and a third meeting was arranged, at which a set of rules was finally adopted, which were entirely satisfactory to the Board and *also to the canners themselves.* Since that time, regular inspections at frequent

intervals have been made of all the canneries during each canning season. The canners have cooperated heartily with the Board in its endeavors to improve conditions, manifesting in almost all instances a willingness to make any reasonable changes in their methods or equipment when requested to do so. The result is that at the present time the canning factories in the State, with but one or two unimportant exceptions, are well constructed and equipped; are operated in a cleanly manner; are handling sound raw materials, and are turning out a good finished product. There are still some problems to be solved in connection with this industry. We are now studying methods for the disposal of waste products, and next season a vigorous campaign will be carried on among the farmers to try to improve the methods of handling and transportation of raw materials.

In 1910, an act was passed providing that all places where animals are slaughtered for human food shall be licensed by the State Board of Health, and giving the Board power to make rules and regulations governing the location, structure, equipment and operation of such places. Previous to this time, there had been no general supervision over slaughter-houses, although a number of municipalities had attempted to control them by ordinance. The slaughtering business in this State is largely in the hands of ignorant foreigners, and most of the slaughter-houses were in a deplorable condition. Soon after the act was passed, an inspection service was organized and a systematic control over these places begun. In 1910, there were over 300 slaughter-houses in the State. Over seventy-five of these have been abandoned since that time, as the owners were unwilling to comply with our requirements. Many of those which remained have been practically reconstructed. All of them have been thoroughly cleansed, and most of them are kept reasonably clean. Our inspection force, consisting of one veterinarian and a part-time-assistant, is much too small to supervise all these places properly, but conditions have improved materially since the act became effective. What is needed in this State, however, is an adequate system of meat inspection. Most of the beef cattle slaughtered in the small country slaughter-houses are worn-out dairy cows, and the proportion of diseased animals among them is high. Much of this diseased meat gets on the market. We prosecute every one we can catch who sells such meat, but it is absolutely impossible to maintain a suitable inspection service while the number of slaughter-houses is so great. The most obvious solution of this problem is the establishment of municipal or county abattoirs, at which a proper veterinary inspection could be maintained. To establish such a system as this will require legislation which we have not been able as yet to secure. A few of the municipalities have meat inspectors, but in most places there is no adequate inspection of the animals slaughtered within the State.

The oyster is popularly supposed to be responsible for a great deal of typhoid fever. Some outbreaks of this disease have been actually

traced to the eating of infected shellfish, and many more cases which could not be so traced have been blamed on the oyster, nevertheless. A hue and cry has been raised against it, which has made many timid persons eschew it altogether. It is altogether probable that the dangerousness of the oyster has been very greatly exaggerated, but there is no doubt that oysters grown or laid out in polluted water may sometimes act as carriers of the typhoid bacillus. As long ago as 1903, the Board began to investigate the shellfish industry, but could do little for some years after, because of lack of funds. In 1910, an act was passed making it the duty of the State Board of Health to investigate all the oyster and clam beds in the State; to issue certificates showing the result of these examinations to the oystermen, and to condemn those beds which were polluted and prohibit the sale of oysters therefrom. As there are several thousand oyster grounds in the State scattered over a coast-line of perhaps 150 miles in length, and as the legislature neglected to appropriate anything for the enforcement of the act, this was rather a large order. Nevertheless, the Bureau began an investigation with what limited facilities it had. This showed two things: the need for very careful and extensive further investigation, and the utter impracticability of the law. The law was changed in 1911, and again in 1912, and is now a most satisfactory piece of legislation, giving the Board ample power to control the growing, handling and sale of shellfish, and providing funds for its enforcement. It was quickly realized that the Laboratory facilities at Trenton were not adequate to handle this problem, so an auxiliary laboratory was provided in the form of a specially built motor boat, described in previous reports, which is equipped with everything necessary to make the analyses and surveys which have been carried on since that time. The boat is in commission about eight months in the year, and carries a chemist and bacteriologist, and a captain who attends to the navigation, does the cooking and assists in the collection of samples. We are, therefore, in a peculiarly favorable position for studying the sanitary aspects of the oyster industry, and a great deal of such work has already been done. Thousands of samples of water and oysters have been examined bacteriologically, and sanitary surveys have been made of all the important shellfish grounds of the State.

The same procedure was adopted in this investigation which was so successfully carried on in the canning factory inspections. The oystermen were taken into our confidence, and an active system of cooperation established with them. This has resulted in such radical changes in the method of handling shellfish, particularly in the Maurice River section where the most extensive oyster grounds are located, that the oysters taken from them are now perfectly safe for use as food. Much remains to be done along this line. We have planned a series of investigations which will require four or five years to complete, and which, if successfully carried to completion, will furnish us with information about the relation of the oyster to disease which is greatly needed.

These few lines of the kind of work which the Bureau is now carrying on will serve to illustrate the present policy in the enforcement of our food laws. It is eminently an educational and constructive policy. It has always in view the safeguarding of the health of the people first, and the suppression of fraud afterwards. We believe that the best results can be secured by working *with* the producers, manufacturers and dealers in food, rather than against them. Our experience has shown that the great majority of them are just as honest, just as conscientious, just as willing to do right if they know how and have a chance, as any other class of citizens. Many of them need to be protected against their own ignorance. Many more need to be protected against the unfair competition of the small minority who are dishonest. We endeavor to work along both these lines, and by so doing, to protect both the purchasing public and the honest vendor of foods and drugs.

WATER AND SEWERAGE INSPECTION: Several years' experience with the inspection of water purification and sewage disposal plants has shown that a change in the method of making these inspections may be advisable. At the present time, it is the practice to send the assistant engineers to these plants for a general inspection and for the collection of the necessary samples for analysis. The inspector observes the manner in which the plant is managed, noting particularly any defect either in operation or equipment, and advises the attendant regarding any changes which he deems necessary. This procedure has brought about considerable improvement in the management of many of the plants in the State, but the method fails to meet those cases where experimental work is needed in order that data may be secured, upon which intelligent advice regarding the construction or operation of plants can be based. The information which is obtained in a visit lasting only a few hours is not always sufficiently definite or comprehensive to disclose all the defects which may exist. It is believed that much better results could be obtained by having an assistant engineer spend considerable time at a number of these plants, actually taking charge of the operation for a period long enough to enable him not only to discover all the weak points, but also to thoroughly train the attendant in the proper method of operation. This applies particularly to those disinfection plants which are maintained to protect tidal waters from pollution because of the proximity of shellfish grounds. These plants require much more careful and intelligent supervision than they are getting at the present time, as the data relating to them contained later in this report will show. Much investigation is still needed to determine the conditions under which an adequate degree of purification of sewage by means of hypochlorite or liquid chlorine can be obtained at a reasonable cost, and this can best be secured by having our assistant engineers, possibly in cooperation with members of the Laboratory force, make sufficiently careful and extended studies on the ground to determine what the proper methods of operation are.

Investigations are also greatly needed looking toward the solution of one of the most difficult problems which now confronts the State—the disposal of factory wastes. New Jersey is preeminently a manufacturing State at the present time. It is certain that during the next decade its manufacturing interests will materially increase. Such an increase should be encouraged as the prosperity of the State will thereby be enhanced. Factories, however, frequently have waste products which must be disposed of, and when these happen to be liquids, the natural tendency is to empty them into watercourses. Any one who is familiar with the condition of the lower Passaic Valley knows what disastrous results this policy may bring about when the quantity of trade wastes added exceeds the power of assimilation of the stream. In many instances it is necessary to treat liquid industrial wastes in order to remove deleterious materials, and the engineering division should be in a position to advise the owners of factories having to dispose of objectionable wastes, regarding the best method of purification. Such a service will require a considerable additional force, and also the establishment of an experimental station where these problems can be studied under conditions which can be properly controlled. The results to be expected from such an equipment will much more than offset the cost. An adequately equipped and manned sewage experimental station will be of inestimable service, both to the manufacturers, who will then be able to secure information at present not obtainable, and to the citizens as a whole, who will benefit by the decreased pollution of the streams which will certainly result.

The engineering division should also be sufficiently enlarged to enable studies to be made on the disposal of domestic sewage from individual residences and small groups of houses. It frequently happens that disposal works serving places of this character are constructed at considerable cost from designs made either by the owners or by some local plumber who knows nothing about the principles of sewage disposal. Money so spent is frequently wasted; the plants do not work, and are sooner or later abandoned. The Board could render valuable service to citizens of the State by advising them regarding the installation of treatment plants of this character.

Later in the report will be found a brief statement showing the results of a preliminary study which has been made of the kind and amount of sewage, (including manufacturing wastes) which is discharged into the Hudson River, the Kill von Kull, the Arthur Kill down to and including the mouth of the Raritan River at Perth Amboy, Newark Bay and the Hackensack River up to and including Jersey City. This study will be continued, and will necessarily include a further investigation of the amount and character of the trade wastes; the amount and composition of the domestic and storm sewage; the effect of tidal flow on the distribution of the sewage, and an extended series of examinations of the water at and near the points of outfall of the sewers, for the purpose of ascertaining the effect of this sewage upon the waters of the Hudson

River and Newark Bay and upon local conditions in the immediate neighborhood of the outlets. A very elaborate and comprehensive study of some of these waters has already been made by a New York Commission, which has thrown much light upon the question of sewage disposal in the Hudson River and New York Bay. It is to be regretted that the Board was unable, because of lack of funds, to cooperate in this investigation. However, the treatment of the sewage now entering these waters is a problem which must soon command the attention of the various municipalities bordering on them. In order that this may be satisfactorily accomplished at the least possible cost to all concerned, a a general scheme covering the entire territory must be prepared; and before this can be done, the studies above mentioned must be completed in order that the data upon which such a plan must be based may be procured.

Later in this report will be found the results of an investigation of the watershed of the Raritan River, made primarily for the purpose of securing data which could be used by the Board to enable them to determine the degree of purification of sewage which would reasonably be demanded of municipalities sewering into it. The Raritan is one of the most important streams in the State, having a large watershed, much of which is so sparsely populated that the water obtained from it is well adapted for potable use after proper treatment. Because of the rapid increase in population in the northern end of the State, this watershed must be regarded as a very valuable asset to the surrounding territory, although it has not yet been fully developed; and every effort should be made to conserve the purity of the water by the adoption of measures which will prevent the pollution of the stream. Much work has already been done on this watershed by the Bureau in the abatement of minor pollutions, and orders have also been issued to all the important cities and towns on it—Raritan, Somerville, Bound Brook, East and South Bound Brook, and New Brunswick—to purify their sewage. None of these municipalities have as yet complied with these orders, and one of the reasons why the above mentioned study was made, was to determine, approximately at least, the degree of purification which must be required, and hence the character of the works needed to keep the river in such a condition that no nuisance will arise at any point; and that, in those sections from which water is taken for potable purposes, the river will be pure enough to make it possible to filter it and deliver a safe water to the consumers. The degree of purification believed to be necessary is stated in the conclusion to that report, and it is our opinion that, if municipalities along the river design and construct disposal plants which will produce effluents in accordance with those suggestions, all the river above Raritan and possibly all above the Fieldville Dam can be permanently conserved for potable use.

The river at Raritan is so used at the present time, and the section above this point presents comparatively little difficulty at present, as it is thinly settled. From Raritan down to the Fieldville Dam, a great

deal of sewage and trade waste is now added to the water without treatment. This material needs treatment. If the river is not to be used as a source of water supply, the degree of purification required will be comparatively small. If, however, this portion of the river is to be used in the future as a source of water supply, the sewage treatment needs to be much more complete. The writer believes that the latter policy should be adopted. Unless some comprehensive scheme of water conservation for the northern part of the State is soon devised and put into effect, within two or three decades this section will begin to suffer from a shortage of potable water. It is none too soon to institute measures to prevent this. The Board can render the citizens of the State and their descendants no more important service than by doing its part in securing for them an abundant supply of pure water. It will not, of course, be necessary to build complete disposal works for the municipalities above mentioned until the section of the river on which they are located is actually used as a source of water supply, but all treatment works which are designed for these places should be so planned that sufficient additional purification can be economically provided, when it is needed, to produce an effluent pure enough to prevent the placing of too heavy a burden upon the water purification plants below.

Arrangements should be made whereby some of the work done by this Bureau can be given wider publicity than is secured by printing it in an annual report of the Board, which often is so delayed that long periods of time elapse between the completion of the work and its publication. The results obtained by inspecting the canning factories, for example, should be published in pamphlet form at the end of each canning season, so that they could be placed in the hands of the canners in time to give them ample opportunity to take advantage of the facts disclosed and suggestions made before the beginning of the next canning season. The same procedure should be adopted with respect to the shellfish investigations. A special bulletin, giving in considerable detail the work which the Board has done toward safeguarding this industry, should be prepared and placed in the hands of the oystermen.

Following will be found the reports of the work of the four divisions of this Bureau.

BACTERIOLOGICAL DIAGNOSIS: John V. Mulcahy, Chief Bacteriologist, in charge.

The following report is of the work done in this Division for the year ending October 31, 1914.

As is shown by Table 1, the number of specimens examined is the largest since the establishment of this laboratory; and this fact is the best kind of endorsement that the laboratory is fulfilling the needs of the physicians and public health officials of the State, insofar as it is able with its limited space and force.

Those connected with this Division realize more keenly perhaps than others the necessity for enlarging the scope of this work so as to include

as routine examinations a number of tests that under the present crowded condition of this laboratory are absolutely impossible. Of greatest importance from a public health standpoint is the examination of blood from persons suspected of having syphilis. Hardly a day passes that we do not have requests for this particular kind of an examination, and it is to be regretted that we are not able to comply with them. At the present time the bacteriological laboratory consists of two rooms, entirely too small to carry on the present volume of routine work conveniently. Without increased facilities in the way of additional room, additional work cannot be undertaken. This applies particularly to the making of Wasserman reactions for syphilis, for which considerable additional space and equipment will be needed. This examination is an invaluable aid to the physician in making a diagnosis, and, in many cases, is the only means by which he can establish a diagnosis and watch the effect of treatment.

Examinations of specimens from suspected cases of glanders by means of the complement fixation and agglutination tests; of blood in special cases of typhoid fever by cultural methods; of material from septic conditions for the invading organisms, to determine the kind of vaccine to be used, are only a few of the examinations it would be possible to add to our routine work were increased laboratory facilities available.

Another line of work which is now on the increase, and is certain to increase greatly in the future, is the examination of blood and excreta from suspected carriers of typhoid bacilli. These examinations are of great assistance to investigators of epidemics of typhoid fever, in ascertaining the source of infection in these epidemics when suspicion points to individuals who may be responsible for the spread of the disease.

That typhoid carriers are one of the principal means of distributing typhoid fever, is being realized more each year; and the public health laboratory will be called upon to make frequent examinations of this character. This work consumes much time, and will require the services of an additional bacteriologist if the laboratory undertakes to make all the examinations that will be necessary in epidemiological investigations of typhoid fever in this State.

Much assistance has been rendered the Bureau of Medical and Sanitary Inspection during the year in this respect, and provision should be made so that their work will not be hampered by delay in obtaining results on specimens submitted.

An additional reason for more space and the services of another laboratory assistant is created by the passage of an act authorizing the State Board of Health to distribute, at cost, culture media to local boards of health and other people engaged in public health work in this State. This has resulted in quite a demand for such products from outside sources, and this, in addition to the large quantities which are prepared for other Divisions of this Bureau, has imposed much additional work on the present staff.

Attention is again directed to the continued prevalence of rabies throughout the State, as indicated by the large number of specimens from suspected cases of this disease shown in one of the following tables. The figures do not exaggerate the condition, for undoubtedly the laboratory does not receive all rabid animals, as many suspected of having the disease are killed and not sent for examination. It is difficult to see how this condition is to be improved, unless the State takes some action providing certain restrictions in regard to the freedom dogs now enjoy at the expense of the public, who are exposed to the danger of a terrible disease and the inconvenience and financial loss due to taking the preventative treatment.

That more deaths of persons bitten have not resulted is due to the Pasteur treatment, which is now so readily obtained by physicians, who advise its use in all cases of bites by rabid animals.

The increase over last year in the number of diphtheria specimens examined is due in part to the use made of the laboratory by school authorities in several localities where this disease was endemic for the purpose of excluding from school pupils who were found to be harboring the diphtheria bacillus in their throats or noses. A number of carriers were found by this method and were restrained from attending school until negative cultures were obtained or until a test made of the organisms proved it to be non-virulent. This procedure has resulted in a marked decrease in the number of diphtheria cases reported and is to be strongly recommended.

The following table shows the number and kind of specimens examined during the year arranged by months:

TABLE SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY MONTHS.

MONTHS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS.		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
November, 1913.	1,211	431	401	66	206	44	14	4	80	20	2,477
December, 1913.	783	612	469	65	195	45	23	....	79	26	2,297
January, 1914.	457	704	523	103	186	20	9	....	88	19	2,109
February.	419	245	415	54	143	12	12	....	100	25	1,425
March.	323	229	539	82	156	24	19	2	73	17	1,464
April.	2,086	354	510	91	193	32	20	....	66	12	3,364
May.	274	240	584	104	243	30	41	3	93	37	1,649
June.	372	277	522	71	216	39	51	4	83	17	1,652
uly.	262	195	420	51	236	36	42	1	99	17	1,359
August.	144	127	414	87	307	43	43	2	73	7	1,247
September.	190	97	396	69	368	48	61	2	95	25	1,351
October.	492	278	450	103	329	54	45	1	105	21	1,878
Total.	7,013	3,789	5,643	946	2,778	427	380	19	1,034	243	22,272

This shows an increase from 914 in 1896 and 1897, when the laboratory was established. In 1913 the total number was 18,342.

The interpretation of the results of the various bacteriological examinations in conjunction with the clinical findings is treated in detail under the heading of each disease in the report of this department for the year ending October 31, 1913.

Too frequently we are unable to report on some of these specimens on account of their being received without any information regarding the sender as a result of which we are obliged to hold the report and await inquiry. If unnecessary time has ensued before a report it received an inquiry to the Director of the Laboratory, should be made regarding it.

Considerable delay in receiving specimens has been especially noticeable this year and is undoubtedly due to the advent of the parcel post. While these specimens are subject to the same rate of postage as parcel post matter, Section 495, Postal Laws and Regulations, provides that they be pouched with letter mail and dispatched with the same expediency as first class matter. Postmasters in some of the post offices not aware of this order forward them as parcel post matter, delaying their receipt in the laboratory and thus causing unnecessary delay in the report to physicians.

It is suggested that physicians mail their specimens personally and that they direct the attention of the postmaster to the above mentioned section of the postal laws, so that delay in this respect may be minimized.

The list of repositories where mailing cases provided by the laboratory for the collection and transmission of specimens to the laboratory may be found in the report of this department for the year ending Oct. 31, 1913. Inability to obtain outfits should be reported to the Director of the Laboratory who will see that they are forwarded at once.

The following shows the number and various kinds of the 1277 miscellaneous specimens examined in the laboratory during the past year, both positive and negative.

POSITIVE—Gonorrhœa, 343; rabies, 54; anthrax, 0; blood for bacteria, 0; B. tuberculosis, gland of cow, 1; B. tuberculosis, cow's liver, 0; B. tuberculosis, pleura of cow, 0; B. tuberculosis, urine, 6; B. tuberculosis, pleural fluid, 1; B. tuberculosis, fluid from joint, 0; B. tuberculosis, throat specimen, 1; B. tuberculosis, pus, 0; B. typhosus, feaces, 1; B. typhus, urine, 0; B. para-typhosis, 1; B. typhosus, pus, 0; B. typhosus, water, 0; fæces for hookworm, 0; glanders, 3; gonorrhœal opthalmia, 1; gonorrhœa, urine, 1; gonorrhœa, fluid from joint, 1; pus for bacteria, 15; pus, conjunctivitis, 0; section of lung for bacteria, 0; spinal fluid, 2; sputum for bacteria, 3; throat specimen for Vincent's angina, 0; treponema pallidum, 0; urine for bacteria, 1. Total, 434.

NEGATIVE.—Gonorrhœa, 584; rabies, 35; anthrax, 6; blood for bacteria, 1; B. tuberculosis, gland of cow, 0; B. tuberculosis, cow's liver, 1; B. tuberculosis, pleura of cow, 2; B. tuberculosis, urine, 18; B. tuberculosis, pleural fluid, 2; B. tuberculosis, fluid from joint, 1; B. tuberculosis, throat specimen, 0; B. tuberculosis, pus, 12; B. typhosus, fæces, 50; B. typhosus, urine, 18; B. para-typhosis, 30; B. typhosus, pus, 1; B. typhosus, water, 22; fæces for hookworm, 1; glanders, 14; gonorrhœal opthalmia, 13; gonorrhœa, urine, 5; gonorrhœa, fluid from joint, 0; pus for bacteria, 13; pus, conjunctivitis, 1; section of lung for bacteria, 3; spinal fluid, 6; spu-

tum for bacteria, 0; throat specimen for Vincent's angina, 2; treponema pallidum, 2; urine for bacteria, 0. Total, 843.

This table shows the increase in the number of specimens of this character examined in any previous year. Physicians desiring special examinations of any bacteriological nature are requested to communicate with the Director, when possible, regarding it so that directions for the proper manner of collection and transmission of specimens may be sent.

The following shows the number and kind of the 89 specimens examined for rabies during the year:

Dogs —Positive, 50; negative, 27; unsatisfactory, 3.
Cats — " 1; " 3; " 1.
Boy, negro— " 1;
Cow — " 1;
Horse— " 1;
Pig — " 1;

The following list of towns from which brains found to be positive were received, shows that rabies is wide spread throughout the State. Counties not included may have had cases that did not reach the laboratory for examination. The counties and number of animals positive from each were as follows:

Bergen—Hackensack, 1; Midland Park, 1.
Burlington—Burlington, 1; Moorestown, 2.
Camden—Berlin, 1; Camden, 1; Pensauken, 1; West Collingswood, 1.
Cumberland—Millville, 1; Shiloh, 1.
Hunterdon—Lambertville, 1; Milford, 1.
Mercer—Hightstown, 1; Princeton, 5; Trenton, 8.
Middlesex—Dunellen, 1; Metuchen, 1.
Monmouth—Englishtown, 2.
Morris—Chatham, 1; Butler, 1.
Passaic—Passaic, 1; Clifton, 1.
Somerset—North Branch, 1; Somerville, 2.
Union—Elizabeth, 1; Plainfield, 3; Rahway, 3; Scotch Plains, 1; Summit, 1; Westfield, 6.
Warren—Riegelsville, 1.
Total, 54.

The following table is intended to show that rabies is no more frequent in the summer months than at other times:

SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR ARRANGED BY MONTHS.

	Positive	Negative	Unsatisfactory
November, 1913,	2	2	
December, 1913,	6	3	
January, 1914,	4	2	
February	6		
March	3	1	
April	5	4	
May	4	7	1
June	4	2	1
July	4	5	
August	5	3	1
September	5		
October	6	2	1
	54	31	4

When a person has been bitten by a dog suspected of being rabid, the dog should not be killed immediately, unless it is absolutely necessary, but the animal should be confined for a period of about ten days. If during this time symptoms of rabies do not develop in the animal, there is no danger of rabies from the bite, but if the typical symptoms, either of the furious or the paralytic type develop, the animal will not live more than a few days. An examination of its brain at the expiration of this time will prove more reliable than in cases where the animal has been killed earlier in the disease.

Bites of animals suspected of being rabid should be cauterized as soon as possible with strong, fuming nitric acid which has been demonstrated to be as effacious as any local treatment.

When killing an animal, care should be taken that the brain is not injured, as this seriously interferes with the examination. The head of the animal should be wrapped in a cloth, placed in a tight container, preferably a can with a tight cover that can be soldered, the container surrounded by ice, and expressed to the laboratory without delay. Sawdust or other absorbent material should be used to prevent the leakage of blood, etc.

The following table shows the number and kinds of specimens examined during the year, arranged by towns:

SPECIMENS EXAMINED DURING THE YEAR, BY CITIES AND TOWNS.

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS.		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Allendale	1		4								5
Allentown			7	1	1						9
Alpha				1							1
Andover			3								3
Anglesea	1		3								4
Arlington	1	2	39	4	73	12	13		13	1	158
Asbury Park	230	75	73	3	68	9	10	1	5	1	475
Atlantic City	55	28	105	17	66	6			33	6	316
Atlantic Highlands	7	8	4		1	1	1				22
Audubon	5	2	5	4	9	1			3		29
Avon-by-the-Sea							1				1
Barnegat			5	2	2				3		12
Baptistown	4	3									7
Basking Ridge	1		6	1	2						10
Bay Head					3	1	3				7
Bayonne	38	7	76	19	16		6		6	1	169
Beach Haven			6	1							7
Bedminister					1						1
Belford			2								2
Belleville	2		4		1	1	1		1		10
Belmar	2	1	1		3						7
Belvidere	22	17	4	2	9	1					55
Bergenfield	3	4	7	1							15
Berlin	2				2				1		5
Bernardsville	37	19	4		3	1	3		5	1	73
Beverly	12	3	7		5				3	2	32

SPECIMENS EXAMINED DURING THE YEAR,
BY CITIES AND TOWNS—continued.

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS.		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Blackwood	1	1	12	4							18
Blairstown	1	1	6		1						9
Bloomfield	4	1	20	3	14		1		4		47
Bloomingdale			1								1
Bloomsbury	13	7									20
Bogota	9	15	21	13	7	1	10	1	3		80
Boonton	11		11	2	4		3	1	1		33
Bordentown	3	1	6		1		1				12
Bound Brook	23	11	13	3	14	1	3				68
Bradley Beach	4								1		5
Branchville	3	7	2								12
Bridgeport	10	5	1								16
Bridgeton	15	23	27	12	46	9			24	1	157
Brown's Mills	1				3	1					5
Burlington	4	1	15	4	13	2			1		40
Butler	7	1	4	1					3		16
Caldwell	30	15	23	4	14	1	7		2		96
Califon	1		2	1	4						8
Camden	410	163	255	42	154	25	14		86	44	1,193
Cape May	1		7	2	6	1			3		20
Cape May Court House			4		2						6
Carlstadt	7	4	14		8						33
Carteret	3		1		3						7
Cedarville	3		1								4
Chatham	3		1		14				10	14	42
Chester	6	2							3		11
Chesterfield			1								1
Chews			5								5
Chrome	5	8	1		2	1			1		18
Clayton			1		2		1		1		5
Clifton	64	19	43	6	13	1	5		4		155
Clinton	2		3		3	2			7	3	20
Closter	8	3	7	2	2				1		23
Collingswood	23	12	9	3	10	1	1	1			60
Columbus	1		1								2
Cranbury			1								1
Cranford	13	7	21	5	5		4	1	1		57
Crosswicks	2	1			2						5
Daretown				1	3						4
Dayton			8	1							9
Delance	3		3		3						9
Dennisville	3		15	2	1						21
Denville	2										2
Dover	14	1	15		4	1	3	1	5	1	45
Dumont	3	5	15	2	2		3				30
Dunellen	3		10	6	21	4	11	2	3		60
East Mahwah	1										1
East Newark			8		6						14
East Orange	9	3	89	35	32	2	4		4	2	180
East Rutherford	5		15	1	7		1				29
Eatontown	1										1
Edgewater	2	3	6		2						13
Egg Harbor	3	2	7		3	3			2		20
Elberon	1										1
Elizabeth	53	9	161	15	85	8	1		3		335
Elmer	1		3		2						6
Englewood	73	62	24	18	35	2	2		4		220
Englishtown	1		1		1	2			2		7
Erma			1								1
Ewan									1		1
Fair Haven					1						1

SPECIMENS EXAMINED DURING THE YEAR,
BY CITIES AND TOWNS—continued.

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS.		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Fairton									1		1
Fanwood	3		3								6
Farmingdale	1		6	1	6						14
Flemington	9	8	3		5	1			6		32
Florence	3		4								7
Florham Park					2	12			2	1	17
Fort Lee	1		4		2				2	4	13
Franklin Borough					1						1
Franklin Furnace	2	2			1						5
Freehold	2		21		8	3			5		39
Frenchtown			1		1						2
Garfield	23	10	23	3	1		1				61
German Valley	3	1	1						1		6
Gibbstown			1								1
Gladstone	92	157	2	2					2		255
Glassboro	1	1			1						3
Glen Gardner					2	1			2		5
Glen Ridge			1								1
Gloucester	2	2	12	1	3						20
Grantwood	618	1,033	9						1		1,661
Greenwich			1								1
Grenloch			1								1
Greystone Park					3						3
Guttenberg	2				4						6
Hackensack	77	45	120	14	43	3	14	1	24	6	347
Hackettstown	9	3	5	1	5		1		2	1	37
Haddonfield	83	67	17	2	22	3	1		4		199
Haddon Heights	1		2	1	5						9
Haledon			2								2
Hamburg	9	3	11	1	4		1		1		30
Hamilton Square	3	18			1						22
Hammonton			3		9						12
Hampton			1								1
Harrison			10		7	1					18
Hasbrouck Heights	4	1	7	1	3	3	2				21
Heislerville			2		1						3
High Bridge	11	16	6	1							34
Highland Park	2	4	1								7
Highlands			4		2	1					7
Highwood Park			1								1
Hightstown	10	14	10	8	1				2		45
Hillsdale			1				1				2
Hoboken	39	19	121	12	80	5	6		9		291
Hohokus		5			2						7
Hopewell	2	3	1		5	1					12
Hudson Heights	6	17	2	1	1						27
Irvington	54	36	46	4	14		4		6		164
Island Heights			1								1
Jamesburg	10	9	1								20
Jersey City	85	4	367	35	160	18	5		30	15	719
Kearny			16	1	6	1			4	4	32
Keyport	23	17	9	2	18	3	2		3		77
Lafayette			3	1							4
Lakehurst	1		2								3
Lakewood	16	8	29	9	13	3	6		14	4	102
Lambertville			3	1	11	4			1		20
Laurel Springs	2		2		3						7
Lawrenceville	30	2	4	1	3		1				41
Layton	1		1								2
Lebanon			1		2						3

SPECIMENS EXAMINED DURING THE YEAR,
BY CITIES AND TOWNS—continued.

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS.		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Leesburg	2				3	1					6
Leonia	1	1			2						4
Linden	5	4	2		3	4	1				19
Linwood				1							1
Little Falls	7	3	5	1	1						17
Little Silver									1		1
Lodi	1		2		2						5
Long Branch	43	49	59	8	109	13	4		3		288
Lyndhurst	19	9	13	4		4					49
Madison	26	5	29	7	14		5		7	3	96
Magnolia		2	5		5						12
Mahwah	7	2	1	1							11
Manahawkin					2						2
Manasquan	2		3		3						8
Mantua	1										1
Maplewood	2		21	4	7	1					35
Marlboro	1										1
Marlton			1	1	2						4
Matawan	2		2								4
Mauricetown	1		1								2
Mays Landing	1		2								3
Maywood	3	1	5						2		11
Medford	1				3				3		7
Mendham	4	5	5	1	13	5			5		38
Merchantville	38	71	9	2					1		121
Metuchen	56	23	17	1	4		4		3		108
Midland Park	3		11	2					5		21
Milford									1		1
Millstone			3								3
Milltown	2		10	1	4						17
Millville	6	2	42	6	6				3		65
Milton			1								1
Montclair	6		8	1	1				1		17
Montvale				1							1
Montville	3	3									6
Moorestown	28	18	24	4	9	3	1		4		91
Morris Plains	8	1			2						11
Morristown	13	2	28	4	39	8			1		95
Mount Arlington					2	1					3
Mount Holly	37	22	21	3	54	17	1				155
Mullica Hill	15	15	2		2		3		5		42
Netcong	4	1	5		3	1			1		15
Newark	13	1	61	10	6		3		7	1	102
New Brunswick	36	1	123	18	36	3			13		230
New Egypt		1	1								2
Newfield				1							1
Newfoundland			1	1							2
New Market			1		1						2
Newton	22	15	16		11	4	1				69
North Bergen			1								1
North Branch	2	1			1				1		5
North Mount	1										1
North Plainfield			1								1
Nutley	26	12	5	1	2		2				48
Oakhurst									1		1
Oakland			6								6
Oak Ridge			1								1
Ocean City	9	12	2		7	1	1			1	33
Ocean Grove			3		1						4
Oradell	7		8	3	3						21

SPECIMENS EXAMINED DURING THE YEAR,
BY CITIES AND TOWNS—continued.

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS.		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Orange	8	1	102	14	24	2	11	....	7	....	169
Oxford	.....	.....	1	.....	1	....	....	....	.....	....	2
Palisade Park	1	.....	2	1	.....	....	....	....	.....	..	4
Palmyra	15	43	4	1	7	1	1	....	2	....	74
Park Ridge	.....	.....	6	1	3	....	....	....	1	....	11
Parsippany	1	.....	1	.....	.....	.....	.....	.....	.....	.....	2
Passaic	170	185	378	69	49	6	27	1	35	4	924
Paterson	54	7	380	38	86	17	....	....	7	....	589
Pattenburg	8	5	.....	.....	.....	.....	....	....	.....	....	13
Paulsboro	6	5	7	.....	12	1	....	....	.....	....	31
Peapack	11	7	2	.....	1	....	....	....	.....	....	21
Pedricktown	20	6	4	1	.....	....	....	....	.....	....	31
Pemberton	251	141	1	.....	3	....	....	....	1	....	397
Pennington	.....	.....	2	.....	.....	.....	....	....	.....	....	2
Penns Grove	520	173	.....	.....	4	....	....	....	.....	....	697
Pennsville	.....	.....	1	.....	.....	....	....	....	.....	....	1
Pensauken	.....	.....	2	.....	1	....	....	....	1	....	4
Perth Amboy	9	2	127	21	46	4	8	....	5	....	222
Phillipsburg	1	.....	3	.....	1	....	....	....	2	1	8
Pitman	10	6	13	2	4	....	1	....	.....	....	36
Plainfield	8	7	54	12	40	5	5	....	7	3	141
Pleasantville	3	.....	10	1	22	4	....	....	5	4	49
Point Pleasant	4	1	3	.....	7	4	1	....	.....	....	20
Pompton	.....	.....	.....	1	.....	....	....	....	.....	....	1
Pompton Lakes	.....	.....	4	2	2	1	....	....	.....	....	9
Port Norris	.....	.....	2	.....	3	....	1	....	3	....	9
Princeton	32	5	16	2	13	3	19	....	14	....	104
Rahway	14	8	66	10	57	4	....	....	8	....	167
Ramsey	53	14	11	1	2	....	....	....	.....	....	81
Raritan	2	1	1	.....	.....	.....	....	....	.....	....	4
Red Bank	16	8	28	1	10	....	3	....	3	....	69
Reiglesville	.....	.....	.....	.....	.....	.....	.....	.....	1	....	1
Ridgefield Park	46	34	14	.....	16	2	6	2	6	3	129
Ridgewood	6	7	21	3	8	1	3	....	.....	....	49
Ringoes	1	.....	1	.....	1	....	....	....	.....	....	3
Riverside	14	.....	19	2	5	....	....	....	.....	....	40
Riverton	21	6	1	1	8	1	1	....	6	....	45
Rochelle Park	.....	.....	1	.....	.....	.....	....	....	.....	....	1
Rockaway	22	5	18	1	2	2	....	....	8	....	58
Rocky Hill	.....	.....	3	.....	.....	.....	....	....	.....	....	3
Roebling	16	13	9	.....	6	....	....	....	.....	....	44
Roselle	13	8	11	1	3	....	....	....	.....	....	36
Roselle Park	2	1	6	2	1	....	....	....	.....	....	12
Rosemont	.....	.....	2	1	.....	.....	....	....	.....	....	3
Rutherford	12	4	9	2	10	2	1	....	.....	....	40
Salem	8	4	14	4	6	1	1	....	2	....	40
Sayreville	.....	.....	5	.....	1	....	....	....	.....	....	6
Scotch Plains	.....	.....	.....	.....	.....	.....	....	....	1	....	1
Sea Bright	17	15	9	.....	6	1	....	....	.....	....	48
Sea Isle City	17	29	7	2	6	10	3	....	7	3	84
Sergeantsville	.....	.....	1	.....	1	1	....	....	.....	....	3
Shiloh	2	1	.....	.....	.....	.....	....	....	1	1	5
Shrewsbury	.....	.....	.....	.....	.....	.....	....	....	3	....	3
Skillman	109	12	3	2	8	....	1	....	1	....	129
Somerville	22	13	44	10	11	1	11	1	17	3	133
South Amboy	1	.....	2	....	1	....	....	....	1	....	5
South Orange	3	.....	33	9	3	....	....	....	.....	....	48
South River	.....	.....	4	.....	.....	.....	....	....	.....	....	4
Spotswood	7	3	1	.....	.....	.....	....	....	.....	....	11
Springfield	16	12	17	.....	4	1	1	....	.....	....	51

SPECIMENS EXAMINED DURING THE YEAR,
BY CITIES AND TOWNS—continued.

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS.		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Spring Lake	4		4	1	23	6			1		39
Spring Lake Beach			1		1						2
Stanhope			5	1	7	3	19	1	1		37
Stanton			1		2						3
Stewartsville	1								2		3
Stillwater					3						3
Stirling	15	7	3		1				1		27
Succasunna	4		5								9
Summit	5	3	9	1	20	2	10		16	3	69
Sussex			1		1						2
Swedesboro	2		9	1	2						14
Tenafly	2	6									8
Toms River	5		3	1	5	1					15
Town of Union	5		20	1	1	1			2	2	32
Trenton	1,828	314	802	190	368	91	22	2	304	64	3,985
Union Hill	1		16	2	6				1	1	27
Vernon			1								1
Ventnor City			1								1
Verona	3		22	3	3						31
Vineland	37		93	20	56	12	2		42	4	266
Waldwick			5								5
Wanaque			2								2
Washington	5	2	13	1	7	2	3	1	7	1	42
Weehawken	16	7	34	10	14	2	2		8	2	95
Wenonah	2	1	4		1				1		9
West Collingswood			1		4				1		6
West End	1	1			2						4
Westfield	49	30	52	23	16	1	1		7		179
West Hoboken	18		87	8	32	1	7		5	2	160
West Long Branch	3	2									5
West Milford				1							1
West New York	67	25	54	5	13	1			10	5	180
West Orange	2	1	15	3	8		1		4	1	35
Westville	2		7								9
Westwood	35	26	20	7	7	3	17	2	4	1	122
Wharton	5	2	5								12
Whippany					1						1
White House Station			3		4				2		9
Wildwood	2	2	11	2	1				3		21
Williamstown	4		5	3	1				7	1	21
Windsor			5	1							6
Woodbine	16	6	7	2	1						32
Woodbury	7	8	25	2	6		1		2	15	66
Woodbridge	272	187	33	5	7		1		1	1	507
Woodridge			1		1						2
Woodstown	16	18	2		1				2	1	40
Wyckoff			2		3						5
Yardville			1								1
Blanks	18		9				1		2		30
Totals	7,013	3,789	5,643	946	2,778	427	380	19	1,034	243	22,272

DIVISION OF FOOD AND DRUGS—William G. Tice, Chief Chemist, in charge.

SANITARY ACT. The Sanitary Act has for its purpose the regulation of those conditions under which foodstuffs are prepared, packed, distributed and sold. The provisions of the law are exceedingly broad and far reaching, and it is obvious that if the law is to be effective a large number of inspectors are needed for its enforcement. Last year two men were available, who could devote less than half of their time to this work.

During the year sanitary inspections were made of 13 bakeries, 60 bottling establishments and 220 groceries and meat markets. In addition, 346 inspections were made of slaughter-houses and 235 investigations of canning factories. This latter work required the entire time of two men, the result of whose work can be found in another part of the annual report.

Bakeries which are not kept in good sanitary condition cannot produce a bread of high quality. It was found that 37 per cent. of the bakeries visited were operated in such a manner as to make the production of good clean food impossible. These facts being brought to the attention of the Board, under authority contained in the Sanitary Act, notices were sent to those persons conducting bakeries where inspections had been made and violation of the law observed, fixing a time when such bakeries must comply with the law.

In the southern part of the State 60 inspections of bottling establishments were made. Most of the places were engaged in preparing soft drinks. Using a grading system of Good, Fair and Poor, 55 per cent. of the establishments visited came within the first classification, 33.4 per cent. were Fair, and 11.6 per cent. were considered Poor. Some of the insanitary conditions encountered in the establishments visited consisted of unclean floors, which in certain instances were not impervious to water, inadequate drainage, and unclean side walls. The utensils, bottles and materials used in the process of manufacture, were invariably clean. Twenty-five letters of notification were sent to various bottlers, calling attention to those conditions which appeared to be in violation of the provisions of the sanitary laws. For the purpose of ascertaining whether the recommendations which were incorporated in these notices had been complied with, reinspections were made, and it was learned that wherever possible the improvements suggested had been adopted. Final classification of the establishments visited showed that 96.6 per cent. of the places could be regarded as good and 4.4 per cent. as fair.

The attitude of the bottlers whose places were investigated was particularly good, and it seems to be their desire to pack their products in as clean a manner as possible.

As previously stated, 220 inspections have been made of grocery stores and meat markets. Of this number, 80 have been graded as good, 107

fair, 15 poor and 18 as bad. In reaching this conclusion, the condition of the floor, walls, utensils, ventilation, lighting, screening, exterior surroundings, cleanliness of back room of shop and cellar, protection of food, both in and outside of store, have been taken into consideration. Our investigations show that the most objectionable conditions which have been met with consist in the use, in certain instances, of the back room of store as living quarters, the display of food products in such a manner, particularly meats, that they can be handled by prospective purchasers, the exposing of crackers, dried fruit, and other readily contaminated foods in uncovered boxes on the floor of the store, the exposure of food outside of the store to contamination by dust and dirt, the maintaining of toilets in the rear of the store or in the cellar without adequate facilities to enable employees to wash the hands after visiting the same, and the failure to properly protect and ice cans from which milk is sold by dipping.

It is estimated that there are approximately 10,000 grocery stores and meat markets in the State, all of which need regular and systematic inspection. The problem should be handled by the local health authorities, who are already vested with sufficient authority to carry on such inspection work under the terms of the Sanitary Act. In a number of places this has been attempted, with considerable success.

The most desirable and effective way of securing a cleaner and more wholesome food supply, is by a campaign of public education. A great deal of good has already been accomplished by the Housewives' League throughout the State, who have demanded pure food at reasonable prices, retailed under clean conditions.

The number and kind of places visited by inspectors during the year for the purpose of collecting samples and gathering information relating to sanitary conditions were as follows: Milk wagons, 1,863; milk depots, 349; grocery stores, 2,981; drug stores, 978; meat markets, 215; cold storage warehouses, 271; butter stores, 29; vinegar factories, 3; bakeries, 34; restaurants, 100; bottling establishments, 82; barber supply establishments, 463; liquor stores, 24; egg establishments, 170; miscellaneous, 18; hotel kitchens, 5; milk cans, 100; canning factories, 235; confectionery stores, 217; produce markets, 13; creameries and dairies, 24; slaughterhouses, 346; total, 8,520.

INSPECTION OF SLAUGHTER-HOUSES. We have now, in this State, 246 slaughter-houses, a very large proportion of which are located in the rural districts. Since 1910, when the present slaughter-house act went into effect, systematic inspections have been made of all such places known to be operating, for the purpose of regulating their sanitary conditions.

When our investigations first commenced, the conditions at the majority of slaughter-houses were deplorable. We found unclean buildings, with dirty interiors and squalid surroundings. The floors of most of these buildings were of wood, not tight, and in many cases covered with blood and hair from innumerable slaughterings. It was found to be the universal practice, unless a convenient stream was available, to

permit the waste liquids to flow upon the ground in the immediate vicinity of the building. One of the commonest defects was the lack of an adequate supply of running water.

A marked change, as the result of our inspection work, has taken place, during the last four years, in the condition of those places at which animals are killed for human consumption. There are now over 200 rural slaughter-houses operating under licenses obtained from the State Board of Health. These places have tight floors, side walls which are faced to a height of at least four feet, to enable them to be readily cleaned, and practically every one is provided with a conveniently placed water supply.

It has been the practice to demand of the smaller slaughter-houses only those things which appeared to be essential in order that they could be maintained in a clean condition, and meat and meat products handled in a satisfactory manner. In the larger abattoirs, a number of which are under government inspection, much more stringent requirements must necessarily be complied with before a license can be granted.

The following shows the general conditions of slaughter-houses throughout the State:

Total number of slaughter-houses operating, 246; inspections during the year, 346; licenses issued during the year, 29; slaughter-houses operating under licenses, 237; application for licenses refused during year, 2; licenses revoked during year, 3.

Sanitary condition of slaughter-houses at the time of the last inspection was: Good condition, 132; fair condition, 76; poor condition, 26.

The above summary does not include farmers who may slaughter animals raised by themselves, nor does it show small dealers, who slaughter animals occasionally on farms where these animals are purchased.

In 1911, under authority contained in the Slaughter-house Act, a tentative set of rules was prepared and issued relating to slaughter-houses. As the work of slaughter-house inspection has progressed, the need of further rules and a revision of those already in use became apparent.

It is desired particularly to direct the attention of prospective slaughter-house operators to Rule 2, relating to the approval of the slaughter-house site by the local health authorities, within whose jurisdiction the building will be located, and to Regulation 3, pertaining to the submission of plans and specifications.

MEAT INSPECTION. It seems scarcely possible that there are persons who will deliberately sell for food the meat from a diseased animal, yet during the year it became necessary to bring three prosecutions for this offense.

Information which has been obtained by our inspector, when engaged in the investigation of slaughter-houses, indicates that there is a considerable traffic in diseased animals, which are ultimately slaughtered and sold for food. This year there were condemned 15 beef and 5 calf

carcasses, which undoubtedly would have been sold had our representative not prevented it.

A considerable amount of good has resulted in certain cities throughout the State by the enactment of ordinances requiring that carcasses shall not be permitted to be sold in the city without being examined by the meat inspector of the municipality.

COLD STORAGE. The past year has been memorable because of events which have had a marked effect upon the normal exchange of food between this country and other nations and continents. The passage of the Underwood Tariff Bill was the first event which suddenly turned the products from the Argentine Republic, Australia, China, New Zealand and the countries of Europe to this country in enormous quantities. The ships bearing these commodities landed in most cases at the port of New York. After inspection by agents of the Government at the port, large quantities of meat, butter and eggs required facilities for preservation until needed for consumption.

Meats formed by far the greater part of these shipments. Millions of pounds were unloaded upon the arrival of a ship. Such a product demanded refrigeration at temperatures below the freezing point, for successful preservation. In solving this problem the cold storage warehouse was a very important factor.

The transfer from the ship to the warehouse was made by train, and necessitated the removal of the meat from suitable refrigeration for longer or shorter periods of time. It was essential that this period be short, in order that serious loss should not take place. This required much larger forces of laborors than were ordinarily employed, with consequent demoralization of the work. These problems were handled expeditiously and with the result that enormous quantities of meat were preserved in excellent condition. The time of storage of these shipments has generally been short, two months being the maximum. Consequently, large additions have been made to the meat supply of the country and the cold storage warehousemen of this State have contributed no small part in enabling the consumer to secure a wholesome article of food.

The importation of butter and eggs has caused less difficult problems in providing adequate refrigeration, as the volumes imported were comparatively small. These foods also arrived at a time when the holdings of these articles in cold storage were very low.

A second great event which has changed the normal exchange of food between this country and other nations has been the war in Europe. During the last two months of the fiscal year, large quantities of meat were collected in warehouses about New York City, for export to nations at war. Care had to be taken of this meat until the time of shipment, and suitable wrapping had to be provided.

Another effect of the war has been the failure to complete shipments to certain of the parties at war. Large quantities of salmon in tierces

were shipped from the Pacific coast to the port of New York, for export to Germany. Much of this salmon is held in warehouses in this State, because of the failure to secure transportation to that country.

During the past year, 271 inspections have been made of cold storage warehouses in this State. These inspections have shown that care is exercised by the warehousemen in placing the dates of entrances upon articles of food intended for cold storage. The removal of articles of food before the expiration of the period of ten months has also been attended to by the warehousemen. Notices are sent to the owners at least fifteen days before the ten months has elapsed, to the effect that the goods must be removed before the expiration of the ten months. It has become the practice of the warehousemen to deliver the articles upon failure of the owners to remove them.

As was pointed out in the article on cold storage in the annual report of the Board of Health of the State of New Jersey for 1911, one of the greatest difficulties of the Cold Storage Act has been the provision requiring goods which have been in cold storage outside the State to bear the date of original storage, unless a permanent consent is granted for the storage of such articles, in case the original date of storage cannot be learned. This provision is unenforceable. It is impossible to prove that articles have been in cold storage, and consequently, it is impossible to compel the owners to place the date of entry into storage upon them. During the past summer carloads of turkeys in a frozen condition were received at warehouses of this State for storage. In many cases the original date of storage could not be determined, because of the fact that several changes in ownership of the goods had taken place since the original date of storage. In the majority of cases the condition of the foods have been such that permanent consent to store them has been granted. In such instances the purpose of the Cold Storage Act is defeated, in that the total time in storage for these articles may be far in excess of a year.

In an opinion given by the Attorney General at the request of the State Board of Health, it was ruled that articles could be stored ten months in this State, regardless of time stored in other States, provided that further storage would not impair their purity, quality or wholesomeness. This was not generally known during the first two years, or economic conditions were such as to render it impracticable for owners to take advantage of their ability to transfer foods from storage warehouses in one state to storage warehouses in other states without hindrance.

Numerous specific instances showing the dates of storage in other states and also the dates of removal from storage, prove that foods are frequently stored for the entire period in the place of original storage and then restored in warehouses in this State until it is desired to remove them. This practice was first tried on a large scale in the spring of 1914, when the price of butter dropped below the original cost. In such

an emergency it was the desire of the owners to hold butter until a more satisfactory price could be obtained. This brought about the transfer of large quantities of butter from warehouses in Pennsylvania to warehouses in this State. This butter was examined and was found to be in a suitable condition for further storage. However, the only article which has been transferred with frequency, is poultry. Carload lots have been stored in Buffalo for ten months and have been transferred to warehouses in Jersey City. Many instances of similar transfers have been noted.

On June 5, 1914, 33 cans of liquid egg material in a frozen condition were found in the warehouse of a refrigerating company at Newark, N. J. These cans were sampled and a part of the contents taken to the laboratory for analysis. The results of this examination showed that the material was filthy, decomposed and putrid. Twenty additional cans were stored on June 5, 1914. These cans were also sampled and the results of the examination showed that this material was unfit for food purposes. On June 15, 1914, 1,475 pounds of this material, comprising the entire 53 cans, were condemned and denatured by the application of carbolic acid. The superintendent of the warehouse stated that this egg material had been stored by a man who gave his name as S. Goldberg, 31 River Street, Newark, N. J. The superintendent also stated that 36 of the cans had been transferred by this man to the account of a large baking company of Newark, although no representative of the baking company had seen the eggs. The proprietor of the bakery denied having purchased or having had any dealings with such a man. Later, the owners of the property at 31 River Street, Newark, informed our representative that the property had never been rented by S. Goldberg. With this exception, only small quantities of food have been found in warehouses of this State in an unwholesome condition. One small lot of eggs in the shell and another small lot of poultry were found in warehouses, and were condemned and destroyed.

The following summaries show the amounts of foods held in warehouses of this State, as submitted by warehousemen, in accordance with law, during the years of 1913 and 1914.

COMPARISON OF QUARTERLY REPORTS OF GOODS HELD IN COLD STORAGE DURING THE YEARS 1913 AND 1914.

ARTICLE.	Jan. 1, 1913.	Jan. 1, 1914.	April 1, 1913.	April 1, 1914.
Eggs, doz.	7,296,480	2,869,740	61,710	67,830
Eggs, broken lbs.	108,289	53,500	23,510	6,750
Butter, lbs.	1,074,106	2,254,873	172,491	527,930
Cheese, lbs.	225,072	117,540	44,264	92,311
Poultry, lbs.	4,357,507	6,993,766	4,025,759	6,348,532
Meats, fresh, lbs.	1,970,773	3,704,873	2,523,361	6,766,688
Meats, salt, lbs.	9,295	96,070	195,386	158,443
Fish, fresh, lbs.	1,484,317	1,573,943	203,525	65,775
Fish, smoked, lbs.	.....	506,400	13,200	304,060
Fruits, dried lbs.	40,050	55,230	12,845	.....
Nuts, lbs.	.....	1,545	15,290	1,465
Fruits, green, pkg.	341,997	189,013	67,592	90,261
Vegetables, green, lbs.	3,891	7,043	5,046	3,055
Miscellaneous, pkg.	2,871	4,144	2,875	3,112

COMPARISON OF QUARTERLY REPORTS OF GOODS HELD IN COLD STORAGE DURING THE YEARS 1913 AND 1914—(continued.)

ARTICLE.	July 1, 1913.	July 1, 1914.	Oct. 1, 1913.	Oct 1, 1914.
Eggs, doz.	16,610,340	18,596,070	13,519,440	16,113,090
Eggs, broken lbs.	95,020	92,960	155,132	77,075
Butter, lbs.	3,991,808	4,491,929	6,044,799	6,153,428
Cheese, lbs.	158,699	327,439	242,052	538,736
Poultry, lbs.	2,017,239	3,194,275	1,885,968	2,340,902
Meats, fresh, lbs.	2,910,522	4,498,386	1,471,750	2,091,743
Meats, salt, lbs.	107,824	158,370	223,653	37,567
Fish, fresh, lbs.	704,618	1,533,383	1,141,745	2,000,991
Fish, smoked, lbs.	194,550	328,621	437,700	305,690
Fruits, dried, lbs.	413,499	170,482	245,311	55,443
Nuts, lbs.	69,899	5,935	30,916	5,380
Fruits, green, pkg.	2,422	3,441	52,407	158,173
Vegetables, green, pkg.	1,102	477	6,676	1,412
Miscellaneous, pkg.	6,436	4,027	3,467	17,177

EGGS. The present methods employed in the transportation and preservation of perishable food enable large quantities of eggs to be collected from large areas in seasons of plenty, and transported to centers where they are held until seasons of scarcity. In the transfer of such enormous quantity of food of such a fragile nature as eggs over hundreds of miles, damage frequently results. Usually, this damage is caused by the breaking of the shells of the eggs. These eggs may have been shipped for storage in cold storage warehouses, or for immediate sale.

In order to hold eggs successfully in cold storage for several months, all leaking eggs, and the pasteboard fillers, which are wet must be removed. The leaking eggs may be sweet and of good quality, although it is impossible to place them upon the market because of the condition of the shell. It has been the practice in the past to remove these eggs from the shell immediately, and to strain the material through a coarse sieve into an open twenty or thirty-pound can. The rooms in which this work was carried on, were poorly lighted, badly ventilated, and without a conveniently placed source of water supply to enable utensils to be properly cleansed, or to permit those persons employed to wash their hands. Consequently, the eggs were broken under insanitary conditions, with no adequate precautions to prevent dust, particles of foreign material, or unsound eggs from gaining entrance to the liquid material.

At the large wholesale houses eggs are graded by candling before they are placed upon the market for sale. The eggs which are broken, or which are decomposed, are removed from the sound ones. It has been the practice in many of these establishments to break the badly leaking eggs in the candling room, into an open can. These candling rooms are poorly lighted from necessity. The same inadequate equipment for handling such a product as liquid eggs was the rule in these establishments, as in the cold storage warehouses. Here again, the leaking eggs were broken without adequate precautions to prevent dust particles of foreign material, or unsound eggs from gaining entrance to the liquid

material. At one large candling establishment the liquid egg material was sold daily to a dealer in liquid and frozen eggs, subject to his inspection. A record of the amount accepted and the amount rejected by this dealer showed a large proportion of the eggs to have been rejected. Upon repeated inspections of the liquid egg material at the candling room by representatives of this Department, dirt was noticed in a large proportion of the cans.

In case the leaking eggs were not broken out into cans at the cold storage warehouses, or the wholesale egg houses it was the practice to place them in cans, still in the shell. These eggs were sold to small dealers, who made a business of breaking them out for use by bakers. These places, in which the eggs were broken out, were generally in small quarters, with no accommodations for such work. Furthermore, the proprietors of these establishments generally conducted the business at night, and without giving any address to anyone. It was, therefore, very difficult to locate the place of business, and as soon as this was accomplished by an inspector, the establishment would be vacated.

Another method of evading the food and drug inspector was to pretend to do a business in breaking out eggs for food purposes, and also for manufacturing purposes. Whenever "rots and spots" were found in such an establishment the inspector was powerless, as he would be informed that they were for manufacturing purposes only. There was no control at all over establishments that broke eggs for manufacturing purposes, other than local ordinances governing nuisances. It seemed best, therefore, to require all places where eggs were broken out, to secure a license and to provide a penalty for operating without a license.

At the last session of the Legislature there was passed, "An act to regulate the sale, handling and distribution of eggs, and egg products." This Act took effect in April, 1914. In accordance with the provisions of Section 2 of this Act, the Board adopted regulations for the government of egg-breaking establishments. These rules will be found in the report of the Board.

Since the above mentioned law went into effect nine applications have been received for licenses to conduct an establishment for breaking eggs for food purposes. Eight of these places have been granted licenses; one has discontinued business, and it became necessary in one other instance to revoke the license.

Five applications have been received for licenses to conduct an establishment for breaking eggs for manufacturing purposes only. Before such licenses are granted the applicants have been required to secure the approval of the location of the building from the local board of health. Only one license has been granted. Three have discontinued business, and a fourth is operating without a license although this license probably will be granted.

CANNING FACTORIES. The canning industry of the State was described in some detail in the report of the State Board of Health for

1913. Attention was directed to certain insanitary conditions that had formerly existed in many of the canning factories, but which, by the united efforts of the State Board and the Canners, have been for the most part corrected. It is doubtful if any one unfamiliar with the conditions which existed four years ago could realize the improvements which have been made.

This season, owing to unfavorable weather conditions, there has been a short pack. It is estimated that fully 40 per cent. less was packed than in 1913. The quality of the tomatoes has suffered proportionately, making it difficult for any grade of tomatoes to be canned except standards.

During the present year 235 inspections of the canning factories have been made. As a result of these inspections it has been learned that there are still certain problems which need further attention by the canner, and some study on the part of ourselves. The time has now come when some method must be devised to satisfactorily handle those wastes resulting from the canning of tomatoes, that they may not become a nuisance, or if they be emptied into streams, be objectionable because of their effect upon fish life. It may be possible that if the solid materials be carefully removed, the liquid waste could be permitted to flow into tidal streams, along the banks of which many of the factories are located. The question of dilution would, under these circumstances, be a very important factor. When no stream is available, as at inland factories, a different system must be adopted. To properly solve the problem will require considerable further investigation.

It is essential, if tomatoes are to be properly packed, that the factory be provided with a good washer. A large variety of washers are now in use in various canning establishments in this State, but the perfect washer, suitable to all soils, has not yet made its appearance. The most objectionable is the tank washer, which is supposed to be emptied at frequent intervals and filled with fresh, clean water. This procedure entails work and some delay and is, therefore, often neglected, which results in the tomatoes being improperly washed in very dirty water. Any washer, whether used with paddles, by the introduction of an air jet, or by any other method to impart movement to the tomatoes while being washed, that does not have a supply of fresh water entering it at all times when in use, is inefficient.

An ideal washer would be one having a sufficient supply of clean water flowing into the tank at all times, and an outlet near the bottom through which the dirty water would automatically be removed. A false bottom of wire netting or perforated boards would serve to catch a very large proportion of dirt and sand which settles during the process of washing, and would permit the accumulated dirt to be readily removed without interfering materially with the washer.

As tending to show the progressiveness of the canner, it may be stated that in two of the factories packing tomatoes and one ketchup estab-

lishment, three steam cookers were in use. These steam cookers are in an experimental stage as yet, but if all that is claimed for them, in a saving of time and steam is true, they will be in general use before many years elapse. Under ordinary circumstances, from 30 to 35 minutes is required to process a No. 3 can of tomatoes by the methods generally used. This same work is accomplished by the steam cooker above mentioned in less than half the time with a saving of considerable steam.

BACTERIOLOGICAL EXAMINATION OF TOMATO PRODUCTS.

OWNER.	LOCATION.	Product Examined.	Sample Number.	Yeasts and spores per one sixtieth cubic centimeter	Average per cent. fields showing molds.	Bacteria per cubic centimeter
Alart & McGuire	Williamstown	Catsup	L 3336	4	6	
Alloway Packing Co.	Alloway	Paste.	L 3383	6	4	
Ayars, C. B. Can. Co.	Bridgeton	Pulp.	A 1255	4	4	16,800,000
Baker, Walter.	Millville	Pulp.	L 3386	6	8	16,000,000
Baker, Walter.	Bridgeton	Pulp.	A 1252	6	12	26,400,000
Biondi, Gabriel	Cliffwood	Sauce	L 3331	15	6	26,400,000
Bucklin, C. S.	Phalanx	Pulp.	L 3377	5	6	26,400,000
Chance's, R. C. Sons.	Mt. Holly.	Catsup.	L 3341	2	4	38,400,000
Crine Seed & Pack. Co.	Morganville.	Catsup.	L 3332	4	4	19,200,000
Diament, J. E. Co.	Cedarville.	Pulp.	A 1254	4	4	21,600,000
Fairdale Canning Co.	Bridgeton	Pulp.	A 1253	5	6	21,600,000
Fogg & Hires.	Salem.	Pulp.	L 3382	14	5	20,400,000
Fogg & Hires.	Salem.	Pulp.	L 3385	6	6	24,000,000
Franco-Amer. Food Co.	Jersey City.	Pulp.	L 3380	4	4	33,600,000
Heinz, H. J. Co.	Salem.	Pulp.	L 4004	4	4	16,800,000
Heinz, H. J. Co.	Salem.	Catsup.	L 4005	2	2	19,200,000
Heinz, H. J. Co.	Salem.	Chili.	L 4006	2	2	18,000,000
Hurff, Edgar F.	Swedesboro.	Pulp.	L 3309	2	2	16,800,000
Kelty, Samuel & Sons.	Quinton.	Pulp.	L 3387	8	10	21,600,000
Kelty, Samuel & Sons.	Quinton.	Paste.	L 3384	5	5	14,400,000
Leonard, Keough & Co.	Iona	Pulp.	L 3335	4	6	24,000,000
McMechen Preserv. Co.	New Egypt	Pulp.	L 4007	6	4	14,400,000
Morris Canning Co.	Allentown.	Pulp.	L 3122	4	10	26,400,000
Morris Canning Co.	Lambertville.	Pulp.	L 3123	4	8	16,800,000
Pritchard, E.	Winslow Junction.	Pulp.	L 3381	4	4	17,000,000
Pritchard, E.	Bridgeton	Pulp.	L 4001	4	4	21,600,000
Pritchard, E.	Bridgeton	Pulp.	L 4002	2	2	19,200,000
Pritchard, E.	Bridgeton	Catsup.	L 4003	4	2	21,600,000
Raab, Charles.	Williamstown	Paste.	Av. of 10	6	18	20,220,000
Reeves, Ebner.	Bridgeton	Pulp.	A 1251	4	4	21,600,000
Rio Grande Pack. Co.	Rio Grande.	Catsup.	L 3338	7	6	27,600,000
Rio Grande Pack Co.	Rio Grande.	Catsup.	L 3339	4	6	26,400,000
Salem Canning Co.	Quinton.	Pulp.	L 3388	8	10	24,000,000
Salem Supply Co.	South Dennis.	Pulp.	L 3451	2	8	15,120,000
Veechi, Luigi, Inc.	Hazlet.	Paste.	L 3333	8	10	33,600,000
Veechi, Luigi, Inc.	Hazlet.	Paste.	L 3756	12	10	36,400,000
Veechi, Luigi, Inc.	Hazlet.	D. Pulp.	L 3379	17	10	60,000,000
Veechi, Luigi, Inc.	Hazlet.	Paste.	L 3334	100	15	36,000,000
Vesuvian Preserv. Co.	Vineland.	Pulp.	L 3452	4	6	24,000,000

In the accompanying table is shown the results of examination of such samples of tomato pulp as were collected during the canning season. In a great many instances the pulp was manufactured from skins and cores. As has frequently been stated, there can be no objection to the utilization of skins and cores in pulp making, provided they are obtained from

whole, sound tomatoes. This implies, of course, that tomatoes must be properly sorted before passing to the washer, in order that all unsound stock may be removed. Inspections made during the year tend to show that at certain factories, where pulp was manufactured, an adequate system for sorting tomatoes was not in use. In one instance it became necessary for the Board to order the manufacturer to discontinue the making of tomato pulp until proper apparatus had been installed in his factory, to insure the production of a cleanly product.

For the purpose of showing the total percentage of solid content of various tomato pulps made in the State, the following list has been prepared:

Sample No. A-1251, 8.21; A-1252, 5.24; A-1253, 4.23; A-1254, 5.38; A-1255, 5.73; L-3123, 9.17; L-3309, 8.95; L-3377, 6.96; L-3381, 9.02; L-3382, 9.86; L-3387, 3.79; L-3388, 5.62; L-3451, 5.54; L-3452, 8.00; L-4001, 6.04; L-4002, 9.95; L-4004, 6.16.

It can be seen from the above list that there is considerable variation of the total solids. In fact, conditions are now such that any liquid consisting of the juice of the tomatoes, if partially concentrated, is called and labeled pulp, regardless of the solids it contains. For the purpose of securing uniformity, it would seem desirable that a standard be adopted, based on the total solid content, and requiring, further, that all persons engaged in the manufacture of tomato pulp prepare their product so as to comply with the same standard.

Our investigations this year, show more conclusively than ever that the labels on canned goods should be marked to show by whom the product was packed. It is now the custom of the jobber or distributer to furnish the label he desires used on the product purchased. As a rule the label is marked "Packed for" or "Distributed by," followed by the name of the person who distributes it. This method is unjust to the New Jersey product, which is a good solid pack, and of advantage to the pack of certain other localities where liquid is added. Opportunity would also be afforded the purchasing public to make a more satisfactory selection if definite information were contained on the label showing where the product was canned.

The results of our inspections indicate that it is the desire on the part of those persons engaged in the canning business in this State, to prepare their products under clean conditions, and there is every reason to suppose that the quality of the goods packed in the future will be better than in the past.

FOOD AND DRUGS: During the year 6,180 samples of food and drugs were examined in the Laboratory, of which 16.3% were found to be below the legal standard.

The following shows the number and kinds of samples examined and those above and below standard:

Milk and cream, above 2,812, below 205; foods other than milk and cream, above 1,287, below 184; drugs, above 1,075, below 617; totals, above 5,174, below 1,006.

DETAILED STATEMENT REGARDING THE FOODS EXAMINED DURING THE YEAR OTHER THAN MILK OR CREAM.

Allspice, above, 35; apple sauce, above, 1; asparagus, canned, above, 1; baking powder, above, 5; beans, canned, above, 1; beverages, above, 13; below, 18; bologna, above, 1; butter, above, 387; below, 42; cabbage, pickled, above, 1; cake, above, 1; cake filler, above, 2; candy, above, 3; cheese, above, 10; cherries, canned, above, 2; chicory, above, 1; chocolate paste, above, 1; cider, above, 3; cinnamon, above, 31; clam juice, above, 1; clams, canned, above, 2; cloves, above, 25; coffee, above, 7; condensed milk, above, 1; corn meal, above, 3; cracker meal, above, 1; eggs, below, 6; egg, color, above, 1; fish, canned, above, 27; below, 4; fish, fresh, above, 2; fish, smoked, above, 2; flour, buckwheat, above, 2; flour, diabetic, above, 2; flour, potato, above, 1; flour, rye, above, 1; flour, wheat, above, 1; fruits, dried, above, 14; below, 2; gelatine, above, 3; ginger extract, above, 8; below, 11; ginger, ground, above, 50; hamburg steak, above, 3; ice cream, above, 2; jam, above, 14; jellies, above, 18; lard, above, 3; below, 15; lemon extract, above, 22; below, 9; mace, above, 9; below, 1; maple flavor, above, 1; maple syrup, above, 12; below, 1; mustard, ground, above, 26; nutmegs, above, 3; oleomargarine, above, 9; olive oil, above, 113; below, 4; orange juice, below, 1; pears, canned, above, 2; pepper, black, above, 53; pepper, red, above, 6; pepper, white, above, 24; pine-apple juice, above, 1; raspberry, syrup, above, 2; rennet, liquid, above, 1; salad oil, above, 4; sausage, above, 18; below, 3; sauce, bordeau, 1; sauce, Worcestershire, above, 1; sauce, Rector's, above, 1; squash, canned, above, 2; strawberries, canned, above, 1; sugar coloring above, 1; tomatoes, canned, above, 86; tomatoes, carciofi, above, 1; tomatoes, catsup, above, 8; tomatoes, paste, above, 4; below, 3; tomatoes, pulp, above, 40; below, 5; tomatoes, sauce, above, 1; below, 1; tomatoes, dried, below, 1; vanilla substitute, above, 5; vanilla extract, above, 22; vinegar, above, 2; below, 1; vinegar, cider, above, 86; below, 36; vinegar, distilled, above, 3; below, 7; vinegar, molasses, above, 1; vinegar, red wine, above, 3; vinegar, syrup, above, 1; below, 3; vinegar, white, above, 7; below, 9; vinegar, wine, below, 1; wine, above, 11; total, above, 1,287; below, 184.

STATEMENT SHOWING THE NUMBER AND KIND OF DRUGS EXAMINED DURING THE YEAR.

Alcohol, above, 9; below, 1; antiseptic preparations, above, 2; aqua hamamelidis, above, 285; below, 61; aqua hydrogenii dioxidi, above, 34; below, 44; Argenti nitras fusus, above, 1; asprin tablets, above, 9; below, 9; blood purifier, above, 1; calix chlorinata, above, 5; below, 28; cancer cure, above, 1; castoria, below, 1; cough remedies, above, 6; below, 9; diarrhoea remedy, above, 1; face lotion, above, 1; foam producer, above, 4; ginger and capsicum, above, 1; hair dressing, above, 6; below, 4; hair tonic, above, 40; below, 11; headache remedies, above, 67; below, 91; heal skin, below, 1; health beverages, above, 6; insect exterminator, below, 10; kidney remedy, above, 2; linimenti, above, 13; below, 18; linimentum camphoræ, above, 54; below, 27; liquor calcis, above, 189; below, 66; liquor magnesii citratis, above, 2; liquor potasii arsenitis, above, 3; below, 3; mentha pepsinum, above, 1; oleum andropogon nardi, below, 1; oleum morrhuæ, above, 1; oleum olivæ, above, 5; oleum ricini, above, 4; potasii bitartras, above, 5; rheumatic remedies, above, 1; below, 1; salol tablets, above, 4; scalp lotion, above, 1; shampoo, above, 1; soap, above,

3; sodii boras, above, 1; sore throat remedy, above, 2; spiritus aetheris nitrosi, above, 1; spiritus camphoræ, above, 132; below, 95; spiritus menthæ piperitæ, above, 3; below, 5; spiritus myrciæ, above, 53; below, 14; stomach remedy, above, 1; below, 1; syrupus eucalyptus, above, 1; syrupus sasparilla compisitus, above, 6; below, 9; tinctura iodii, above, 42; below, 70; tinctura opii, above, 2; below, 3; tinctura opii camphorata, above, 2; below, 1; tinctura zingiberis, above, 35; below, 17; toilet creams, above, 1; below, 1; toilet waters, above, 28; below, 22; tonics, below, 2; toothache drops, above, 1; tooth wash, above, 1; total above standard, 1,080; below standard, 626.

MILK: During the past few years many municipalities have been engaged in making a study of their milk supply, for the purpose of securing to the consumers a clean and wholesome milk. Most of the work has been done in the large cities, which were in a position financially to support a system of milk inspection. It was thought desirable, in our investigation, to select a small city where no comprehensive system of milk inspection existed, in order that the information obtained could be used by such municipality toward securing a better milk if they so desired. A further purpose of the study was to secure data concerning the handling, distribution, production and quality of milk produced within short distances of the city where it is sold. Bordentown and Burlington, being very accessible to the laboratory, making it possible for all milk samples taken to be examined at least four hours after collection, a study of the milk situation in these cities was begun. The results of these investigations can be found in detail in the report of the Bureau of Creameries and Dairies.

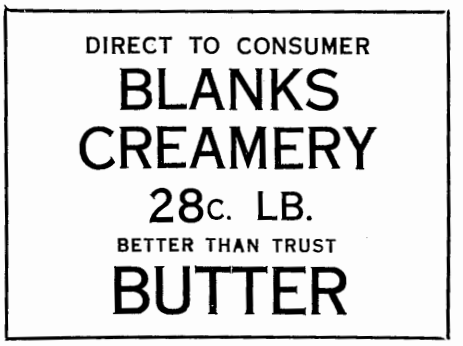
Last year 3,017 samples of milk and cream were examined, of which 205 were found to vary from the legal standard. These may be divided into the following classes:

Milk below standard with respect to solids, 143; milk containing added water, 54; milk below standard with respect to fat, 3; milk containing formaldehyde, 1; cream below standard with respect to fat, 3; cream containing artificial coloring, 1; total, 205.

BUTTER AND OLEOMARGARINE: The law regulating the sale of oleomargarine at retail requires that every person selling the same shall at the time of sale inform the purchaser that the substance is not butter, and shall also stamp in a conspicuous place on the outside of the outer wrapper the word "Oleomargarine." It would seem that these requirements would be ample to protect the purchaser, and for a number of years after the passage of the law the requirements above mentioned were found to be adequate to prevent the fraudulent sale of oleomargarine, provided a sufficient number of men were available to enforce the law. As time has progressed, however, the vendors of oleomargarine, and in certain instances the manufacturers, probably advised by able counsel, have devised ways and means of evading the law and at the same time misleading the average purchaser into the belief that he is securing butter. This is accomplished by misleading advertisements in the newspapers and public places, so that the purchaser is practically

led up to the place of business fully convinced that he will be able to obtain a high grade butter at a medium price.

As illustrative of the character of advertising above mentioned, the following was abstracted from a prominent daily newspaper:



Oleomargarine is a good and wholesome food product and is to be regretted that certain manufacturers will not depend for its sale upon its true merits.

The places visited by inspectors and number of visits in each place: Absecon, 1; Aldine, 3; Allentown, 6; Alliance, 2; Alloway, 5; Alloway Junction, 1; Anderson, 1; Andover, 2; Anglesea, 4; Annandale, 2; Arlington, 2; Asbury, 1; Asbury Park, 8; Atlantic City, 41; Atlantic Highlands, 2; Audubon, 1; Bay Head, 1; Bayonne, 9; Belle Meade, 2; Belmar,, 1; Belvidere, 1; Berlin, 1; Bernardsville, 2; Beverly, 3; Birmingham, 1; Bivalve, 6; Blairstown, 1; Bloomfield, 4; Bloomsbury, 4; Boonton, 11 Bordentown, 25; Bowne, 1; Branchville, 1; Bridgeport, 1; Bridgeton, 35; Burlington, 27; Caldwell, 3; Califon, 1; Camden, 102; Canton, 2; Cape May, 4; Carmel, 1; Cedarville, 6; Chatham, 2; Chester, 2; Clayton, 1; Cliffwood, 4; Chrome, 1; Clinton, 1; Clover Hill, 2; Collingswood, 3; Columbia, 1; Columbus, 5; Cookstown, 1; Cranbury, 5; Crosswicks, 1; Deerfield, 3; Delanco, 2; Denville, 1; Dover, 18; Dumont, 1; East Orange, 1; East Rutherford, 1; Eatontown, 1; Eggert's Crossing, 1; Egg Harbor, 5; El Dora, 1; Elizabeth, 24; Elizabethport, 4; Elmer, 6; Englishtown, 1; Erma, 1; Everettstown, 1; Ewan, 1; Ewanville, 1; Fairfield, 1; Fair Haven, 1; Fairlawn, 1; Fairton, 9; Fairview, 1; Farmingdale, 1; Flanders, 1; Flagtown, 3; Flemington, 9; Folsom, 2; Franklin, 4; Franklin Borough, 1; Franklin Park, 1; Freehold, 9; Frenchtown, 3; Garfield, 3; German Valley, 4; Glassboro, 9; Glenridge, 2; Glenwood, 1; Gloucester, 4; Goshen, 2; Great Meadows, 1; Green Village, 3; Greenwich, 3; Grenloch, 1; Guttenberg, 3; Hackensack, 18; Hackettstown, 1; Haddonfield, 4; Haddon Heights, 1; Hainesburg, 1; Hamburg, 1; Hampton, 2; Hammonton, 5; Hancocks Bridge, 2; Harmersville, 3; Harrison, 13; Harrisonville, 3; Hazlet, 8; Hightstown, 1; Hilton, 1; Hoboken, 42; Holly Beach, 3; Hope, 2; Hopewell, 6; Houses, 2; Iona, 3; Irvington, 12; Jamesburg, 1; Jersey City, 141; Jobstown, 1; Jutland, 1; Kearny, 3; Keyport, 4; Kirkwood, 2; Lafayette, 2; Lakehurst, 1; Lakewood, 2; Lambertville, 5; Landisville, 4; Lebanon, 4; Leesburg, 4; Lewistown, 2; Lincoln, 1; Lindenwold, 1; Linden, 1; Little Falls, 1; Little Ferry, 1; Lodi, 2; Logan Township, 1;

Long Branch, 4; Lyncroft, 2; Lyndhurst, 1; Lyons Farms, 2; Madison, 7; Manasquan, 14; Maplewood, 3; Markboro, 1; Marlton, 3; Martinsville, 3; Matawan, 6; Maurice River, 1; Mauricetown, 1; Mays Landing, 1; McAfee, 3; Medford, 3; Mendham, 3; Merchantville, 2; Middleville, 2; Milford, 2; Millburn, 7; Milltown, 1; Millville, 12; Monmouth Beach, 5; Monmouth Junction, 1; Monroeville, 4; Montclair, 8; Moorestown, 1; Morgan, 1; Morganville, 3; Morris Plains, 10; Morristown, 28; Mount Holly, 8; Mullica Hill, 1; National Park, 1; Neshanic Station, 2; Newark, 166; New Brunswick, 20; New Egypt, 5; Newfield, 1; Newport, 3; Newton, 5; New Village, 1; Norma, 7; North Bergen, 1; Ocean City, 3; Oceanport, 2; Orange, 4; Oxford Furnace, 2; Palmyra, 3; Passaic, 15; Paterson, 21; Pattenburg, 1; Paulsboro, 1; Peapack, 2; Pedricktown, 8; Pemberton, 5; Pennington, 6; Pennsgrove, 1; Pennsville, 5; Pensauken, 1; Perth Amboy, 7; Phalanx, 2; Phillipsburg, 8; Pine Brook, 1; Pitman, 4; Pittstown, 1; Plainfield, 12; Pleasantville, 2; Point Pleasant, 1; Princeton, 3; Prospect Plains, 3; Quinton, 5; Rahway, 2; Red Bank, 7; Ridgefield Park, 4; Ringoes, 1; Rio Grande, 4; River Edge, 1; Riverside, 6; Riverton, 5; Rockaway, 3; Roebling, 2; Roselle, 2; Roselle Park, 5; Rosenhayn, 1; Rutherford, 2; Salem, 24; Sayreville, 1; Sea Bright, 1; Seacaucus, 1; Sea Girt, 2; Sergeantsville, 1; Seaside Park, 1; Sewell, 2; Sharptown, 3; Shiloh, 1; Shrewsbury, 1; Somers Point, 1; Somerville, 6; South Amboy, 2; South Dennis, 2; South Orange, 5; South Vineland, 1; Spottswood, 1; Springfield, 1; Spring Lake, 1; Stillwater, 1; Stirling, 1; Stockton, 1; Stratford, 1; Summit, 13; Sussex, 1; Swedesboro, 7; Tenafly, 1; Three Bridges, 7; Tinton Falls, 1; Toms River, 1; Totowa, 1; Tranquility, 1; Trenton, 210 Troy Hill, 1; Tuckahoe, 3; Tuckerton, 4; Union Hill, 12; Vienna, 1; Vincentown, 1; Vineland, 16; Warrensville, 2; Washington, 5; Watchung, 1; Wenonah, 1; West Collingswood, 1; Westfield, 1; West Hoboken, 18; West New York, 3; West Portal, 1; West Summit, 2; Westville, 1; Westwood, 1; Wharton, 1; Whippany, 1; White Horse, 1; White House, 6; Wildwood, 4; Williamstown, 7; Windsor, 1; Winslow Junction, 5; Woodbine, 1; Woodbury, 10; Woodruff Gap, 1; Woodstown, 14; Wrightstown, 2; Yorktown, 4.

TOILET PREPARATIONS: The continuance of the investigation into the production and sale of toilet preparations, begun in 1912, has this year been marked by the helpful cooperation which the barbers' supply houses have given to the Division of Food and Drugs, in its effort to bring about the abandonment of the use of wood alcohol in the compounding of hair tonics, bay rum and similar lotions. Improved conditions have everywhere been found.

Early in the year circulars issued by the State Board of Health were distributed to the barbers and druggists throughout the State. These circulars, printed in English and Italian, set forth in plain language the penalty which would be incurred by anyone offering for sale any preparation containing methyl or wood alcohol. Copies of this circular were forwarded to the various barbers' trade journals and were reproduced in these publications.

Inspections of all the manufactories of toilet lotions known to this Division have been made, and a large number of barber shops have been visited. In many instances no samples were collected on these visits, as inspection alone disclosed the fact that wood alcohol was not entering into the composition of the lotions produced. However, about

200 samples of bay rum, hair tonic and toilet water were collected and analyzed in the Laboratory of Hygiene. Fifty of these samples were found to contain wood alcohol. The majority of these fifty adulterated preparations were vended by 5-and-10-cent stores as perfumes. The percentage of bay rums and hair tonics containing wood alcohol was surprisingly low in comparison with similar percentages of preceding years.

The large barbers' supply houses of New York City and Philadelphia have for the most part discontinued the use of wood alcohol in the compounds sold by them in this State. These firms are now labeling their goods as "Guaranteed to comply with the Health Laws of New Jersey." Wherever shipments into the State of preparations containing wood alcohol have been detected, the matter has been called to the attention of the United States Department of Agriculture.

There are, no doubt, not a few barbers and druggists who are still using wood alcohol in compounding toilet lotions, which they dispense to their immediate customers. Systematic inspection is being carried on in an effort to locate these violaters of the law. There has, however, been extraordinary improvements within the last year.

HEADACHE REMEDIES: The pharmaceutical dispensing profession is hedged about by a multitude of laws, necessary to protect society from the operations of its unscrupulous members. Druggists, as a rule, are familiar with the so-called "pharmacy laws" governing the conduct of their business, but few are conversant with the "Food and Drugs Act." One section of the Act with which the Board of Health has particularly concerned itself this year, provides that any package of drugs shall be deemed to be misbranded if it "fail to bear a statement on the label of the quantity or proportion of any ..... acetanilid, acetphenetidine, phenacetin or antipyrin, or any derivative of such substances, contained therein."

Inspectors of this Board visited about 160 drug stores throughout the State and in each request was made for "a dozen headache tablets" or "a dozen migraine tablets." In three instances the inspectors were supplied with pills containing neither acetanilid, phenacetin nor antipyrin. In about one hundred stores they were handed boxes of pills containing one of the proscribed drugs, but bearing no statement, whatsoever, as to its presence in the compound. Of the remaining pharmacists who sold properly labeled goods, only about a dozen dispensed the pills in their own boxes, the rest supplying the purchaser with tablets in original packages as they had been put up by the manufacturer or wholesale dealer.

Analysis showed that the pills sold as "headache tablets" differed widely in composition. Nearly all contained acetanilid, but in amounts varying from one grain to six and one-half grains. "Migraine tablets" were found subject to the same variation in composition as "headache tablets," although the majority corresponded closely to the formula known

as Migraine No. 1, each tablet containing about two grains of acetanilid, compounded with monobromated camphor and citrated caffeine.

The results of this investigation disclose how widely the provisions of the Food and Drug Act are violated by druggists, though such violation is, in general, not wilful, but due to carelessness and ignorance of the law. The pharmacists of the State are earnestly urged to familiarize themselves with Chapter 217, Laws of 1907 (Food and Drug Act), and in order that they may do so this Division will gladly supply them with copies of the statute and assist them in any other way within its power.

WATER ANALYSIS: The analysis of water and sewage has been conducted in general accord with the plan adopted early in 1913, and outlined in the report of that year, with a few changes to increase the accuracy of results and the efficiency of the service rendered.

The laboratory analyzed 2,545 samples during the fiscal year, from public, private, and State Institution water supplies; bottled waters, ice samples, sewage, trade wastes, and miscellaneous substances used in water treatment, such as bleaching powder, aluminum sulphate and sand.

Public water supplies were examined four times yearly, as required by law. Private supplies were analyzed at the request of local boards of health, which had reason to believe that the water from such sources might be polluted, and who agreed to prevent the use of the water if it were found unfit for potable purposes. Many water and ice samples were examined to insure safe supplies of drinking water on railroads operating in this State.

Sewages, trade wastes, miscellaneous samples, and about five hundred of the public water samples were analyzed for the Division of Water and Sewerage Inspection and the Division of Engineering of this Board, to supply data as to the working of the various plants for the purification of water and sewerage in the State.

The work of the laboratory in this field from November 1, 1913, to October 3, 1914, is shown by the following: Public water supplies, 1,467; special public water supplies, 94; proposed public water supplies, 59; State Institution water supplies, 89; private water supplies, 352; bottled waters, 44; dairy water supplies, 7; miscellaneous waters, 1; ice samples, 15; trade wastes, 11; sewage samples, 367; miscellaneous samples, 39; total number of samples, 2,545.

The daily examination of the raw and filtered water of the Trenton Supply, for bacterial count, turbidity, hardness and alkalinity, explained fully in the 1913 report, was continued during the first part of 1914 until the pressure of other work prevented the daily collection of complete data. The results were in accord with those previously obtained, the bacterial reduction being excellent, with practically no change in the water chemically.

A change in procedure was made, consisting of a reduction in the number of chemical determinations, with increased emphasis on the bacterial results, of certain long established public water supplies of known

purity. This demanded different analytical methods, increasing the bacterial examinations and making use of Endo's medium as a confirmatory test for B. coli. It has been customary to make a rather complete chemical analysis and the presumptive test for B. coli on all samples from public water supplies received at the Laboratory. Many of these waters were from deep wells, practically free from any chance of pollution, and analyses covering several years showed scarcely any change in their chemical composition. B coli were usually absent. The time consumed in the chemical analysis of many of these waters four times yearly seemed excessive, when a reliable check could be kept in less time by careful bacterial examination alone. The time thus saved could be used more effectively on work relating to public waters of questionable purity, private or semi-public wells and springs closely associated with cases of communicable disease, which might have been water borne; water supplies for country schools which should have careful supervision; and similar problems which would lead to improved sanitation where it is much needed.

The change has been gradually introduced until at the present time nearly all deep well supplies, with the exception of those having iron removal plants, are analyzed only once a year chemically, and carefully examined for B. coli every three months.

It was at once realized that if such a procedure was to be followed, a more thorough examination for B. coli than the presumptive test in lactose bile was essential. To determine the reaction of organisms producing gas in bile on all the media necessary to establish their identity would be far too cumbersome for the large number of samples handled by the laboratory. The use of Endo's medium, however, as a confirmatory test for B. coli offered an easy and rapid method by which large numbers of samples could be handled.

This medium was prepared somewhat differently from the usual manner, for instead of adding lactose, sodium sulphite and basic fuchsin separately to the melted medium when about to pour plates, it has been found that a solution of the three may be prepared and kept ready for use, it being necessary only to add a certain volume of this solution to the melted media. The solution is prepared as follows: 50 grams of lactose and 12.5 grams of anhydrous sodium sulphite are dissolved in about 190 c. c. of warm distilled water; to this is added 25 c. c. of a saturated alcoholic solution of basic fuchsin, and the whole made up to 250 c. c. with distilled water. This solution will give good results for at least a month after preparation. In practice, 5 c. c. is added to 100 c. c. of the melted Endo agar and the whole thoroughly mixed. It is then poured on Petri dishes using about 10 c. c. for each 9 cm. Petri dish, and allowed to harden and dry slightly for a half hour before the dishes are covered. The surface of this plate is streaked with a loopful of bile taken from the tube to be confirmed. The greater part of the drop is worked off on one side of the plate and the needle then worked zig-zag across the

plate, leaving single colonies scattered about the surface. It is then incubated 18 to 24 hours at 37.5° Centigrade. B. coli produce a bright green iridescent sheen on the surface of the colonies, immediately surrounded by a dark red zone. The green color may be lacking if the media is too moist.

About 460 lactose bile tubes have been planted on this medium since the work was started, the greater portion being from tubes having less than 50% gas at the end of 72 hours incubation.

The amount of data is at present too limited to use as a basis for definite conclusions, but the results indicate that small percentages of gas are produced in lactose bile by organisms other than B. coli, while the higher percentages of gas are practically always produced by B. coli. Of the 118 samples containing 10 to 15% gas, only 12, or 10%, contained B. coli; when 20 to 25% gas was produced, 36.3% were B. coli, while 50% and above gave positive results in every case but 2 from 92 samples. The results show that the presumptive test in lactose bile is liable to indicate an excessive number of B. coli unless the minimum gas production which shall be considered positive is set sufficiently high. Just what shall be that minimum can only be determined by the examination of a large volume of data.

The reaction of the organisms growing in any particular bile tube on Endo's medium seems to be reliable and consistent, as far as our observations have gone. In many instances several plates have been inoculated from a single bile tube, sometimes at one time and under similar conditions and again on successive days, with and without increase in gas production, and in nearly every case the later results verify the first reactions on Endo. This fact has also been found true in confirming the B. coli presumptive tests on oysters.

The laboratory is prepared to examine waters from private supplies only when the sample is submitted by a local board of health, who have good reason to believe that the water in question is a menace to the health of its community and who agree to close the well or spring if the water is found unfit for use. Such a restriction is necessary owing to our small laboratory force. Local boards of health requesting such analyses and submitting samples should keep clearly in mind their own responsibility in carefully collecting the samples according to the directions furnished, and the necessity of giving all the information requested, in order that an accurate and just interpretation may be made of the analysis. Carelessness in securing a sample of water may cause a good water to appear polluted, and information regarding the surroundings of a well or spring are as necessary as the analysis in forming an intelligent opinion of the quality of the water.

SHELLFISH: The question which has been foremost in mind during all of our shellfish investigations has been: are the shellfish taken from the waters over which the Board has control liable to cause diseases?

With this point of view in mind, data has been obtained to show the prevalence of typhoid fever on that watershed within whose boundary the largest proportion of oysters are grown and placed. Sanitary surveys of the watersheds affecting the oyster industry have also been made in certain instances.

For the purpose of obtaining further information regarding the bacteriological content of oysters and of the waters from which they are taken, a considerable number of oyster and water samples were examined.

MAURICE RIVER SECTION.—The public seed grounds of the Maurice River Section are located in that part of Delaware Bay extending from False Egg Island Light to within a short distance of the mouth of the Cohansey River, a distance of about twenty miles. The season for dredging opens April 10th and closes sixty days later. During this period approximately 400 vessels are engaged in gathering small seed oysters, which are subsequently transplanted to the leased grounds in Maurice River Cove, where they remain until such time as they attain sufficient size to be marketed, usually from two to five years.

Every oyster boat carries a crew of at least four men, and in several instances as many as fourteen. There are, therefore, for about two months, nearly 3,000 men engaged in the business of dredging and transferring oyster seed, about sixty per cent. of whom are temporarily employed.

During the month of May the Board's oyster inspection boat spent considerable time on the seed grounds for the purpose of studying conditions and of observing the habits and customs of the men. So far as could be ascertained, the captain of each vessel was operating his boat in as cleanly a manner as possible under the conditions prevailing. It was further apparent that no serious objection could be raised regarding the manner in which the oyster men conducted themselves. It was learned that all of the boats carry pails which are used for toilet purposes, and that it is the practice to empty most of these pails into the main channel. It is stated that this is necessary because practically all of the boats remain on the seed grounds from Monday morning until Friday night. When the schooners return to port at Maurice River, each boat is visited by the scavenger, and such material as may have accumulated during that day is removed.

It is an established custom to dredge from sunrise to sunset, and it is the universal practice to cease work from Friday night until Monday morning. During this interval the majority of the oyster fleet tie up at Maurice River, and all of the captains and permanently employed men visit their homes. This presents a condition where over 1,000 men live on the boats almost without supervision except such as the health authorities in Commercial Township are able to give. The Health Inspector of Commercial Township does all in his power to control these men, and to prevent polluting material from gaining access to the river. Should, however, any polluting substances find their way into the river, the effect at this time is nil, because no oysters are placed in these waters until September.

In the report of the Division for 1913 certain insanitary conditions were pointed out which at the time existed on the Maurice River side of the Maurice River. Inspections made this year show that the toilet facilities are still inadequate, and that such toilets as are provided are not kept clean. These conditions have already been brought to the attention of the Pennsylvania Railroad and the shippers, but so far without results. The objectionable practice of stooling on the ground adjacent to a ditch which leads into the river near the oyster floats, has, so far as could be ascertained, been discontinued.

When our oyster investigations were first begun, the bacteriological examinations of water and oysters were limited to presumptive tests for B. coli communis by the standard methods of the American Public Health Association. Our experience has shown that the procedure above mentioned is not entirely satisfactory. For example: traces of gas have ordinarily been regarded as negative tests for B. coli, when in many instances they doubtless should have been recorded as positive; other organisms than those of the B. coli group, and obtained from water and oysters, not infrequently produce gas in lactose bile medium, and the results are therefore misleading. It is also believed that attenuated B. coli have failed to produce gas in lactose bile. This year it has been our practice to plant oyster and water samples into lactose broth, and to confirm all tubes in which gas was produced on Endo's medium.

The total number of water samples collected in Maurice River was 198. Of this number, seventy-three were collected in Section Four, the Millville section, thirty-six in Section Three, the section immediately below, and eighty-nine in Sections One and Two. In Section One, which is that part of the river in which shellfish are floated, 143 oyster samples were collected, consisting of sixty salt and eighty-three floated oysters.

Approximately 1,100,000 gallons of effluent from the Millville Disposal Plant enters the Maurice River daily two and one-half miles below the City of Millville and seventeen miles above the oyster floating grounds at Bivalve and Maurice River. In order to determine what effect this effluent had upon the dissolved oxygen content of the river, and incidently to compare the Winkler with the modified Rideal-Stewart method for determining dissolved oxygen, an investigation was undertaken during the latter part of September.

One hundred and twenty-three samples were collected, starting at a point two and one-half miles above the disposal plant and taking samples every half mile for a distance of eight and one-half miles below the disposal plant. All samples were collected as near as possible in the channel. No attempt was made in the sampling to cross-section the river, but to make results comparable, complete sets were taken on both the ebb and flood tides.

It is seen that the polluting matter from the disposal plant lowers the dissolved oxygen content of the water for a distance of about two miles when a gradual rise occurs. At a distance of five and one-half miles and seven miles below the plant higher dissolved oxygen values are obtained. This

This may be explained on account of the two small creeks (Menantico and Manumuskin) emptying into the river. On the flood tide the water of these two creeks becomes oxygenated, and will, therefore, have a higher oxygen content when emptying into the river on the returning ebb tide.

The investigation indicates that five miles below the disposal plant the percentage of oxygen saturation is as high and sometimes higher than above the City of Millville. This is probably due to the fact that small amounts of trade waste empty into the river at Millville, above the point where samples were taken, while several miles below the city the river receives the water from two unpolluted creeks. Our results further appear to show that the Winkler method for determining dissolved oxygen gives results which are comparable with the more troublesome and time-consuming Rideal-Stewart method when the tests are run upon waters of low nitrite content. The dissolved oxygen work done this year was necessarily limited due to lack of time, and is preliminary to a more extensive investigation next year.

Typhoid Fever in the Maurice River District.—After all, the best indication of what shellfish from a given section are likely to do, is a record of what they have done. It is, therefore, interesting to study the connection between the Maurice River oysters and the prevalence of typhoid fever in that section.

All cases of typhoid fever are required by law to be reported to the State Board of Health. The Board has been actively engaged in enforcing this law for many years, and it is very generally obeyed by physicians, so that practically all cases are in fact reported. Since 1911, every reported case of typhoid fever in a shellfish section has been investigated by an inspector of the Bureau of Medical and Sanitary Inspection of the State Board of Health.

In the townships of Maurice River and Commercial, in which most of the oyster business of the Maurice River district is conducted, there have been reported since November 1, 1911, up to May, 1914, ten cases of typhoid fever. Two of the cases, which occurred in Commercial Township, were in the family of a farmer; and another, making a total of three for this township, was in North Port Norris at least two miles from the Maurice River. These cases were investigated, and no information was obtained that pointed toward oysters as the source of infection. The seven remaining cases were in Maurice River Township. It was learned that two of the cases occurred in June and August, which is not the season of the year in which oysters are commonly eaten. Two other persons, one of whom was ill in September, 1912, and the other in October, 1912, stated that they had not eaten oysters. One other case was contracted in Philadelphia. Practically nothing is known about the cause of the two remaining cases, which occurred in November, 1913. They were so cared for, however, that no pollution of the river by their discharges could have taken place.

Estimate of Oysters Eaten at Bivalve and Maurice River.—At Bivalve, twenty shippers are engaged in the oyster business. They employ

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

OYSTER INVESTIGATION IN RARITAN BAY

STATEN ISLAND

GREAT KILLS

PRINCESS BAY

Seguine Pt.

PERTH AMBOY

Ward Pt.

RARITAN BAY

SOUTH AMBOY

Scale

Yards

Legend

- Oyster Beds
- 7 Depth Water at Low Tide
- Channel
- Sewage Disposal Plant

Section 5.

Section 3.

Section 2.

Section 1.

Morgan Cr.

Cheesequake Cr.

Nixon Cr.

Marquis Cr.

Matawan Pt.

Whale Cr.

Cliffwood Pt.

Cliffwood

N. Y. & L. B. R. R.

Matawan Cr.

Wilson Cr.

Luppatcong Cr.

KEYPORT

Conaskonk Cr.

Conaskonk Pt.

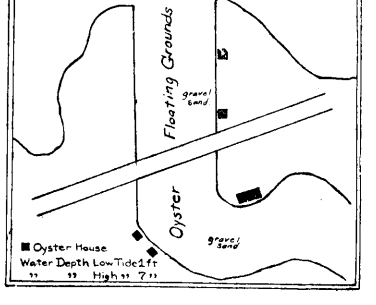
Pt. Comfort

Flat Cr.

Lorillard

Keansburg

Mouth of Luppatcong Cr.
Section 4.



an average of eleven men each on the wharves and boats. It is the practice of each of these men to take home about 150 oysters per week. Assuming that each man carries to his home 150 oysters per week during the oyster season, he and his family would consume in the four months from September 1st to January 1st, the most active part of the oyster season, 2,400 oysters. Assuming an average family of four, the number of oysters eaten per capita per day would be five. The entire oyster consumption, the group of people consisting of 220 men and their families, would be 528,000. It is estimated that ten per cent. of these oysters are eaten raw.

On the Maurice River side of the river, there are fifteen shippers employing an average of ten men each. Not nearly so many oysters are taken home on this side of the river. Approximately eighty men take home oysters regularly, in about the same quantities as on the Bivalve side. An estimate on the basis given above gives 192,000 oysters as the total consumption for four months.

The men working on the wharves, and the shippers themselves, eat a number of oysters not included in the above estimates. On the Maurice River side, it is estimated that the sixty men employed on the docks and scows, and the fifteen shippers, consume an average of four oysters per capita per day; that is, seventy-five persons eat about 2,000 oysters per week. On the Bivalve side of the river, the scowmen and other employees, including the shippers, amounting to 110 men, will eat, on the same basis, 3,000 oysters per week. This amounts to 80,000 oysters per season of four months, *all* of which are eaten raw.

The thirty-five shippers on both sides of the river have about fifty boats under their control. Besides these, there are between seventy and eighty boats engaged in the business in this section, which operate independently of the shippers, and the crews of which are, therefore, not included in the above estimates. The average crew on each boat is six men, making a total of 420 persons who doubtless consume large numbers of oysters, both raw and cooked. Briefly summarized, these estimates show that approximately 900 persons eat at frequent intervals throughout a period of at least four months, oysters which are grown in Maurice River Cove and floated in Maurice River. This means that a practical experiment on a large scale is being conducted on the wholesomeness of the Maurice River oyster. This experiment has been going on year after year, and the records show that typhoid has never been epidemic in this section. There have been but ten cases of typhoid in both Central and Maurice River Townships since October, 1911. Most of the oystermen live in these townships. It will also be observed from the above estimate that nearly 5,000 raw oysters are eaten each week during at least four months of the year, by the men employed on the wharves. This affords another excellent practical experiment to test the wholesomeness of the Maurice River oyster. Not a case of typhoid has occurred among the employees on the docks for the past three years.

COHANSEY RIVER.—The only oysters floated in the Cohansey River are those taken from the western shore (Delaware) and these are floated at

Greenwich Pier, commencing about September 1st. The investigation of this river was made during the month of June, and therefore no oysters were available for examination. A considerable number of water samples were, however, collected from the mouth of the river to Bridgeton, a distance of about nineteen miles.

Samples collected from Greenwich Pier to mouth of river:		
Total number of samples collected	11	
Number showing presumptive test for B. coli in 1.0 c.c.	9	81.8%
" " " " " " " " .1 c.c.	4	36.3%
" " " " " " " " .01 c.c.	2	18.1%
Samples collected from Fairton to Greenwich Pier:		
Total number of samples collected	28	
Number showing presumptive test for B. coli in 1.0 c.c.	20	71.4%
" " " " " " " " .1 c.c.	8	28.6%
" " " " " " " " .01 c.c.	0	0
Samples collected from Fairton to Bridgeton:.		
Total number of samples collected	50	
Number showing presumptive test for B. coli in 1.0 c.c.	48	96%
" " " " " " " " .1 c.c.	36	72%
" " " " " " " " .01 c.c.	21	42%
" " " " " " " " .001 c.c.	1	2%

When the results shown in the above tables were obtained in June, there was being discharged into the river, in addition to the effluents from the sewage disposal plants at Bridgeton, a considerable quantity of raw sewage. At the time this report is being written, conditions have materially changed; and now practically all of the raw sewage is being treated at the disposal plants. The City of Bridgeton and the State Board of Health are both attempting to have the disposal plants operated in a satisfactory manner, and conditions will, undoubtedly, gradually improve. During the coming year a more careful investigation will be made of the Cohansey River and of the oysters found in its waters.

CAPE MAY SECTION.—The oyster business of Cape May County is extremely small, and is rapidly decreasing. Not over 1,500 bushels of oysters were shipped from these waters during the past year, and most of these were consumed locally. Of eleven bays and sounds, eight were inspected. Oyster beds were located in Jarvis' Sound, Taylor's Sound, Richardson's Sound, and Ludlam's Bay. The four remaining bays which were inspected, namely: Grassy Sound, Great Sound, Corson's Sound, and Peck's Bay, contain no oyster beds. Jenkin's Sound, Stite's Sound, and Townsend's Sound, contain a few oysters which are owned by men living at Cape May Court House and Clermont. Most of the bays are several miles distant from any city, and receive practically no polluting material. Should any sewage gain access to the waters above described, it would be enormously diluted by water entering directly from the ocean.

Water samples from Jarvis and Taylor Sounds:		
Total number of samples	15	
Number showing B. coli present in 1.0 c.c.	3	20%
" " " " " " .1 c.c.	0	0
Oyster samples from Jarvis and Taylor Sounds:		
Total number of samples	6	
Number having scores of 23 and under	6	100%

It was found at Holly Beach that one oyster bed was located in the thoroughfare between the sewer outlets of Rio Grande and Cresse Avenues. A sample collected from the bed gave a score of 230. Under authority contained in the Shellfish Act, a notice was sent to the owner of the bed that under no circumstances must these oysters be removed and offered for sale. He was informed, however, that no objection would be made to the transfer of the oysters to unpolluted waters.

LAKE'S BAY.—All of the oyster traffic of Lake's Bay is conducted by four men who live in the Town of Pleasantville and have their oyster houses and floats on the shores of the Bay. They do a summer business almost entirely. Three of the dealers ship practically their entire output to the hotels of Atlantic City, while the other dealer sends all of his stock to Philadelphia, Reading, Allentown and other Pennsylvania cities. Natural stock is handled almost exclusively, although some Virginia oysters are planted.

The oysters gathered in the bay are transferred to floats which in this locality are all built on the bottom of artificial ditches and under cover of the oyster houses, the waters of the ditches passing through the houses. The oysters are usually floated for not more than one tide.

An inspection of the floats, ditch streams, and all creeks, in the vicinity of the floats, was made with a view to discover any possible source of pollution. A very evident source of pollution was noticed directly in the rear of a float owned by one shipper. It was learned that it was the custom of his employees to deposit excremental matter on the banks of this ditch. This condition was brought to the attention of the shipper, who caused it to be immediately remedied. Another possible source of pollution may result from several privies used by the occupants of several cottages situated on a street which extends down to the edge of the bay.

Water samples from Pleasantville ditches and Lake's Bay:

Total number of samples	76	
Number showing positive Endo test for B. coli in 1.0 c.c.	43	56.5%
" " " " " " " " " .1 c.c.	32	42.1%
" " " " " " " " " .01 c.c.	6	7.0%

Nineteen oyster samples were collected in the vicinity of Lake's Bay, of which seven were salt oysters and twelve had been floated. The results of these examinations are summarized as follows:

	Salt	%	Floated	%	Total	%
Total number of samples	7	.....	12	....	19	....
Number having confirmed score of 23 and under	7	100%	11	92%	18	95%
" " " " over 23	0	0	1	8%	1	5%
" " " " " 50	0	0	0	0	0	0

ABSECON AND ABSECON CREEK.—In the last annual report there was but brief mention of the oyster industry in this locality, because of the fact that there was every reason to believe that the industry in this section was rapidly declining. Our investigations of the business through the summer of this year reveal a decided change, and what has for several years been a meager industry, must now be regarded as an important one. The bulk of the output, which is shipped from Absecon, mainly to Phila-

delphia and Atlantic City, amounts to several thousand bushels of oysters each season.

The oyster dealers, of whom there are six, making their headquarters at Absecon, obtain their seed in large quantities from Hampton Bar, Va., and from Connecticut. Very few "natural" or local plants are grown here, as it is claimed that the Southern and Eastern oysters are superior.

The oysters in this locality are taken from the various parts of Absecon Bay, Reed's Bay, Main Channel and several of the connecting thorofares. Before shipping, the oysters are placed on floats in Absecon Creek and allowed to drink from one to two tides. The water of this creek in the vicinity of the several floats has a density of 1.002 at ebb tide, while at flood tide a density of 1.013 was obtained at 60° F. So far as could be ascertained by inspection, this creek is free from all direct sources of pollution. All samples of floated oysters collected were found to have scores under twenty-three.

CONOVERSTOWN.—The industry here is conducted by five men. The oysters are gathered chiefly from Reed's Bay and floated on the bottom of a shallow creek, the Conoversville Creek, and shipped principally to Philadelphia by way of Absecon. Some natural stock is grown, but the Virginia and Connecticut seed is chiefly used.

OCEANVILLE.—This oyster center, located on the small fresh water shallow stream known as Reed's Creek, also obtains its supply, grown principally from Southern and Eastern seed, from Reed's Bay and the nearby thorofares. The oysters find the best market in Philadelphia. The large volume of oyster business is conducted here by six firms.

NAVESINK OR NORTH SHREWSBURY RIVER.—The oysters in this branch of the river seem to become less plentiful each year, and this season were fewer than ever before. Considerable difficulty is experienced with borers, and practically no oysters are planted. Unless conditions materially change, the business in this section will probably be extinct within two or three years time.

Last year a rather complete sanitary survey was made in this district, and can be found in the report for 1913. It has not been thought necessary to repeat this survey. A considerable number of water and oyster samples were, however, collected, which are herewith tabulated:

Section One is that part of the river located between the old railroad bridge at Red Bank and the present Central Railroad bridge.

Section I—Water Samples Bacteriological Results:

Total number of samples	47	
Number showing B. coli in 1.0 c.c.	43	92%
" " " " " .1 c.c.	25	53%
" " " " " .01 c.c.	5	11%
" " " " absent	2	8%

Section Two comprises that part of the river extending from the present Central Railroad bridge at Red Bank to the Merchants' Steamboat Wharf, a distance of 880 yards.

Section II—Water Samples, Bacteriological Results:

Total number of samples	43	
Number showing B. coli in 1.0 c.c.	30	70%
" " " " " .1 c.c.	15	35%
" " " " " .01 c.c.	3	7%
" " " " absent	13	30%

That part of the river from the Merchants' Steamboat Wharf to Guyon's Point, a total of 1,550 yards, is known as Section Three.

Section III—Water Samples, Bacteriological Results:

Total number of samples	30	
Number showing B. coli in 1.0 c.c.	15	50%
" " " " " .1 c.c.	5	16%
" " " " " .01 c.c.	0	10
" " " " absent	15	50%

Section Four extends from Guyon's Point to Brown's Beach, a distance of 1,880 yards.

Section IV—Water Samples, Bacteriological Results:

Total number of samples	24	
Number showing B. coli in 1.0 c.c.	11	46%
" " " " " .1 c.c.	4	16%
" " " " " .01 c.c.	2	8%
" " " " absent	13	54%

Section Five reaches from Brown's Dock to the bridge at Oceanic, a distance of about 2,000 yards.

Section V—Water Samples, Bacteriological Results:

Total number of samples	10	
Number showing B. coli in 1.0 c.c.	3	30%
" " " " " .1 c.c.	2	30%
" " " " " .01 c.c	1	10%
" " " " absent	7	70%

Section Six extends from the Oceanic Bridge to Lower Rocky Point.

Section VI—Water Samples, Bacteriological Results:

Total number of samples	10	
Number showing B. coli in 1.0 c.c.	2	20%
" " " " " .1 c.c.	0	0
" " " " " .01 c.c.	0	0
" " " " absent	8	80%

The results of the oyster samples collected in the Navesink River were as follows:

Total number of samples	25	
Number having score or 23 and under	23	92%
" " " between 23 and 50	4	16%
" " " over 50	0	

The results stated in the above tables are based on confirmed tests.

The sewage disposal plant at Red Bank empties within the limits of Section One approximately 700,000 gallons of treated effluent daily. Tests made of the effluent during the year have shown the B. coli communis to be almost invariably present in dilution of one to ten thousand, and in some instances in greater dilutions. From the table it is seen that in Section One ninety-two per cent. of the water samples gave positive results in one cubic centimeter quantities, fifty-three per cent. in dilutions of one-tenth of a cubic centimeter and eleven per cent. when one-hundredth of a cubic centimeter was used. Proceeding down the river and away from the disposal plant, the per cent. of positive coli tests, in varying dilutions,

became less, as would be expected, until in Section Six, three and one-tenth miles below the outlet of the sewage disposal plant, only twenty per cent. of the water samples examined gave positive tests for B. coli Negative results were obtained in every case in dilutions of one-tenth and one-hundredth per cubic centimeter. In other words, three and one-tenth miles below the sewer outlet, there has been a percentage reduction of seventy-eight and three-tenths of the B. coli content in one cubic centimeter samples, and a decrease of 100 per cent in water dilutions of one-tenth and one-hundredth of a cubic centimeter.

RARITAN BAY.—In order that a comprehensive idea could be obtained of this section, and to show those waters in which oysters are grown and placed, a map was prepared. For convenience, the bay has been divided into sections. Section One starts at the old railroad pier and extends to Conoskong Point. Practically all of the oyster grounds are within this section.

Section I—Water Samples.

	Presumptive test.	Per cent.	After confirmation.	Per cent.
Total number examined. 16				
Number showing B. coli in 1.0 c.c.	1	7%	0	0
" " " " " .1 c.c.	0	0	0	0
" " " " absent.	15	93%	..	..

Section Two extends from the old railroad pier east to the steamboat wharf. No water samples were collected in this division. The Third Section extends from the steamboat wharf to the mouth of Luppatcong Creek.

Section III—Water Samples.

	Presumptive test.	Per cent.	After confirmation.	Per cent.
Total number examined. 28				
Number showing B. coli in 1.0 c.c.	28	100%	22	78%
" " " " " .1 c.c.	21	75%	9	32%
" " " " " .01 c.c.	11	39%	2	7%
" " " " absent.	..	....	6	22%

Luppatcong Creek has been classified as Section Four, and includes the oyster floating grounds.

Section IV—Water Samples, Bacteriological Results:

	Persumptive test.	Per cent.	After confirmation.	Per cent.
Total number examined. 83				
Number showing B. coli in 1.0 c.c.	82	99%	53	64%
" " " " " 1 c.c.	75	90%	27	33%
" " " " " .01 c.c.	26	31%	6	7%
" " " " absent.	1	1%	30	36%

Section Five embraces Cheesequake Creek, which is also used as a floating ground for oysters after September 1st of each year.

Section V—Water Samples, Bacteriological Results:

	Presumptive test.	Per cent.	After confirmation.	Per cent.
Total number examined. 49				
Number showing B. coli in 1.0 c.c.	43	88%	17	35%
" " " " " .1 c.c.	15	30%	2	4%
" " " " " .01 c.c.	4	8%	0	0
" " " " absent.	6	12%	32	65%

Matawan Creek is also situated in Section Five, and while no oysters are floated in this creek, for the purpose of examination forty-nine water samples were collected.

Section V—Water Samples, Bacteriological Results:

		Presumptive test.	Per cent.	After confirmation.	Per cent.
Total number examined	5				
Number showing B. coli in 1.0 c.c.		4	80%	3	60%
" " " " " .1 c.c.		3	60%	2	40%
" " " " " .01 c.c.		0	0	....	....
" " " " " absent.		1	20%	2	40%

The total number of oyster samples collected in the Raritan Bay Section were fifty-two. The results of the examination of these oysters were as follows:

		Presumptive test.	Per cent.	After confirmation.	Per cent.
Total number of floated oysters examined	43				
Number giving score below 23		9	20.9%	34	79.0%
Number giving score between 23 and 50		7	16.3%	8	18.6%
Number giving score above 50		27	62.8%	1	2.4%

		Presumptive test.	Per cent.	After confirmation.	Per cent.
Total number of salt oysters examined	9				
Number giving score below 23		0	....	9	100%
Number giving score between 23 and 50		3	33.0%	....	....
Number giving score above 50		6	67.0%	....	....

By referring to the accompanying map it can be seen that the oyster grounds of New Jersey in these waters extend about a mile and three-quarters directly north from Conoskong Point, southwest about one mile from there, and then in a southeasterly direction about three-quarters of a mile, forming a rough triangle. These grounds are leased from the State Oyster Commissioner at the usual rates of one dollar per acre.

Seed oysters are planted on the soft bottom, about a mile from shore. These are allowed to remain until they reach maturity, when they are transplanted to the hard bottom. The object of this transplanting is twofold: First, the water is only eight to ten feet deep on the hard bottom, which simplifies tonging, while it is twelve to fifteen feet deep on the soft bottom. Secondly, the hard bottom is nearer Keyport and the oysters have a tendency to become cleaner after being shifted. It is necessary that they be planted upon the soft bottom to grow, as the severe northeastern storms would completely bury them by the shifing of the sand on the hard bottom.

The oysters shipped out of Keyport are of two kinds, namely, James River's and Naturals. The former are not placed upon the soft bottom at all, but are placed upon the hard bottom for a period of six weeks to two months. The natural oysters are very green, probably due to vegetable organisms. In reply to inquiries as to the reason for the purchase of the James River's and the necessity for going to the expense of paying freight upon them from James River to Keyport, laying out upon the hard bottom, taking up and floating in Luppatcong Creek, it was stated that, at the beginning of the season it is hard to dispose of the natural oysters, due to their green color, and as the James River's do not have time during the short period in which they are in Raritan Bay to become green, they can readily be marketed. It is therefore the custom, at the beginning of the season, to give the trade these James River's and gradually work in

the Naturals, mixing them judiciously, until the trade no longer objects to the green oysters, when the James River's are discontinued.

All oysters are shipped from Keyport in the shell except those marketed by the J. & J. W. Ellsworth Company, who operate a large shucking house. An inspection was made of the sanitary conditions in the shucking house, and these were found satisfactory.

As previously stated, the principal floating grounds for oysters in this section are the waters of Luppatcong Creek, which is a tributary of Raritan Bay. The creek extends back from the bay a distance of about four miles, originating from numerous springs located in the hills, and has a drainage area of about four square miles. A sanitary survey was made of this stream during the year by a representative of the Division of Water and Sewerage Inspecton, who reported as the result of his inspection eighteen pollutions, most of which were of minor importance. Under authority contained in the Shellfish Act, notices were sent to the persons responsible for the above mentioned contaminations, ordering that the pollutions be abated. About three months after the service of the notices, another inspection was made of the creek, and it was learned that fifteen of the eighteen pollutions had been abated, and that the necessary steps were being taken to mitigate the other three.

The effluent from the sewage disposal plant at Keyport empties into Raritan Bay about one-quarter mile from the mouth of Luppatcong Creek. For the purpose of ascertaining the probability of the effluent entering Luppatcong Creek, some float experiments were made. These floats, which were placed overboard directly in line with the sewage discharge pipe at flood tide, were carried past Luppatcong Creek into Matawan Creek.

By consulting the tabulated water results of samples collected from Luppatcong Creek it is seen that sixty-four per cent gave positive B. coli results in one cubic centimeter, thirty-three per cent. in one-tenth of a cubic centimeter, and seven per cent. in one-hundredth of a cubic centimeter. B. coli was found absent in thirty-six per cent. of the samples tested. The results would not appear to indicate that the river contains dangerous polluting matter. For the purpose of showing the effect of the waters of Luppatcong Creek upon oysters floated in it, the following experiment was made: 150 salt oysters were collected, and four samples, or twenty oysters were examined bacteriologically. The remaining 130 oysters were placed in Luppatcong Creek and representative samples removed from time to time and tested. The results of these experiments showing scores of salt and floated oysters of the same lot follow:

SALT OYSTERS.	FLOATED OYSTERS.					
Score.	Time Floated.	Oyster Score.				
0	2 low waters	3	14	1	1	5
1	6 low waters	5	4	14	2	5
2	8 low waters	0	1	0	1	4
0	12 low waters	1	1	1	3	1

From information obtained from the sanitary survey of Luppatcong Creek, together with the bacteriological results of water and of such oyster samples which have been floated in the creek, it is believed that by exercising proper sanitary precautions, oysters may be floated in Luppatcong Creek and sold without endangering the health of those persons eating them.

The bacteriological examinations of water and oysters collected in this section were conducted according to the standard methods of the American Public Health Association, except that lactose broth medium has been used in place of lactose bile. In addition, our presumptive tests have been confirmed using Endo's medium.

Whenever the presumptive test is referred to, it should be remembered that this test has been obtained using lactose broth. It is therefore probable that a larger percentage of positive presumptive tests have been obtained using lactose broth than would have resulted had lactose bile been used.

OYSTER RESULTS IN DETAIL—RARITAN BAY SECTION.

Scores of Floated Oysters.						Scores of Salt Oysters.	
Before Confirmation.	After Confirmation.	Before Confirmation.	After Confirmation.	Before Confirmation.	After Confirmation.	Before Confirmation.	After Confirmation.
23	3	230	5	500	3	230	3
41	33	320	0	230	14	140	2
230	2	230	1	410	1	140	3
230	33	41	0	230	1	230	2
140	14	140	1	320	5	41	1
41	1	140	4	230	5	41	0
50	23	5	1	320	4	41	1
50	3	14	1	230	14	230	2
410	41	14	1	140	2	230	0
50	14	5	3	230	5	.....	.....
140	1	4	1	320	0	.....	.....
230	14	230	33	230	1	.....	.....
500	3	41	4	41	0	.....	.....
230	14	140	50	140	1	.....	.....
410	1	14	2	140	4	.....	.....
230	1	23	5	5	1	.....	.....
320	5	500	50	14	1	.....	.....
230	5	230	50	14	1	.....	.....
320	4	500	320	5	3	.....	.....
230	14	500	23	4	1	.....	.....
140	2	140	33	.....	.....	.....	.....

WATER AND SEWERAGE INSPECTION—Francis E. Daniels, Director of Water and Sewerage Inspection, in charge.

INTRODUCTION: This Division inspects water purification and sewage treatment plants, for the purpose of supervising their operation. makes inspections of streams to discover and abate pollutions, and collects samples of water from public supplies, which are examined in the Laboratory. It also investigates complaints concerning water supplies, sewage disposal and minor pollutions, for the purpose of removing, if possible, the causes for complaint.

The routine work has been carried on along the same general lines as last year, but special cases have from time to time caused changes in plans. Schedules of inspections of water supplies, sewage treatment plants and watersheds have been closely followed and practically completed as planned at the beginning of the year. Sufficient information has been gathered to warrant some changes in the routine, which will no doubt be of benefit.

The Division is handicapped by the lack of men, as a great deal of more efficient work could be accomplished if a larger force were available. This is particularly true in the line of special investigations. There are many problems which confront the proprietor of a small water supply, or of a small business, the waste from which constitutes a pollution. Such problems as these should be worked out by the State, because the individuals are often powerless to help themselves.

Upon the water supplies there have been made 340 inspections, while 82 inspections of watersheds from which potable waters are obtained have been completed. These figures include both routine inspections as well as special investigations in response to complaints or requests for advice. The purpose of our inspections of pollutions is to secure abatements rather than to collect penalties, and every other means is tried before prosecution is resorted to. Two hundred and seventy-two stream pollutions have been abated without the necessity for legal action. In three cases, however, it was necessary to bring suit, and in each the penalty of $50 was collected.

Nearly all of the watersheds supplying potable water have been inspected once, and some of the streams tributary to shellfish grounds have been examined. The sanitary survey of that portion of the Hackensack River below New Milford, begun last year, has been finished.

Upon the sewage systems there have been made made 737 inspections, including both routine work and special investigations. Of these, 522 were made on the sewage disposal plants, of which there are now 150 in operation. Compared with the number of inspections made during the preceding year, this is an increase of 36 per cent.

At the beginning of the fiscal year, a schedule of sewage disposal plants was adopted, in which the plants were grouped according to their

relative importance from the standpoint of the public health. Due consideration was given to such factors as the size and location of the plant, the stream or waterway into which the effluent discharged, whether or not the water in such stream or waterway was used for potable purposes, the general condition of the plant and the manner in which it was constructed, maintained and operated. Sixteen sewage disposal plants were put in the first group, and during the past year have been inspected once a month. The other plants, according to their relative importance, have been inspected bi-monthly, quarterly, or semi-annually. Eight plants, all of which are very small, and relatively unimportant, were placed in the group requiring but one inspection a year.

In addition to the above, out of 2,545 samples of water and sewage analyzed in the Laboratory, over 2,000 were collected by the inspectors attached to this Division.

Last year comment was made concerning the law which requires a quarterly analysis of every public water supply in the State. As then stated, the number of the analyses should be left to the discretion of the State Board of Health. Then again, the term "public supply" has been decided by the Attorney General to include any supply of whatever size, the water from which is sold. This includes many wells, the water from which is sold to a neighbor or two, while a well supplying a large factory or corporation's tenements is not included if the water is not paid for as such.

In order to avail themselves of our services, some corporations render separate bills for water, while some supplies which have been condemned by the State Board of Health are still being used free of charge, in order to get around the law. What is needed is discretionary power vested in the State Board of Health and State supervision over the local health officer, to compel him to keep in touch with the smaller supplies in his district, and, with such assistance as may be necessary from the State Board, to safeguard the purity of these supplies.

The following is a brief summary of the work done during the year, other than the collection of samples of water for analysis:

Water supply inspections, 340; bottled water supply inspections, 50; ice supplies and manufacturing plants inspected, 5; watershed inspections, 82; sewerage systems inspected, 737; number of stream pollutions reported, 740; number of stream pollutions re-inspected, 610; number of stream pollutions abated, 272; number of notices to cease pollution issued, 284; number of cases referred to the Attorney General, 34.

WATER SUPPLIES: For the purpose of inspection, there are at the present writing on our records 230 "public" water supplies in the State. While the majority of these are single isolated sources, some are combinations made up of several sources of either ground or surface waters. For our present purpose they may be classified as follows:

Ground waters without treatment, 141; ground waters treated for the removal of iron, 22; ground waters treated for the removal of carbon dioxide, 1; ground waters treated for the removal of bacteria, 2; surface

waters without treatment, 34; surface waters treated for the removal of pollution, 23; combination supplies, 7; total, 230.

Generally speaking, the sanitary quality of the public water supplies of the State of New Jersey is good, although a few are really bad and some are of doubtful quality. The majority of the ground water supplies are good, though some of the deep well waters could be treated for the removal of iron or carbon dioxide with advantage. Some of the so-called ground water supplies are from such shallow wells that treatment, at times at least, is advisable.

The surface supplies cause the greatest concern, as the streams furnishing the water are becoming more and more subject to pollution because of the increase of temporary or permanent human habitations. The need for treatment of some of these supplies becomes more pressing year by year.

The general conditions of the watersheds furnishing potable water are fairly good, as will be shown by the table of watershed inspections given elsewhere in this report, but some of the sheds are practically beyond redemption on account of the excessive population thereon. Some will have to be abandoned. The water from others will require purification before use. There is, of course, a great demand for deep well water, but unfortunately this is not to be had in sufficient quantity in some sections. In several instances wells have been sunk with practically no results whatever.

In some cases supplies have been changed from surface to ground water, notably at Gloucester, Moorestown, Jamesburg and Hopewell. Frequently the ground waters are much harder and have to be treated for the removal of iron or carbon dioxide. In some places deep well water cannot be used at all, as at Rahway, or it must be mixed with surface water, as at Skillman.

During the present year the summer drought was of unusually long duration, and a shortage of water was experienced in many places. The situation in some of these places was acute. Lambertville had to pump from the feeder to the Delaware and Raritan Canal, and New Brunswick had to use water from a factory, to augment their depleted supplies. These extra waters were treated with chlorine to make them safe, although the consumers were also advised by the local authorities to boil the water. Butler had to depend upon the generosity of the owner of a lake on a private estate.

On the other hand, the dry weather was of advantage to Trenton. There was no shortage at this place, and as the river kept quite clear, opportunity was given to cut out the distributing reservoir and pump directly into the mains while the reservoir was being cleaned. This process occupied about three weeks, during which time tons of mud and silt were removed. The reservoir was then filled with clear river water and after this was done, it was possible to stop the pumps long enough to make the necessary changes in the receiving pump well. The rains held off until the new filters had been completed.

It is very unfortunate, however, that during the dry weather while the reservoir at Skillman was empty, it could not have been cleaned, as it is greatly silted up and heavily seeded with a very objectionable Bryozoön, Pectinatella. Mud, stumps, debris and all traces of the organism should have been removed. This would have benefited the quality of the water, increased the storage capacity of the reservoir, and lessened the turbidity of the water which is in part due to agitation by the wind, as the reservoir is extremely shallow.

At present the water department of Atlantic City is making preparations for stripping and enlarging the storage reservoir for the surface supply and raising the dam seven feet. It is estimated that this will increase the storage from 20 million to 200 million gallons.

Precautionary measures were taken at Butler against the recurrence of algae troubles, and so far as is known they were effective. An outbreak of Asterionella occurred in one of the ponds of the Middlesex Water Company, but this was quickly checked with copper sulphate.

Objectionable tastes and odors at Bridgeton were remedied by a temporary change of intake.

Enormous growths of Pectinatella were discovered in the late summer in the reservoir at Skillman, and hundreds of pounds were removed bodily, as it was not deemed wise to kill the masses and allow them to decompose in the water. Every effort should be used to rid the reservoir of the organism, or else trouble may be experienced by growths of it in the intake mains.

A slight appearance of Chlamydomonas in one of the Jersey City distributing reservoirs was successfully treated with copper sulphate. The pond at Allentown was treated with copper sulphate to prevent growths of algae, and so far as is known, it was successful. The Salem supply, which has given trouble in the past, is to be taken in hand next season for the same purpose.

It was impossible to learn the cause of some of the complaints received, because by the time a man could reach the location the trouble had either disappeared or else was found to have been so exaggerated as not to bear investigation. In some cases turbidity troubles were due to sudden fluctuations in pumping, or to temporary repairs on mains, and they were quickly remedied. In still other cases tastes and odors were found to be due to organic matter taken up from swamps and meadowlands through which the water had come, and there was nothing whatever to do until some form of filtration could be established to treat the entire supply, and for the present in many cases this seems to be entirely out of the question.

Many other complaints have been received which were due to the fact that the chemistry of water purification is still not so generally understood as it should be by the operators of purification plants. Complaints in regard to the use of alum and hypochlorite come in this class,

The installation of liquid chlorine apparatus for the disinfection of potable waters is becoming more and more in vogue and already such apparatus has been installed in Bound Brook, Flemington and Newark, and has been substituted for hypochlorite outfits at Bridgeton, New Brunswick and Trenton. Steps are being taken towards using it on the surface supply at Atlantic City.

Both the dry gas and the solution type of feed are giving satisfaction, and the operation of both types seems to be reliable.

The law requiring the notification of local and State boards of health whenever any change is made in a water supply which will deteriorate its quality, has worked well. In several cases the authorities have been able to safeguard the health of the citizens during emergencies which have necessitated the use of impure water. In one case, however, the Superintendent of the State Sanitorium for Tuberculous Diseases allowed the removal of an old filter and the consequent use of untreated surface water for several weeks without notifying the Board. At the present writing the new filtration plant at this place is practically ready for operation.

GROUND WATERS WITHOUT TREATMENT: As usual, the ground waters require little attention and the supplies are for the most part safe and satisfactory. Occasionally some wells show slight traces of pollution, in that B. coli appears. In some cases the trouble has been traced to surface water leaking in around a defective casing, although it has not been definitely ascertained what is the source of the B. coli at Margate, Essex Fells, Holly Beach or the State Home for Girls at Trenton. Upon these supplies further investigation is planned. At Mullica Hill it was thought that repairs to casing and suction line had corrected matters, but B. coli still appear occasionally.

Efforts have been made to have the Stewart supply at Clarksboro put in better condition. The surroundings are not very good; the storage tank is in bad repair, and water from this tank sometimes runs back into the well on account of a leaky check-valve.

Another supply in Clarksboro, which was condemned last year, is still being used, although the water is not sold, in order to evade the law and put the supply outside the jurisdiction of the State Board. This supply should be abandoned.

There are still some supplies that are in need of treatment, either for the removal of iron or for free or half-bound carbon dioxide. Considerable trouble has been experienced with the Island Heights supply because of the presence of rusty precipitates in the water. The distribution system has to be carefully watched and frequently flushed out to keep the supply at all satisfactory. A treatment plant is needed.

The same may be said of the Ocean Gate supply, a great deal of the trouble with which seems to be due to half-bound carbon dioxide and a very unsatisfactory distribution system. This is composed of small black

wrought iron pipes, so laid out that numerous dead ends exist. Private investigators have been called in by the owners to devise a remedy for the unsatisfactory conditions in this supply.

GROUND WATERS TREATED FOR REMOVAL OF IRON: The majority of the installations for the removal of iron from ground waters are giving a satisfactory output. Now and then one is found that needs a little overhauling and repair. A slight expenditure is usually sufficient to remedy the defects and make the water satisfactory. At Hightstown the old iron removal filters have been renovated and new sand put in. As stated in former reports, the process of iron removal is by means of lime treatment, aëration, or combination of both, followed by sedimentation and filtration through pressure or gravity filters. In one plant in which lime is used, followed by aëration, sedimentation and filtration, the method of adding lime is worthy of consideration. The lime is added through a two-inch pipe, which extends a little over thirty feet down into the well, so that the lime solution will be applied just below the suction. By this method the lime is thoroughly mixed with the well water before the water reaches the aërator.

The most precarious plant in this class is the one at Gloucester City. Under the present conditions it is frequently impossible to turn out a satisfactory water at this place, and upon the slightest emergency a heavily polluted creek water has to be used with only a treatment with hypochlorite to safeguard the consumers. The pumping equipment attached to the wells is inadequate, and when the filters are operated the water has to be pumped three times. The water has so much iron in it that the color is quite green, and this water is either pumped into the distribution system direct, or run through rapid sand filters without preaëration. This practice soon results in clogging the filters from top to bottom, and within a short time the sand in the filters has been twice renewed.

It is unnecessary to comment upon the needs at this plant, other than to mention that there should be provided adequate facilities for getting the water from the wells for proper aëration and settling, and a reliable disinfecting outfit should be provided to be used in cases of emergency. When this is done a good, safe and satisfactory water can be furnished, without turning in sewage polluted creek water every time the weather gets cold, or hot and dry, or a small fire breaks out, or it becomes necessary to shut down on account of some slight mishap to machinery or boilers. As it is at present, the supply is not only precarious, but dangerous.

GROUND WATERS TREATED FOR CARBON DIOXIDE REMOVAL: On account of red water troubles in Cranbury, a lime treatment plant was installed to remove the free carbon dioxide which is present in the well water. The pump formerly drew the water from the well and forced it under pressure directly into the distribution system, and only a slight

excess was sent up into the elevated storage tank. The amount of carbon dioxide was considerable, and it did not have a chance to escape until the water was drawn at the faucets in the houses. Trouble was experienced with the rusty water, and it was believed that it was caused solely by the carbon dioxide rusting the pipes, since the iron content of the water in the well was practically zero. The case was put in the hands of a water treatment company and a lime plant installed. The complaints ceased almost immediately and apparently the plant was a success.

When further tests were made on this plant it was noted that no provision had been made for settling out the carbonate of lime formed, as everything was forced into the distribution system. The question of deposits in the pipes was then raised, and also whether or not deposits and rusting might occur in the hot water systems by the action of heat on any bi-carbonates which might be formed should the operation not be properly controlled. Simple aëration on a small scale was tried, with the result that about the same amount of carbon dioxide was removed by that means as with the lime.

The company was then advised to consider aëration, using an extra riser to convey the entire supply to the tank, and after aëration to distribute from the tank with perhaps lime treatment for the carbon dioxide still remaining. At the close of the year the changes are well under way, and the final outcome is awaited with interest.

It is believed that in the future more attention will be paid to the elimination of carbon dioxide both in ground waters and in filtered waters purified by the use of alum. A water heavily charged with dissolved oxygen, which is treated with alum and put through a system of pressure filters directly into the distribution system, is likely to cause considerable trouble from red water.

GROUND WATERS TREATED FOR THE REMOVAL OF POLLUTION: The water derived from the driven wells at Midland Park and that from the springs and underground collecting tiles at Dover, are still being treated with calcium hypochlorite for the elimination of B. coli. That from the wells of the Piscataway Water Company at Bound Brook, which furnishes part of the supply for Elizabeth, is treated with liquid chlorine for the same purpose. A similar treatment has been advised for the water from a set of wells of the Bound Brook Water Company. The plants are doing satisfactory work and are requiring but a small amount of attention and supervision.

DOVER WATER DEP'T.

WATER ANALYSES.	Jan. 12, 1914.		April 13, 1914.		July 30, 1914.		Oct. 26, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Bacteria per c.c. 20° C...	33	10	24	5	6	64	18	40
Bacteria per c.c. 37° C...	0	0	1	1	0	7	0	1
Red Colonies per c.c.....	0	0	0	0	0	0	0	0
B.Coli (presump.) in 1 c.c.	0	0	0	0	0	1	0	3

BERGEN WATER CO. (MIDLAND PARK.)

WATER ANALYSES.	Jan. 19, 1914.		Apr. 2, 1914.		July 20, 1914.		Oct. 28, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Bacteria per c. c. 20° C...	6	0	14	1	8	3	5	2
Bacteria per c.c. 37° C...	4	1	6	2	100	180	0	0
Red Colonies per c.c.....	0	0	2	0	0	0	0	0
B.Coli (Presump.) in 1 c.c.	0	0	1	0	0	0	0	0

At Dover it was noticed that the supply was turbid after a rain. Investigation revealed an old catch-basin at the beginning of one of the rows of tiles, into which surface water was entering. This was promptly cut off and the trouble ceased.

SURFACE WATERS WITHOUT TREATMENT: The surface potable waters of New Jersey are derived from brooks, ponds and lakes, or large streams. Considerable has been accomplished in the removal of pollution from the potable watersheds and the quality of the untreated supplies has been fairly well maintained. In some cases, however, conditions over which the Board can have little or no control are getting so serious that some form of treatment is needed.

The increase of pollution, due to growth and movements of the population, is manifesting itself more and more in the wash and run-off from fields, highways, railroads and city streets. Wash from the pastures and haunts of domestic animals constitutes a constant source of contamination to some of our untreated supplies, and although there is little evidence that such a pollution constitutes a serious danger to human beings, yet for aesthetic reasons alone the presence of cow manure in drinking water is quite undesirable. And while the danger of transmission, by water, of intestinal parasites from animals to man may be more or less remote, still it is known that such organisms in certain stages of their life history are discharged from the domestic animals.

The chance pollution from the camper, the hunter, the fisherman, the recreationist, the labor camp, the berry picker, the gypsy band and the foreigner washing clothes in the stream, in many cases constitutes a great deal more serious menace to potable waters than farm houses and other permanent habitations; and from its nature, it is extremely difficult to prevent. The only alternative is adequate treatment of the water at all times. One commendable action has been taken on the Newark watershed at a point where automobiles frequently stop. The place has been made attractive to visitors, a sanitary toilet has been provided, and notices posted appealing to the people to use the toilet and not to contaminate the watershed.

The towns taking water directly from the lower Delaware have at last been supplied with treatment plants, and it is probable that in a few years extra safeguards will be placed upon the supplies taken from the

upper sections of the Delaware River watershed. The Frenchtown supply, taken from a tributary of the upper Delaware, is in need of some form of treatment to take care of the pollution received from the village of Everittstown and the surface wash from streets, roads and surrounding country. The Pluckemin supply is in about the same category, and the Orange supply is from a densely populated watershed.

The New Jersey Water Service Company's supply at Haddonfield needs better protection from surface wash, and a small filter would be a material benefit. Complaints in regard to tastes and odors in this supply, when investigated, appeared to have been somewhat exaggerated, although color, turbidity, and effects of organisms would be greatly lessened if a filter were installed.

All of the supplies taken from the Rancocas need filtration plants. The water is very high in color, and receives too much pollution to be used in its raw state. Among the towns so affected are New Lisbon, Pemberton, Lumberton, Medford and Vincentown.

Several of the untreated surface supplies as well as treated ones, need to be carefully watched and treated for algae. Rockaway, Butler, Salem, Newark, are so affected. Fortunately a prompt and judicious application of copper sulphate is usually effective. The difficulty has been that many of the superintendents have failed to discover the organisms soon enough. In one case Asterionella appeared just at a time when the superintendent was ill and no one else on the premises was qualified in the use of the microscope.

The Newark watershed has not been inspected this year, but, as it is so well looked after by the owners, it is highly probable that it is in good condition. The water is also treated with chlorine during and after every rain, and, so far as the analyses show, it is quite satisfactory.

Surface Waters Treated for the Removal of Pollution: The supplies of this class are the ones which call for the greatest amount of attention, except where they are well equipped and operated by technically trained men. Such plants as those of the Montclair, Hackensack and Monmouth County Water Companies are both well equipped and skillfully operated.

Steps are being taken to rebuild the Allentown and Millville plants, and some more improvements have been promised at Mount Holly. The Bound Brook plant was never completed, and cannot be relied upon to produce uniformly reliable results until some better means for washing the filters are provided. Better facilities for coagulation are badly needed at some of the plants possessing no basins at all, while at others the settling tanks are so small that too much flock is carried over upon the filters. Then again, the tanks are often 10 feet or more above the filters, so that the velocity around elbows and throttle valves is sufficient to break up the coagulated particles into a very fine turbidity. In some of these places, conditions in the raw water suddenly arise which prevent

the action of the chemicals, and no flock forms. When this happens, color, alum and all go through the sand. This matter is to be further investigated. In other plants some of the machinery is so inaccessible and unhandy that good results are difficult to secure.

In regard to some of the plants that are tested regularly, a few details will be given, together with the analytical results obtained upon the samples taken.

WATER TREATMENT PLANTS: Decided improvements in construction and operation have been observed in a great number of the water filtration and treatment plants, and in most instances these changes have been sufficient to make the plants modern and capable of furnishing a safe and palatable drinking water. There are a few, however, that are in a very poor condition, of which the plant of the Millville Water Company is perhaps the worst offender. Other plants which need attention as to improvements are those of the Gloucester Water Company, Bound Brook Water Company, Lambertville Water Company and Tintern Manor Water Company (Newman Springs Plant). The need of modern filtration plants for New Brunswick and Elizabeth is very evident, unless new sources of supply are provided.

There are several subjects, such as coagulation, washing filters and disinfection, which should be well understood for the proper operation of the filter plant. These subjects are briefly discussed in the following pages:

COAGULATION.—Proper coagulation is very essential for satisfactory filtration. A coagulation basin of such capacity as to allow a period of sedimentation of from two to three hours is of primary importance, so that sufficient time be allowed for the coagulating chemicals to react, and to permit a partial sedimentation. The water before leaving the basin should have a chance to deposit a considerable amount of its suspended matter and yet contain sufficient flock to form a filtering layer upon the sand-beds of the filters.

In this State soda ash and aluminum sulphate are the chemicals which are usually used for coagulation and are generally applied in the order named when it is necessary to use soda ash. In some cases ammonia alum is used instead of aluminum sulphate, and lime instead of soda ash. The order of application of the chemicals is sometimes reversed. An example is at the Monmouth County Water Company, where aluminum sulphate and lime are used in the order mentioned, and the claim is a saving in chemicals.

An interesting problem sometimes arises at the Mount Holly plant. The chemicals do not react in the proper manner to form a suitable flock, and at those times little purification to the water occurs. The reason for this is difficult for us to ascertain, because the condition of the raw water often changes before an inspector can reach the plant. At this plant a chemist is needed all the time to keep close watch upon the conditions of the creek and devise means to insure proper coagulation at all times. Valu-

able information could be obtained in this State on coagulation of colored waters, as excellent opportunities present themselves at such plants as Mount Holly and Millville, where the raw water is highly colored.

WASHING FILTERS.—The proper washing of filters is a problem which must be solved for every plant, as many purely local conditions always present themselves. There are three different methods of washing rapid sand filters in use in New Jersey.

The different methods are (1) reverse current of wash water, with mechanical agitation by means of a revolving rake, (2) reverse current of wash water alone, (3) reverse current of wash water and agitation by compressed air. There are two methods of air and water wash, one with separate manifold distribution systems for air and water, and the other with a combined manifold distribution system.

(1) The method of wash with reverse current and agitation with rakes is only applicable to circular filters, as the sand is agitated by prongs of a rake in the sand bed, which usually extend through the bed of sand to the gravel. Power for revolving the rake is transmitted by a belt and pulley. Although a good wash is generally obtained with this method, on account of the extra power required and the necessity for circular construction of the filters, few plants are so equipped, except perhaps some small installations. The sand must be thoroughly broken up and agitated during the time the reverse current of water is flowing, or else the bed will not be washed evenly.

(2) There are several plants in the State using the reverse current method, some giving good and others poor results. If proper piping has been installed, and the wash water is furnished in sufficient quantity, at a proper velocity and is evenly distributed in the bed, good results will be obtained. The wash water should be furnished so that a vertical rise of at least fifteen inches per minute is obtained. In this as well as in other methods the sand should be lifted and kept in a suspended condition during the washing. Should the bed not break up evenly the attendant can often assist by means of a rake or paddle.

(3) The method of washing with a reverse current of water, assisted by compressed air, to break up the bed so that the water may do its work more effectively, is in use at a good many New Jersey plants. Plants using a separate system of air and water pipes and ones in which air and water are both supplied through the same system, are in use. With this method a vertical rise of wash water can be somewhat less than in the preceding method, although it is very essential that the bed break up evenly and that the sand is entirely suspended.

There has been considerable trouble experienced in washing filters properly. In several instances it has been due to the inability of the drains and waste line to remove the wash water fast enough. In other cases sufficient wash water could not be supplied for washing. A velocity equivalent to a vertical rise of fifteen to eighteen inches per minute is required for washing filters where no other means of agitation is employed and twelve to fifteen inches per minute when a method of agitation is

used. Another source of difficulty is in the manifold distribution system. In some cases this is due to the uneven distribution as well as the lack of a sufficient number of strainers, while in other cases to the clogging of the strainers. Wash troughs too widely spaced will hinder the mud from flowing away and much will settle back upon the sand.

The results of poor washing can and should be readily noticed by the attendant. In many instances an examination of the sand bed will show such characteristics as mud balls, cracks in the sand, patches of dirt on the bed after washing, and a considerable layer of dirt over the entire bed after washing. The attendant on observing any of these conditions should investigate, and, if possible, remove the cause immediately, because if allowed to continue the filter will need to be completely overhauled.

WASHING PRESSURE FILTERS.—The washing of pressure filters has not received the attention given to the gravity filters. This is probably due to the fact that conditions in washing filters of the latter type are more easily observed, and the faults noticed and studied systematically. However, much attention and study should be given to the washing of pressure filters, because the sand bed is not visible. The attendant should remove hand hole or man hole plates quite frequently, and examine the condition of the sand bed both during and after washing, so that he may know exactly the condition of the filtering material. It has been observed at several plants in this State, on opening the pressure filters, that the layer of sand adjacent to the steel shell was cemented together with aluminum hydrate.

At Bound Brook the pressure filters became clogged to such a degree that to obtain good results, it may be necessary to remove the sand and gravel from the filters for a complete cleaning. At this same plant raw water is very often used to wash the filters, and as this water is turbid at times, and is treated with aluminum sulphate, there is danger of clogging the strainer system, and impregnating the entire sand bed with foreign material.

A decided improvement in pressure filter construction has been observed at the plant of the Monmouth County Water Company at Asbury Park. During the year the pressure filters have been completely overhauled, new strainer systems installed, and the sides and bottoms of the filters have been lined with concrete. These improvements were to eliminate several of the faults mentioned above, and they tend to make the filters similar to rapid sand filters of the gravity type.

DISINFECTION.—A large majority of the filter plants, except those that filter for iron removal, use a disinfectant in conjunction with filtration for purification. There are also several plants, in which the disinfectant is the only means of purification besides sedimentation. Calcium hypochlorite is the chemical most generally employed, although several plants have liquid chlorine apparatus in place of hypochlorite, and a few new plants have installed chlorine at the start.

The hypochlorite plants have been very valuable in reducing the bacteria in the final effluent, but there have been several features in the operation,

and sometimes in the construction, which have reduced their efficiency and rendered them unreliable.

The essentials for a good, efficient hypochlorite plant are a mixing tank, (may be part of solution tank); two solution tanks, each to hold at least a day's capacity, and fitted with a suitable means of agitation; a constant head, calibrated orifice feed box, and a proportionate feed, (only needed in few instances, as when the solution is added to water which varies greatly in amount). The chief difficulties experienced in this State have been in obtaining a satisfactory mix and a constant feed. These faults have been due sometimes to the negligence of the attendant and sometimes to faulty construction of the apparatus.

The liquid chlorine plants in operation have given very good results, and appear to rival the hypochlorite installations.

PLANTS TREATING SURFACE WATERS: ALLENTOWN:—This plant was never completed and some of the apparatus was located in most inconvenient and inaccessible places. As alum and soda ash are added to the water directly upon the filter, proper coagulation is not obtained. At last, work has been begun upon a scheme of complete rebuilding, and it is hoped that a very satisfactory installation will now result. As a precautionary measure, the pond was treated with copper sulphate for algæ, and as no complaints have been received, it is believed that the treatment was successful.

BOUND BROOK: The pressure filter plant of the Bound Brook Water Company has never been completed in accordance with the requirements of the State Board of Health.

As it now stands, it consists of a battery of 4 pressure filters, inserted in the pipe-line leading from the reservoirs to the town. The coagulant is fed into the inlet pipe by means of an alum pot inserted in a shunt line leading out from a pair of pitot tubes attached to the inlet line. By this means a shunt stream of water passes through the pot carrying a dose of dissolved ammonia alum.

In the outlet pipe leading from the filters to the town is inserted a tap, through which chlorine gas is admitted for disinfection.

The plant was put in operation and run under the supervision of the designing engineer for about eight months before it was put in charge of the State Board. This was in the late Spring of 1914, at which time it was found that bad water was being delivered occasionally. It was then noticed that both the defects in the plant and the method of operation were responsible. Later on in the summer a more thorough investigation was made and the filters were found to be in bad condition. The sand was caked and could not be washed. This was due to the failure to provide a proper means of washing. Washing is supposed to be done with filtered water, but as the filters can not and are not designed to furnish water fast enough to do this, it is impossible to wash the sand. Under these conditions washing with raw water is often attempted,

ALLENTOWN WATER DEPARTMENT.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Nov. 13, 1913.		Dec. 2, 1913.		Jan. 15, 1914.		Mch. 16, 1914.		May 14, 1914.		July 10, 1914.		Sept. 4, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	30	20	20	0	5	0	0	0	35	30	40	25	50	50
Turbidity	25	15	5	0	10	0	30	0	5	0	5	0	15	15
Free Ammonia	.058	.044	.028	.024	.038	.046	.088	.044	.030	.020	.030	.016	.028	.042
Alb. Ammonia	.094	.084	.046	.020	.036	.028	.128	.078	.104	.066	.108	.046	.180	.184
Nitrites	.002	0	.003	.002	.002	.001	.001	.001	.004	.001	.007	.001	.006	.001
Nitrates	1.20	.68	1.20	1.12	1.80	1.60	.80	1.00	1.40	1.00	0.48	1.12	0.12	0.20
Chlorine	6.5	6.5	5.0	5.5	5.0	5.5	3.0	5.0	5.0	5.0	5.0	5.0	6.0	6.0
Alkalinity	4.0	6.0	11.0	8.0	11.0	10.0	6.0	9.0	8.0	8.0	10.0	9.0	12.0	12.0
Iron	0.6	0.4	0.3	0.1	0.1	0.1	.....	.....	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C.	13200	3500	800	15	615	19	8500	113	475	113	385	130	500	.....
Bacteria per c.c. 37° C.	2800	875	76	3	39	5	88	1	53	17	21	14	28	98
Red Colonies per c.c.	46	16	0	0	0	0	3	0	1	0	6	1	2	5
B. Coli (Presump.) in 1 c.c.	100	1	1	0	0	0	10	0	1	.4	1	.2	1	1

BRIDGETON WATER DEPARTMENT.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Nov. 12, 1913.		Dec. 8, 1913.		Feb. 17, 1914.		Mch. 26, 1914.		Apr. 29, 1914.		June 4, 1914.		Sept. 25, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	50	0	45	0	30	0	25	0	60	0	25	0	5	0
Turbidity	0	0	5	0	20	0	0	0	10	0	0	0	0	0
Free Ammonia	.042	.048	.064	.032	.048	.032	.028	.016	.032	.022	.068	.040	.050	.042
Alb. Ammonia	.114	.112	.082	.032	.080	.022	.074	.028	.062	.026	.068	.034	.070	.054
Nitrites	0	.001	.002	.001	.003	.001	.002	.001	.001	.001	.003	0	.004	.001
Nitrates	.40	.48	.24	.48	.72	.72	.72	.72	.60	.20	0.64	.60	.48	.44
Chlorine	6.0	6.0	5.5	5.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0	5.0	5.5	5.5
Alkalinity	5.0	7.0	5.0	5.0	3.0	1.0	3.0	1.0	8.0	3.0	6.0	5.0	5.0	6.0
Iron	1.1	0.1	0.5	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C.	430	2	235	2	4700	1	155	1	875	4	195	7	540	3
Bacteria per c.c. 37° C.	118	3	63	2	193	1	47	0	75	1	10	2	22	1
Red Colonies per c.c.	6	0	2	0	21	0	1	0	1	0	1	0	5	0
B. Coli (presump.) in 1 c.c.	1	0	10	0	1	0	1	0	10	0	1	0	0	0

which is liable to cause stoppages in the strainer system and be unsatisfactory in other ways, on account of its being heavily charged with the coagulant in addition to the natural turbidity. The other alternative of shutting off the alum feed while washing filters is also bad, in that while washing one, the water going to the other three will not have any coagulant at all.

The chlorine apparatus sometimes gets out of order, and then disinfection stops until repairs are made. Furthermore, the flow of water fluctuates considerably; yet instead of a proportional feed, a constant feed device was installed.

Instructions were sent to the Company for the overhauling of the plant, and also advice in regard to the installation of coagulation basins; means for properly washing with filtered water; proportionate feeding of chlorine, and the necessity for having skilled attention and supervision.

The designing engineer, under whose supervision the plant is still being operated, attempted to get the filters in condition when the drought came on which necessitated by passing them altogether. The plant as at present constructed is likely to produce unsatisfactory results at times.

BOUND BROOK WATER CO.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	May 19, 1914.		June 2, 1914.		July 23, 1914.		Aug. 31, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	15	10	30	0	40	0	.....	.....
Turbidity	5	0	10	0	30	0	.....	.....
Free Ammonia	.020	.206	.060	.118	.060	.058	.....	.....
Alb. Ammonia	.060	.048	.114	.052	.114	.058	.....	.....
Nitrites	.003	.003	.005	.008	.003	.001	.....	.....
Nitrates	.04	.04	.08	.16	.16	.24	.....	.....
Chlorine	3.5	3.5	4.0	4.0	5.5	5.5	.....	.....
Alkalinity	33.	32.	46.	40.	61.	56.	.....	.....
Iron	0.5	0.3	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C.	700	175	400	120	300	75	660	35
Bacteria per c.c. 37° C.	78	10	14	4	55	45	83	6
Red Colonies per c.c.	2	0	0	1	3	0	6	0
B.Coli(presump.) in 1 c.c.	10	1	1	.2	1	1	10	.4

BRIDGETON: The final output from the Bridgeton water plant has always been good, although there are defects which should be remedied. The main troubles have been in regard to washing the filters. The beds do not break up evenly, and the wash water is not conducted away fast enough to prevent backing up over the beds. Wash troughs are also needed, as the water in travelling so far allows too much mud to settle back on the sand. All this prevents satisfactory washing and mud rapidly accumulates on the filters. The water department has been advised to employ an expert to put the filters in such condition that they can be properly operated.

The old hypochlorite plant has been replaced by a liquid chlorine apparatus, which has been giving very satisfactory results. At times in the

summer when the upper intake is used, strong tastes and odors appear in the water. These seem to be wholly due to the organic matter dissolved from the swamps and bogs, and not to algae. A change to the lower intake usually remedies the trouble, as the long storage in the lake between the upper and lower intakes is thus utilized.

BURLINGTON: This plant is without any serious defects and generally produces very satisfactory results. There is need, however, of a calibrated orifice box with which to feed the hypochlorite solution, as at present the head on the feed valve varies from 0 to 26 inches, which gives a variation in dose of as much as two tenths of a part per million of available chlorine.

BURLINGTON WATER DEPARTMENT.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Dec. 9, 1913.		Mch. 4, 1914.		June 3, 1914.		Sept. 9, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	25	0	10	0	25	0	30	0
Turbidity	40	0	10	0	5	0	10	0
Free Ammonia	.056	.046	.128	.148	.....	.....	.036	.014
Alb. Ammonia	.062	.028	.104	.062	.....	.....	.080	.038
Nitrites	.002	.001	.006	.004	.004	.001	.005	.001
Nitrates	.16	.24	.32	.48	.20	.16	.12	.16
Chlorine	3.0	3.5	5.0	4.5	3.0	3.5	4.5	4.5
Alkalinity	25.	16.	28.	21.	33.	24.	34.	30.
Iron	.....	.....	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C	3550	15	2150	36	600	30	475	11
Bacteria per c.c. 37° C	850	2	165	13	24	2	.....	.....
Red Colonies per c.c.	65	0	78	0	7	0	.....	.....
B.Coli (presump.) in 1 c.c.	10	1	10	0	10	0	1	.2

ELIZABETH: The hypochlorite disinfection plant which treats that part of the supply furnished by the Elizabeth River, has been doing as good work as could be expected of it, but it is not adequate at all times to treat water of such a character as that obtained from the Elizabeth River. This supply is soon to be abandoned.

ELIZABETHTOWN WATER CO.

BACTERIOLOGICAL RESULTS.

WATER ANALYSES.	Nov. 10, 1913.		Dec. 3, 1913.		Jan. 13, 1914.		Feb. 3, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Bacteria per c.c. 20° C	3750	1920	9800	235	14500	90	50000	60000
Bacteria per c.c. 37° C	1250	308	775	130	155	110	1500	210
Red Colonies per c.c.	27	0	6	0	0	0	30	0
B. Coli(presump.)in 1 c.c.	10	.5	10	.2	1	.1	10	.1

WATER ANALYSES.	Mch. 9, 1914.		April 7, 1914.		May 5, 1914.		July 22, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Bacteria per c.c. 20° C	30000	45	2600	800	2450	235	120	.....
Bacteria per c.c. 37° C	405	80	88	100	115	115	35	310
Red Colonies per c.c.	11	0	0	0	0	0	0	0
B. Coli(presump.)in 1 c.c.	1	0	1	.2	0	0	0	.1

ELIZABETHTOWN WATER CO. (continued).

WATER ANALYSES.	Aug. 25, 1914.		Sept. 15, 1914.		Oct. 9, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Bacteria per c.c. 20° C.	3650	.....	200	960	650	150
Bacteria per c.c. 37° C.	80	210	280	420	78	95
Red Colonies per c.c.	1	50	60	0	1	2
B. Coli (presump.) in 1 c.c.	0	.1	1	1	10	.4

CHEMICAL RESULTS.

DETERMINATIONS.	Nov. 10, 1913.	Dec. 3, 1913.	Jan. 13, 1914.	Feb. 3, 1914.	Mch 9, 1914.	Apr. 7, 1914.	May 5, 1914.	July 22, 1914.	Oct. 9, 1914.
Color.	10	40	10	10	40	30	50	35	40
Turbidity.	30	30	50	110	35	20	30	10	20
Free Ammonia.	.512	.468	ppt.	.570	ppt.	ppt.	.212	.044	.066
Alb. Ammonia.	.128	.152	.118	.148	.204	.128	.220	.194	.234
Nitrites.	.130	.060	.025	.015	.001	.030	.060	.120	.032
Nitrates.	1.80	1.40	2.80	.76	1.20	2.00	2.40	1.20	.56
Chlorine.	21.5	22.0	16.5	11.5	17.0	15.0	14.5	32.0	26.0
Alkalinity.	88.	85.	62.	31.	44.	54.	63.	.....	.....
Iron.	.....	.....	0.7	.....	.....	.....	.....	.....	.....

HALEDON: The slow sand filter plant at Haledon, which is only used during the summer months, has been giving satisfactory results this year.

HALEDON WATER DEP'T.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Dec. 1, 1913		Apr. 6, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.
Color.	35	30	25	20
Turbidity.	5	0	0	0
Free Ammonia.	.036	.030	.048	.052
Alb. Ammonia.	.100	.048	.082	.066
Nitrites.	002	.001	.001	.009
Nitrates.	.20	.20	0.36	0.36
Chlorine.	4.5	3.5	3.0	3.0
Alkalinity.	24.0	25.0	11.0	11.0
Iron.	.....	.....	.....	.....
Bacteria per c.c. 20° C.	1275	13	160	270
Bacteria per c.c. 37° C.	91	10	27	45
Red Colonies per c.c.	1	0	0	0
B. Coli (presump.) in 1 c.c.	10	0	0	0

WATER ANALYSES.	June 15, 1914.		Aug. 3, 1914.		Nov. 4, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color.	40	20	.....	.....	20	0
Turbidity.	5	0	.....	.....	10	0
Free Ammonia.	.086	.024	.....	.....	.080	.018
Alb. Ammonia.	.126	.052	.....	.....	.122	.062
Nitrites	.004	0	.....	.....	.001	0
Nitrates	.16	.16	.....	.....	.04	.08
Chlorine	3.0	3.0	.....	.....	5.0	5.0
Alkalinity.	38.0	38.0	.....	.....	.....	.....
Iron	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C.	115	4	475	9	235	6
Bacteria per c.c. 37° C.	13	2	58	2	4	1
Red Colonies per c.c.	0	0	3	0	0	0
B. Coli (presump.) in 1 c.c.	1	0	10	.2	1	0

LAMBERTVILLE: The improvements that have been advised by the Board have not as yet been carried out, and as a consequence the Lambertville filters do not always give satisfactory results. On account of excessively dry weather during this autumn, it became necessary to pump canal water to augment the supply. A temporary hypochlorite outfit was installed on October 28, giving the water a dose of 0.6 parts per million of available chlorine.

LAMBERTVILLE WATER CO.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Oct. 3, 1913.		Jan. 21, 1914.		April 1, 1914.		July 14, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	30	0	.....	.....	25	15	35	5
Turbidity	100	0	.....	.....	15	5	5	0
Free Ammonia	.134	.022	.066	.024	.038	.028	.064	.042
Alb. Ammonia	.192	.076	.082	.040	.094	.058	.128	.052
Nitrites	.001	.001	.003	001	.002	.001	.001	.001
Nitrates	.08	0	.16	.20	.12	.16	0	.04
Chlorine	2.5	2.5	4.0	4.0	2.5	2.5	3.0	3.0
Alkalinity	22.0	41.0	35.0	34.0	13.0	18.0	.....	.....
Iron	.....	.....	.6	0	.....	.....	.....	.....
Bacteria per c.c. 20° C	29250	435	1700	40	750	250	675	52
Bacteria per c.c. 37° C	3250	22	115	30	75	45	22	8
Red Colonies per c.c.	290	3	1	0	0	0	.3	0
B. Coli (presump.)in 1 c.c	100	1	1	.2	10	1	1	.2

LONG BRANCH: West End Plant.—New alum solution tanks and a calibrated orifice box for feeding the solution have been installed and the results obtained from the routine tests have been very satisfactory.

Newman Springs Station.—Concrete solution tanks for furnishing lime and alum to the water at the upper reservoir have been constructed, and an automatic stirring device, operated by a small water motor and a constant head orifice feed box have been installed in the filter plant.

The filters, however, are in poor condition. It is impossible to wash them clean, as the wash water cannot be removed fast enough. After washing the filters, a thick layer of dirt is visible over a considerable portion of the coke, a layer of which is over the sand, which was originally placed to prevent clogging from excessive growths of algæ. As regular treatment with copper sulphate is now employed, the troubles from algæ do not occur. The filters are, however, in need of a thorough overhauling, including repairs to strainer systems and wash water gutters, so that the beds can be properly washed.

MILLVILLE: Repeated instructions have been sent to the Millville Water Company to put the plant in a workable condition, but up to date little, if anything, has been done. The filters are in bad condition, a coagulation basin is greatly needed, and a reliable disinfection apparatus should be installed.

TINTERN MANOR WATER CO.

WEST END PLANT.

WATER ANALYSES.	Nov. 18, 1913.		April 15, 1914.		Oct. 22, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	10	0	5	0	35	0
Turbidity	10	0	15	0	5	0
Free Ammonia	.062	.036	.032	.026	.106	.066
Alb. Ammonia	.060	.024	.048	.024	.086	.024
Nitrites	.003	.003	.002	.001	.006	.004
Nitrates	.20	.16	.16	.16	.12	0.12
Chlorine	7.5	7.5	8.0	8.0	9.5	9.5
Alkalinity	13.	8.	14.	8.	24.	13.
Iron	1.2	0	.....	.....	1.6	.....
Bacteria per c.c. 20° C	2700	9	350	5	180	0
Bacteria per c.c. 37° C	750	9	9	0	4	0
Red Colonies per c.c.	24	0	1	0	0	0
B. Coli (presump.) in 1 c.c.	10	0	10	0	10	0

NEWMAN SPRINGS STATION.

WATER ANALYSES.	June 10, 1914.		Sept. 2, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.
Color	0	0	35	0
Turbidity	40	0	20	0
Free Ammonia	.064	.020	.056	.012
Alb. Ammonia	.084	.048	.144	.052
Nitrites	.003	.001	0	0
Nitrates	.12	.08	.04	0
Chlorine	7.0	7.0	7.0	7.0
Alkalinity	26.	24.	31.	25.
Iron	3.8	0.2	0.8	0.2
Bacteria per c.c. 20° C	420	36	365	23
Bacteria per c.c. 37° C	40	0	34	4
Red Colonies per c.c.	0	0	4	0
B. Coli (presump.) in 1 c.c.	1	0	1	.2

The manager has recently stated that the complete rebuilding and enlargement of the plant would positively take place during the coming year. In addition to being rebuilt, the plant should have a trained man to operate it, as the water is at times difficult to treat.

MOORESTOWN: The plant at this place went over from the control of the Moorestown Water Company to that of the city on Jan. 1, 1914, Satisfactory results have generally been obtained. As a further improvement, the method of washing with a reverse current from the pressure main was changed to that by means of a current of water from the clear well supplied by the raw water pump. This avoided stirring up sediment in the pipes and reducing the pressure in town during wash.

During the year 5 wells have been driven and certain other structural changes have been made to convert the works from a surface water plant to a ground water plant. After the water has been aërated it will be passed through the filters for the removal of iron.

MILLVILLE WATER CO.

WATER ANALYSES.	Dec. 17, 1913.		Feb. 10, 1914.		April 23, 1914.		May 28, 1914.		Aug. 11, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	70	60	50	45	60	10	90	55	100	50
Turbidity	0	0	0	0	0	0	.....	.....	0	0
Free Ammonia	.056	.032	.030	.024	.018	.008	.....	.....	.038	.028
Alb. Ammonia	.082	.084	.072	.046	.052	.022	.....	.....	.096	.072
Nitrites	.001	.001	.001	.001	.001	.001	.....	.....	.001	.001
Nitrates	.16	.12	.28	.16	.16	.16	.....	.....	.12	.08
Chlorine	3.5	3.5	3.0	4.5	2.5	3.0	.....	.....	4.0	4.5
Alkalinity	3.0	8.0	0	6.0	0	5.0	1.0	10.0	0	4.0
Iron	0.1	0.7	.....	.....	.....	.....	.....	.....	.....	0.6
Bacteria per c.c. 20° C.	70	42	185	12	110	1	11	9	240	118
Bacteria per c.c. 37° C.	19	11	30	14	38	1	5	1	17	12
Red Colonies per c.c.	.2	1	0	0	0	0	0	0	2	2
B. Coli (presump.) in 1 c.c.	0	.6	1	0	10	0	1	0	1	.2

MOORESTOWN WATER DEP'T.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Jan. 8. 1914.		Feb. 5, 1914.		April 8, 1914.		July 17, 1914.		Sept. 23, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	0	0	0	0	.....	0	30	0	.....	.....
Turbidity	10	0	15	5	.....	0	40	0	.....	.....
Free Ammonia	.056	.046	.052	.048	.....	.050	.098	.048	.....	.....
Alb. Ammonia	.030	.028	.046	.032	.....	.030	.140	.052	.....	.....
Nitrites	.004	.001	.003	.002	.....	.001	.007	.003	.....	.....
Nitrates	1.40	1.40	.88	1.20	.....	1.12	1.60	1.40	.....	.....
Chlorine	7.5	8.5	8.5	10.0	.....	9.0	8.0	8.0	.....	.....
Alkalinity	4.0	5.0	5.0	7.0	.....	3.0	6.0	7.0	.....	.....
Iron	.6	0	1.0	0.6	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C.	515	1	175	1	665	10	5650	168	925	3
Bacteria per c.c. 37° C.	78	5	31	3	12	3	600	2	36	2
Red Colonies per c.c.	0	0	1	0	0	0	75	0	5	0
B. Coli (presump.) in 1 c.c.	1	0	0	0	1	0	10	0	10	0

MOUNT HOLLY: This plant always causes more or less concern. It is in need of a cogulation basin of ample size and at a proper elevation. Several other improvements could be installed to advantage, including a better system for carrying away the dirty wash water. A trained man should be provided to watch the plant and condition of the raw water constantly, as at times the creek water is hard to filter. Someone is needed on the ground to determine what to do when the chemicals refuse to act and little or no purification is accomplished. The State supervising force cannot determine this for the Company, mainly because the conditions often change so quickly that one has not time to arrange to go to Mount Holly to experiment. Instructions and advice have been transmitted to the president of the water company in regard to the necessities of the case, and it is claimed that the recommendations are being carried out. The point of application of the hypochlorite has been changed from the raw water to the clear water, and on account of complaints about red water, an aërating device was advised to be installed at the distributing reservoir. Unfortunately, only one test for carbon dioxide has been made at the aërator, but at that time it was found that only three parts per million were being left in the water. If this degree of removal continues, it will be a great benefit, because the water leaving the filter often contains 15 or more parts per million of free carbon dioxide.

MOUNT HOLLY WATER CO.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Nov. 5, 1913.		Feb. 9, 1914.		May 6, 1914.		Aug. 6, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	70	0	.....	.....	100	10	140	0
Turbidity	25	0	.....	.....	0	0	5	0
Free Ammonia	.084	.058	.....	.....	.030	.026	.028	.022
Alb. Ammonia	.106	.052	.....	.....	.090	.060	.098	.024
Nitrites	.001	.001	.....	.....	0	.001	.001	0
Nitrates	.04	0	.....	.....	.04	.04	.16	.04
Chlorine	4.0	4.0	.....	.....	3.0	4.0	3.5	4.0
Alkalinity	4.0	10.	.....	.....	0	9.0	3.0	10.
Iron	.8	.1	.....	.....	.....	.....	3.0	.1
Bacteria per c.c. 20° C	400	17	360	22	1650	80	410	0
Bacteria per c.c. 37° C	74	4	39	4	65	4	40	0
Red Colonies per c.c	4	0	1	0	7	0	13	0
B. Coli (presump.)in 1 c.c.	10	0	0	0	10	.1	1	0

NEPTUNE TOWNSHIP: Monmouth County Water Company.—Several improvements have been made at this plant during the past year. The three mechanical filters have been overhauled, the sides and bottoms lined with concrete and new manifold collecting system installed. This was done so that the treated water would all pass through the sand beds, instead of flowing along the sides of the filters, which accounts for the presence of aluminum hydrate passing through pressure filters in many cases.

MONMOUTH COUNTY WATER CO.

ASBURY PARK.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Nov. 11, 1913.		Mch. 12, 1914.		May 21, 1914.		Sept. 17, 1914.		Aug. 10, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	70	0	5	0	70	0	50	0	60	0
Turbidity	5	0	50	0	20	0	20	0	10	0
Free Ammonia	.036	.040	.042	.050	.024	.026	.078	.054	.026	.038
Alb. Ammonia	.084	.042	.066	.060	.088	.048	.134	.028	.080	.018
Nitrites	.001	.001	.001	.001	.002	.002	.002	.002	.001	.001
Nitrates	.12	.08	.20	.16	.12	.08	.04.	0	.08	.08
Chlorine	7.5	8.5	7.0	7.5	7.5	7.5	7.5	5.0	8.5	8.5
Alkalinity	acid.	14.	acid.	31.	acid.	21.	0	40.0	acid.	3.0
Iron	0.7	0.2	0.5	0	.....	.....	0.9	0	1.8	.1
Bacteria per c.c. 20° C.	800	78	135	14	475	130	260	.....	1500	450
Bacteria per c.c. 37° C.	78	7	3	3	290	26	25	1	55	7
Red Colonies per c.c.	1	0	0	0	0	0	1	0	14	0
B. Coli (presump.) in 1 c.c.	10	1	0	0	1	.2	0	0	1	.1

NEW BRUNSWICK WATER DEP'T.

WATER ANALYSES.	Nov. 20, 1913.		Dec. 11, 1913.		Jan. 9, 1914.		Mch. 5, 1914.		May 4, 1914.		June 17, 1914.		July 28, 1914.		Sept. 11, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Color	.....	50	.....	0	.....	10	.....	30	.....	40	.....	90	.....	100	.....	110
Turbidity	.....	5	.....	5	.....	10	.....	10	.....	0	.....	5	.....	5	.....	5
Free Ammonia	.....	.048	.....	.072	.....	.048	.....	.088	.....	.040	.....	.044	.....	.048	.....	.122
Alb. Ammonia	.....	.094	.....	.066	.....	.072	.....	.052	.....	.114	.....	.140	.....	.124	.....	.124
Nitrites	.....	.001	.....	0	.....	.001	.....	.001	.....	.001	.....	0	.....	.001	.....	.001
Nitrates	.....	.16	.....	.20	.....	.28	.....	.32	.....	.16	.....	0.20	.....	.08	.....	.04
Chlorine	.....	6.0	.....	6.0	.....	6.0	.....	5.5	.....	3.5	.....	4.5	.....	5.0	.....	6.0
Alkalinity	.....	4.0	.....	4.0	.....	2.0	.....	9.0	.....	3.0	.....	.....	.....	.....	.....	.....
Iron	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C.	2800	135	850	40	1775	125	670	36	165	140	70	525	260	34	115	18
Bacteria per c.c. 37° C.	410	58	450	52	250	133	49	30	65	59	11	17	18	9	16	14
Red Colonies per c.c.	44	0	18	0	20	0	5	0	0	0	0	0	4	0	0	0
B. Coli (presump.) in 1 c.c.	100	.6	10	.2	10	.2	1	0	1	.4	0	0	10	0	0	0

The use of soda ash has been abandoned and lime is now being used to supply the required alkalinity. Four concrete solution tanks have been constructed, with automatic stirring devices and constant head orifice feed boxes. These tanks are used for lime only, and a uniform solution of milk of lime is always obtained, as the stirrers are always in operation.

The supply has been increased by the completion of a new driven well, 1085 ft. deep. The well is pumped with a new 800,000 gallons per day Worthington centrifugal pump, which is operated by a Fairbanks-Morse 17 H. P. gas engine.

The order of the application of the coagulants to the water from Jumping Brook has been reversed. The aluminum sulphate is applied to the raw water first, and then lime solution is added to the acid water. The lime solution from two of the solution tanks supplies the alkalinity required by the water from Jumping Brook, while that from the other two is used in precipitating the iron in the well water. A new preliminary coagulating basin is being built, and will be employed in conjunction with the large one now in use.

NEW BRUNSWICK: The old hypochlorite disinfection plant which had been shown to be incapable of treating the water supply of New Brunswick in a satisfactory manner, has been held in reserve and a liquid chlorine disinfection apparatus has been installed. The results obtained with liquid chlorine, using a dose of 0.6 parts per million have been far more satisfactory. Arrangements have been made with Prof. R. O. Smith, of Rutgers College, whereby this office will receive the results of weekly tests made by him on the bacterial efficiency of the disinfection.

Due to the drouth experienced during the latter part of the summer, the water supply was at one time in a very critical condition. The authorities were prepared to meet the emergency by having two liquid chlorine disinfection plants connected to pumps situated in the manufacturing plant of Johnson & Johnson. These pumps were to pump raw water from either the Raritan River or the feeder of the Delaware and Raritan Canal. Due to the restrictions placed upon the consumption of the city water it was not necessary to use the water from the river or feeder as a sufficient amount was obtained from the filtration plant of the Johnson & Johnson Company.

RAHWAY: City Water Department.—Although a new calibrated orifice feed box for the hypochlorite solution had been installed during the latter part of the previous fiscal year, the rate of application of the chemicals has been far from constant.

The inspection seem to indicate that better attention should be paid to the dosing apparatus to insure a more reliable application to the water to be treated. Several much needed improvements are well under way. These include a coagulation basin, a chemical house and a clear water well.

RAHWAY WATER DEPARTMENT.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Nov. 24, 1913.		Dec. 10, 1913.		Jan. 5, 1914.		Feb. 2, 1914.		Mch. 17, 1914.		April 21, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	0	0	50	0	0	0	10	0	25	0	30	0
Turbidity	5	5	15	0	70	5	90	10	90	0	5	0
Free Ammonia	.022	.026	.056	.054	.120	.118	.114	.128	.132	.140	.038	.028
Alb. Ammonia	.098	.056	.110	.062	.094	.040	.128	.054	.094	.030	.090	.040
Nitrites	.006	.001	.007	0	.003	.001	.005	.003	.004	.001	.007	.001
Nitrates	.20	.24	.32	.44	.44	.40	.36	.40	.36	.32	.20	.20
Chlorine	8.5	10.0	8.5	9.0	5.5	6.5	5.5	6.0	3.5	5.0	7.5	7.5
Alkalinity	64.0	58.0	59.	51.0	25.0	10.0	22.0	10.0	15.0	9.0	50.0	43.0
Iron	.3	.1	.5	.1	.6	0	1.0	0.2	0.7	0.1	.....	.....
Bacteria per c.c. 20° C.	490	10	7250	9	9500	14	19500	47	22000	3	700	30
Bacteria per c.c. 37° C.	100	15	800	9	1650	15	1250	55	445	3	46	5
Red Colonies per c.c.	4	0	12	0	50	0	17	0	33	0	0	0
B. Coli (presump.) in 1 c.c.	1	0	10	0	100	.2	10	0	10	0	1	0

WATER ANALYSES.	May 22, 1914.		July 13, 1914.		Aug. 14, 1914.		Sept. 16, 1914.		Oct. 21, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	40	0	40	10	.....	.....	20	0	.....	.....
Turbidity	10	0	10	0	.....	.....	10	0	.....	.....
Free Ammonia	.030	.022	.040	.020	.....	.....	.074	.024	.....	.....
Alb. Ammonia	.098	.048	.130	.070	.....	.....	.088	.042	.....	.....
Nitrites	.006	.001	.014	.002	.....	.....	.004	.001	.....	.....
Nitrates	.08	.08	.20	.20	.....	.....	.08	.04	.....	.....
Chlorine	7.0	7.5	7.0	7.0	.....	.....	7.5	7.5	.....	.....
Alkalinity	65.0	58.0	60.0	48.0	.....	.....	80.0	75.0	.....	.....
Iron	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C.	1150	16	1250	90	3450	285	825	40	1850	75
Bacteria per c.c. 37° C.	.....	245	78	4	75	2	54	3	53	1
Red Colonies per c.c.	.....	0	17	0	16	0	11	0	10	0
B. Coli (presump.) in 1 c.c.	10	.3	10	.1	10	.1	100	0	10	.1

RAHWAY: Middlesex Water Company.—This plant is carefully managed and gives good results. The supply has to be watched for the appearance of microscopic organisms, the one usually giving trouble being Asterionella. In May, during a time when the engineer in charge was sick, the organism made its appearance in such great numbers that the filters clogged up very quickly. By the use of copper sulphate the organism was eliminated and no further trouble was experienced.

RAHWAY.

MIDDLESEX WATER CO.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Dec. 10, 1913.		Mch. 30, 1914.		June 9, 1914.		Sept. 16, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	35	0	20	0	45	40	45	15
Turbidity	5	0	15	0	15	15	15	0
Free Ammonia	.042	.040	.082	.050	.058	.032	.074	.040
Alb. Ammonia	.128	.082	.110	.068	.188	.114	.168	.100
Nitrites	.001	0	.003	.002	.001	.001	0	0
Nitrates	.04	.04	.20	.20	.08	.08	.08	.08
Chlorine	7.0	7.5	3.5	4.0	4.5	4.5	5.5	5.5
Alkalinity	29.	17.	11.	5.	31.	26.	63.	55.
Iron	0.2	0.1	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C	27	19	2850	200	170	275	65	39
Bacteria per c.c. 37° C	80	7	93	10	36	25	45	4
Red Colonies per c.c.	0	0	5	1	0	0	0	0
B.Coli(presump.) in 1 c.c.	1	0	10	0	0	0	0	0

RARITAN: Somerville Water Company.—A hypochlorite disinfection plant has been installed, and tests have shown that the solution is applied at a uniform rate. The solution is fed directly to the raw water, just previous to the introduction of the alum solution in the suction line.

The hypochlorite apparatus is very inconveniently located, and involves the use of a very long transmission pipe which is located along an inaccessible route. Should it become stopped up or eaten out by corrosion, considerable material and time will be needed to get the disinfection again working. The need for alum solution tanks and a calibrated orifice feed box has been apparent for some time, as at present, with the apparatus on hand, it is impossible to obtain a uniform dose of alum.

RARITAN.

SOMERVILLE WATER CO.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Nov. 6, 1913.		Feb. 4, 1914.		May 20, 1914.		Aug. 5, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	0	0	0	0	30	0	25	5
Turbidity	15	0	30	0	20	0	30	0
Free Ammonia	.048	.030	.028	.038	.048	.036	.040	.014
Alb. Ammonia	.076	.048	.068	.038	.064	.050	.080	.054
Nitrites	.002	.002	.002	0	.005	.002	.002	.001
Nitrates	.28	.28	.40	.60	.20	.16	.04	.04
Chlorine	4.0	4.0	3.5	3.5	3.0	3.5	3.5	4.0
Alkalinity	39.	31.	33.	12.0	36.	29.	47.	38.
Iron	0.1	0	0.6	0.2	0.7	0.1	.....	.....
Bacteria per c.c. 20° C	340	0	2100	3	1850	68	500	44
Bacteria per c.c. 37° C	103	1	145	2	95	9	70	12
Red Colonies per c.c.	0	0	10	0	3	0	5	1
B. Coli (presump.)in 1 c.c	1	0	10	0	100	.3	1	0

ROEBLING: The Roebling filtration plant has a difficult and dangerous water to handle, as the Delaware River at this point shows the evil effects of the daily output by Trenton of over 20 million gallons of raw sewage.

The output of the plant being unsatisfactory at times, a conference between representatives of the John A. Roebling's Sons Company, the State Board of Health and the Norwood Engineering Company was held. An agreement was reached whereby the Norwood Engineering Company which had originally designed and installed the plant, was to make some changes in it which would increase its efficiency.

Among the improvements made were: means for measuring the raw water, new valves, concrete solution tanks, baffles in clear well so that the hypochlorite could be applied to the filtered water, provision for rewash, gauges to measure loss of head and filtered water. The strainer and air systems were thoroughly cleaned and repaired, the rate controllers were overhauled, and other improvements of a minor character were made. Since then the results have shown a marked improvement and have been quite satisfactory.

SKILLMAN: State Village for Epileptics.—In July, 1914, a new permanent hypochlorite apparatus was installed to take the place of the old emergency outfit, which had been doing service for two or three years. The disinfection seems to be satisfactory. In some respects the installation is faulty, as it would have been much better to have added the solution to the clear water instead of to the coagulated water, as was done at the time of the quick installation of the emergency outfit, when there was no time to do otherwise. The excessive velocity around the number of elbows, caused by the relative locations of coagulation tanks, hypochlorite feed regulator and filters, so breaks up the flock of the coagulation that good operation of the filters is difficult.

The supply at Skillman is a combination of filtered surface and deep well waters. The well water is very hard and has to be mixed with the surface water to make it usable. When the drouth came on the pond almost failed entirely and an enormous growth of Pectinatella made its appearance. As stated elsewhere, when the pond was empty it should have been thoroughly cleaned, but unfortunately funds were not available for the purpose. Unless some process of thorugh cleaning is employed trouble may be experienced next year with the growths of Pectinatella. This organism grows in such large, gelatinous masses that it is doubtful that it should be killed in the water, for fear of an intolerable stench upon its decomposition. For that reason the bodily removal of all that could be found was advised. At that time the masses were on almost every stick, stump and stone in the pond and they were discharging millions of tiny winter spores of almost microscopic size. The supply will have to be carefully watched next summer.

ROEBLING—JOHN A. ROEBLING'S SONS CO.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Nov. 26, 1913.		Dec. 18, 1913.		Jan. 14, 1914.		Feb. 11, 1914.		Mch. 6, 1914.		April 14, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	30	0	50	30	10	0	35	0	40	0	50	30
Turbidity	30	0	20	15	20	10	25	0	10	0	20	15
Free Ammonia	.068	.062	.056	.058	.116	.096	.074	.084	.112	.118	.060	.058
Alb. Ammonia	.072	.062	.060	.038	.048	.038	.044	.026	.042	.028	.078	.032
Nitrites	.003	.002	.002	.001	.004	.004	.003	.003	.005	.004	.003	.003
Nitrates	.16	.16	.20	.20	.28	.28	.16	.32	.32	.24	.24	.24
Chlorine	3.5	4.5	6.5	10.0	4.0	4.5	3.5	5.0	5.5	6.0	4.5	6.5
Alkalinity	21.0	19.0	16.0	6.0	28.0	23.0	17.0	3.0	25.0	15.0	13.0	8.0
Iron												
Bacteria per c.c. 20° C.	2450	625	575	8	2950	240	1200	13	765	8	3750	46
Bacteria per c.c. 37° C.	208	49	58	1	120	7	80	2	52	2	20	1
Red Colonies per c.c.	23	6	12	0	32	1	18	0	12	0	4	0
B. Coli (presump.) in 1 c.c.	100	.7	10	0	10	.1	1	0	1	0	10	.1

WATER ANALYSES.	April 20, 1914.		May 11, 1914.		July 8, 1914.		July 21, 1914.		Aug. 4, 1914.	
	Raw.	Filt'd	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color			50	0	40	0				
Turbidity			10	0	15	0				
Free Ammonia			.038	.046	.104	.130				
Alb. Ammonia			.072	.030	.082	.044				
Nitrites			.001	.001	.010	.005				
Nitrates			.04	.08	.20	.28				
Chlorine			3.0	4.0	5.0	8.5				
Alkalinity			18.0	6.0	35.0	25.0				
Iron										
Bacteria per c.c. 20° C.	2600	18	5750	5	1650	123	5250	125	3250	12
Bacteria per c.c. 37° C.	138	2	235	0	88	21	215	4	135	2
Red Colonies per c.c.	61	0	85	0	27	11	50	1	30	0
B. Coli (presump.) in 1 c.c.	100	0	100	0	10	1	100	.6	10	.1

SKILLMAN—N. J. STATE VILLAGE FOR EPILEPTICS.

Results of Chemical Analysis Expressed In Parts Per Million.

WATER ANALYSES.	Nov. 19, 1913.		Dec. 16, 1913.		Jan. 23, 1914.		Mch. 19, 1914.		July 9, 1914.		July 29, 1914.		Sept. 1, 1914.	
	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.	Raw.	Filt'd.
Color	0	0	0	0	10	0	0	0	40	0	.....	.....	.....	.....
Turbidity	5	0	0	0	130	15	10	0	30	0	.....	.....	.....	.....
Free Ammonia	.060	.018	.036	.022	.060	.026	.024	.046	.082	.060	.....	.....	.....	.....
Alb. Ammonia	.080	.035	.072	.026	.124	.030	.066	.034	.154	.068	.....	.....	.....	.....
Nitrites	.002	.001	.001	0	.004	.002	.001	.001	.003	.001	.....	.....	.....	.....
Nitrates	.20	.32	.08	.16	.16	.28	.16	.28	.12	.12	.....	.....	.....	.....
Chlorine	4.5	5.5	4.5	6.0	4.0	7.0	2.5	5.5	5.5	5.5	.....	.....	.....	.....
Alkalinity	15.0	30	24.0	31.0	16.0	49.0	9.0	44.0	.....	45.0	.....	.....	.....	.....
Iron	0.2	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bacteria per c.c. 20° C.	2250	58	500	8	38500	405	6500	10	700	17	260	335	2800	245
Bacteria per c.c. 37° C.	530	15	32	0	1750	44	90	6	115	2	40	1	95	34
Red Colonies per c.c.	7	1	1	0	3	0	6	0	25	0	0	0	4	0
B. Coli (presump.) in 1 c.c.	10	.1	1	0	100	0	1	0	10	0	0	0	1	0

WOODBURY: The water supply for Woodbury is derived from a watershed rather sparsely inhabited, although subject to considerable pollution from roads, fields, pastures and summer resorts. The hypochlorite disinfection apparatus has been doing good work with a dose of from 0.2 to 0.3 part per million available chlorine.

In response to public opinion in Woodbury in favor of deep wells, a set of wells has been driven and the supply will probably be changed from surface to ground during the coming year.

WOODBURY WATER DEPARTMENT.

WATER ANALYSES.	Nov. 3, 1913.		Dec. 15, 1913.		Jan. 22, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Bacteria per c.c. 20° C.	600	122	565	43	1100	85
Bacteria per c.c. 37° C.	43	14	73	24	225	69
Red Colonies per c.c.	11	1	4	0	1	0
B. Coli (presump.) in 1 c.c.	10	.1	1	.1	1	0

WATER ANALYSES.	Feb. 18, 1914.		Mch. 18, 1914.		April 16, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Bacteria per c.c. 20° C.	2825	75	10500	500	1150	29
Bacteria per c.c. 37° C.	85	60	385	260	6	5
Red Colonies per c.c.	7	2	6	0	0	0
B. Coli (presump.) in 1 c.c.	1	0	10	.3	10	.1

WATER ANALYSES.	May 15, 1914.		July 16, 1914.		Sept. 14, 1914.		Oct. 8, 1914.	
	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.	Raw.	Treat'd.
Bacteria per c.c. 20° C.	2250	138	750	1150	120	36	2775	260
Bacteria per c.c. 37° C.	15	16	285	555	45	29	14	9
Red Colonies per c.c.	0	0	.....	10	9	4	3	1
B.Coli (resump.) in 1 c.c.	0	.1	0	.4	1	.1	10	1

BOTTLED WATERS SOLD IN THE STATE OF NEW JERSEY: During the past year all the bottled water supplies of this State have been inspected. All plants have been visited, the methods used and the general sanitary conditions of the establishment observed, and a sample collected from each for analysis.

There are at present thirty-five brands of bottled waters offered for sale in this State. The proprietors of these supplies have all received permission from the State Board of Health to sell the water. Permission has been given during the past year to market the following brands: Ariston Distilled Water, Chemung Spring Water and Crystal Spring Water.

A description of the sources and the methods used in bottling and handling the supplies may be found in the following table:

BOTTLED WATERS SOLD IN NEW JERSEY.

TABLE GIVING NAME, LOCATION AND SANITARY CONDITION OF BOTTLED WATER SUPPLIES FOR FISCAL YEAR ENDING OCTOBER 31, 1914.

BRAND.	Source, and Description of Source.	Washing Facilities.	Bottling Facilities.
Alpha Spring Water	Spring, with concrete basin 5 ft. diam., 3 ft. deep, covered.	Iron vat, hot water, hand washing.	Tap piped direct to spring.
Ariston Distilled Water.	N. Y. City supply, distilled.	Wooden vat, hot water, washing machine.	Automatic filler connected to tight storage tank.
Art-dist-pure Water.	Driven well, 6 in. by 110 ft. Water distilled.	Hot water, hand washing.	Tap from open storage tank.
Artois Table Water.	Artesian well, 3 in. by 113 ft.	Wooden vats, hot water, washing machine.	Automatic filling machine attached to flowing well.
Belmar Spring Water.	Spring, concrete basin 4 ft. diam. by 2½ ft. deep, covered.	Wooden vats, hot water, washing machine.	Pumped direct from spring to four filling taps.
Century Spring Water.	Spring with 2 ft. tile pipe used as basin. Covered.	Hot water, hand washing.	Tap piped direct to spring.
Chemung Spring Water.*	Spring, concrete basin lined with white tile. Covered.	Wooden vats, hot water, washing machines.	Automatic filling machines. Tap to pressure storage tank.
Cold Indian Spring Water.	Spring, concrete basin, 2x2x4 ft. covered.	Wooden vats, hot water, washing machines.	Pumped from spring to tight porcelain lined tank, bottled from automatic filling machine.
Crystal Spring Water	Two driven wells, 1½ in. by 13 ft. flowing.	Cold water, sterilizer.	Pumped from well direct to filling tap.
Crystal Spring Water**	Concealed spring, pipe driven into mountain side.	Wooden vats, hot water, washing machine.	Water flows through glass conveyor direct to the bottling house. Automatic filling machine used.
Culm Rock Spring Water.	Spring masoned basin, 6x6x4 ft., covered.	Wooden vats, hot water, washing machine.	Water flows through 2 in. pipe direct to filling taps.
Echo Spring Water.	Spring concrete basin, 8x10x6 ft., covered.	Hot water, hand washing.	Hand pump to small filling tank.
Englewood Hygeia Water	Driven well, 6 in. x 360 ft. Water distilled.	Wooden vats, hot water, hand washing.	Tap from 2 in. pipe, rubber connections to bottles.
Great Bear Spring Water.***	Springs, concrete basins, covered.	Wooden vats, hot water, washing machines—sterilizers.	Automatic filling machines, attached to pressure storage tank.
Great Rock Spring Water****	Spring, masoned basin, 3x10x3 ft. covered.	Hot water, hand washing.	Hand pumped, filled from tap on pump.
Grey Rock Artesian Water.	Driven well, 8 in. x 147 ft.	Wooden vats, hot water, hand washing.	Pumped direct from well to storage tank with filling taps.
Home Brand Water.	Driven well, 6 in. x 125 ft.	Cold water, hand washing.	Pumped direct from well through 2 in. pipe. Tap on pipe.
Indian Lady Hill Spring Water.	Springs, through underground collecting drain to storage basin.	Wooden vats, hot water, machine washing.	Pumped from collecting basin to storage tank, automatic filling machine attached.

BOTTLED WATERS SOLD IN NEW JERSEY—(*Continued*).

BRAND.	Source, and Description of Source.	Washing Facilities.	Bottling Facilities.
Indian Spring Water.	Spring, concrete basin 6x6x4 ft., covered.	Hot water, hand washing.	From tap pipe direct to spring.
Ironrock Mineral Spring Water.	Two springs, masoned stone basins, 5x5x3 ft. covered.	Wooden vat, hot water, hand washing.	Pumped from spring to two covered storage tanks.
Kalium Spring Water.	Spring, concrete basin, 3x3x3 ft., covered.	Hot water, hand washing.	Filled with dipper.
Kanouse Mountain Spring Water.	Spring, concrete basin, 25 ft. diam., 4 ft. deep.	Wooden vats, soaking machines, hot water, machine washing.	Piped direct from spring to automatic filler.
Keystone Spring Water.	Driven well, 1¼ in. x 16 ft.	Wooden vats, hot water, hand washing.	Pumped from well to porcelain lined storage tank with filling taps.
Mountainside Spring Water.	Spring, concrete basin,10x12x6 ft.	Wooden vat, hot water, hand washing.	Pumped from spring to storage tank with filling taps.
Paradise Spring Water.	Spring, 2 ft. tile pipe as basin	Cold water, rinsing.	Tap piped direct to spring.
Pilgrim Spring Water.	Spring, masoned basin, 6x6x5 ft.	Wooden vats, hot water, machine washing.	Pumped from spring to cement storage tank with filling taps.
Polar Spring Water.	Spring, masoned basin, 2x2 ft. by 18 in.	Wooden vat, hot water hand washing.	Pumped from spring to metal storage tank with filling taps.
(Unnamed).	Dug well, 3½ ft. diam., 35 ft. deep.	Hot water, rinsing.	Pumped from spring to wooden storage tank, filling tap.
Purity Water.	Driven well, 6 in. by 70 ft.	Hot water, hand washing.	Pumped from well to metal filling tank.
Purock Water.	Philadelphia City supply, distilled	Sterilizer, hot water, machine washing.	Pumped to pressure storage tank with automatic filling machine connected.
Red Rock Spring Water.	Driven well, 6 in. by 243 ft.	Wooden vats, soaking machines, hot water, machine washing.	Pumped direct from well to filling taps.
Rock Spring Water.	Concealed spring, pipe driven into hillside.	Wooden vat, hot water, hand washing.	Tap piped direct to spring.
Washington Rock Spring Water.	Spring, masoned basin 6x9x6 ft., covered.	Wooden vat, hot water, hand washing.	Tap piped direct to spring.
Watchung Spring Water.	Five springs with masoned basins, covered.	Wooden vats, hot water, machine washing.	Tap piped direct to spring.
White Cap Sparkling Water.	Driven well, 6 in. by 200 ft., water distilled.	Wooden vat, hot water, machine washing.	Pumped to storage tank gravity. to filling tank.

BOTTLED WATERS SOLD IN NEW JERSEY—(*Continued*).

BRAND.	Method of Filtration.	Floor and Drainage	Location of Source.	Proprietor and P. O. Address.
Alpha Spring Water.	None.	Earth floor no drainage.	Springfield, N. J.	Alpha Spring Water Co., Newark, N. J.
Ariston Distilled Water.	None.	Concrete floor, drainage to sewers.	New York City, N. Y.	New York Bottling Co., New York City, N. Y.
Art-dist-pure Water.	None.	Concrete floor, no drainage.	Salem, N. J.	Gaynor, Griscom & Ware, Salem, N. J.
Artois Table Water.	None.	Concrete floor, drainage to brook.	Hopewell, N. J.	J. G. Burton, Hopewell, N. J.
Belmar Spring Water.	Five Noxall stone filters for removal of iron.	Concrete floor, drainage to brook.	Glen Rock, N. J.	George E. Mitchell, Boston, Mass.
Century Spring Water.	None.		New Brunswick, N. J.	Wm. A. Phillips, R. F. D., New Brunswick, N. J.
Chemung Spring Water*	20 in. International filter for removal of suspended matter.	Concrete floor, drainage to brook.	Chemung Spring, N. Y.	Chemung Spring Water Company, N. Y. City, E. 24th St.
Cold Indian Spring Water.	20 in. International filter for removal of sand.	Wooden floor, drainage to brook.	Asbury Park, N. J.	Cold Indian Spring Water Co., Asbury Park, N. J.
Crystal Spring Water.	None.	Concrete floor, drainage to creek	Hamilton Township.	W. W. Willey, Trenton, N. J.
Crystal Spring Water**	None.	Concrete floors, drainage to brook.	Ulster Co., N. Y.	Pine Hill Crystal Spring Water Co., New York City, N. Y., 36th St., and 10th Ave.
Culm Rock Spring Water.	None.	Wooden floor, drainage to brook.	Pluckemin, N. J.	Culm Rock Spring Water Company, Somerville, N. J.
Echo Spring Water.	None.	Wooden floor, drainage to brook.	Ewingville, N. J.	J. W. Vernam, Trenton, N. J., R. F. D.
Englewood Hygeia Water.	None.	Concrete floor, drainage to sewers.	Englewood, N. J.	Englewood Hygeia Ice Company, Englewood, N. J.
Great Bear Spring Water***	None.	Concrete floor, drainage to sewer.	Fulton, N. Y.	Great BearSpring Water Company Phil.,Pa., and Jersey City, N. J.
Great Rock Spring Water****	None.	Concrete floor, drainage to brook.	Whippany, N. J.	John Mitchell, Whippany, N. J.
Grey Rock Artesian Water.	Bed of sand in storage tank.	Earth floor, drainage to field.	Ewing Township, N. J.	A. Houghton Ashton, Ewing Twp. N. J., R. F. D., Trenton, N. J.
Home Brand Water.	None.	Concrete floor, drainage to sewers.	Gloucester, N. J.	Henry A. Frey & Co., Gloucester, N. J.
Indian Lady Hill Spring Water.	18 inch International filter for sand removal.	Concrete floor, drainage to brook.	Asbury Park, N. J.	Indian Lady Hill Spring Water Company, Asbury Park, N. J.

BOTTLED WATERS SOLD IN NEW JERSEY—(*Continued*).

BRAND.	Method of Filtration.	Floor and Drainage.	Location of Source.	Proprietor and P. O. Address.
Indian Spring Water	None	Concrete floor, drainage to brook	Rockaway Township, N. J.	Joseph Tuttle, Rockaway, N. J.
Ironrock Mineral Spring Water	Sand filters for iron removal	Wooden floor, drainage to creek	Maple Shade, N. J.	Frank C. Bray, Philadelphia, Pa., Drexel Building
Kalium Spring Water	None	Concrete floor, drainage to creek	Collingswood, N. J.	Isaac Collings, Collingswood, N. J.
Kanouse Mountain Spring Water	20 in. International filter for sand removal	Concrete floor, drainage to brook	Oakland, N. J.	Kanouse Mountain Spring Water N. Y. C., N.Y. Hud. Term. Bldg.
Keystone Spring Water	None	Concrete floor, drainage to sewer	Bucks County, Pa.	Keystone Spring Water Company, Trenton, N. J.
Mountainside Spring Water	Small charcoal and gravel filter	Concrete floor, drainage to brook	Livingston, N. J.	Wm. E. Ashby, Newark, N. J.
Paradise Spring Water	None		Boonton, N. J.	D. L. & W. R. R. Co., New York City, N. Y.
Pilgrim Spring Water	None	Concrete floor, drainage to river	Ridgefield Park, N. J.	Pilgrim Spring Water Company, Ridgefield Park, N. J.
Polar Spring Water	None	Wooden floor, drainage to brooklet	Morrisville, Pa.	Wm. Burgess, Jr., Morrisville, Pa.
(Unnamed)	None	Wooden floor, drainage to sewer	Hamilton Township, N. J.	Wm. S. Potter, Trenton, N. J Tyler St.
Purity Water	None	Wooden floor, drainage to cesspool	Mercerville, N. J.	S. G. Shaw, Mercerville, N. J.
Purock Water	None	Concrete floor, drainage to sewer	Philadelphia, Pa.	Purock Water, Philadelphia, Pa.
Red Rock Spring Water	None	Concrete floor, drainage to open field	Midland Township, N. J.	Red Rock Spring Water Company, Midland Twp., Bergen Co., N. J.
Rock Spring Water	None	Concrete floor, drainage to river	West Orange, N. J.	Rock Spring Water Co., St. Cloud, W. Orange, N. J.
Washington Rock Spring Water		Concrete floor, drainage to brook	Plainfield, N. J.	J. P. Petterflou, Plainfield, N. J.
Watchung Spring Water	None	Concrete floor, drainage to brooklet	Plainfield, N. J.	Watchung Spring Water Company, Plainfield, N. J.
White Cap Sparkling Water	None	Concrete floor, drainage to sewer	Jersey City, N. J.	The W. Bender Co, Jersey City, N. J.

* Chemung Spring Water is conveyed in glass-lined tank cars from springs at Chemung, New York, to bottling plant at Jersey City, New Jersey.

** Crystal Spring Water is bottled at springs, Ulster County, New York, and shipped to New Jersey.

*** Great Bear Spring Water is conveyed in glass-lined tank cars from springs at Fulton, New York, to bottling plant at Jersey City, New Jersey, and Philadelphia, Pa.

****Entire output handled by Charles E. Decker through a chain of grocery stores in the Oranges, Bloomfield and Montclair.

SEWAGE DISPOSAL PLANTS: On October 31, 1914, there were 150 sewage disposal plants in active operation in this State, making a net increase of 20 during the past year. The following is a classification of the sewage disposal plants into 24 general types; but this is only a very rough classification, for the plants placed in any group vary greatly as to operation, design and construction:

	Type of Plant	*Number in Operation*
1.	Sedimentation without any subsequent treatment	36
2.	Sedimentation with filtration through sand	19
3.	Sedimentation with disinfection	18
4.	Sedimentation with sub-surface irrigation or ground absorption	18
5.	Sedimentation with land filtration or broad irrigation	11
6.	Sedimentation with single contact treatment and filtration through sand	10
7.	Sedimentation with single contact treatment	3
8.	Sedimentation with trickling filters without sprinkling distribution	3
9.	Sedimentation with sprinkling filters and final settling	3
10.	Sedimentation with sprinkling filters and filtration through sand	3
11.	Sedimentation with trickling filters without sprinkling distribution and filtration through sand	2
12.	Sedimentation with double contact treatment and filtration through sand	2
13.	Sedimentation with single contact treatment and disinfection	2
14.	Screening with filtration through sand	2
15.	Sedimentation with double contact treatment	1
16.	Sedimentation with double contact treatment and broad irrigation	1
17.	Sedimentation with single contact treatment and trickling filters without sprinkling distribution	1
18.	Sedimentation with single contact treatment and sub-surface irrigation	1
19.	Sedimentation with single contact treatment and land filtration	1
20.	Sedimentation with sprinkling filters and cinder straining	1
21.	Filtration through natural sand beds and disinfection	1
22.	Chemical precipitation with sedimentation and cinder straining	1
23.	Broad irrigation without preliminary sedimentation	1
24.	Plants for the treatment of creamery wastes	9
		150

GENERAL CONDITION OF THE DISPOSAL PLANTS: Considering the 150 sewage disposal plants now in operation as a whole, it should in justice be stated that during the past year there has been a general improvement in their operation and maintenance. This improvement, though slight, is, nevertheless, encouraging, and our continued efforts are beginning to produce results.

Of course there are some glaring exceptions, some disposal plants that have deteriorated decidedly; but, on the whole, conditions are better.

Our representatives are meeting with an increasingly friendly attitude on the part of municipal authorities, superintendents, and sewage plant attendants.

The desirability of having sewage disposal plant attendants registered or licensed by the State Board of Health grows daily more apparent. A

great deal of the trouble encountered in the field is due to the fact that the disposal plant attendant is simply a laborer, a man used to physical work but not accustomed to mental endeavor. Municipal authorities, and those in charge of disposal works, should realize, and eventually must realize, that a sewage disposal plant is a most delicate contrivance, very apt to get out of order, and requiring constant, careful and intelligent attention. To manage properly a plant for the disposal of sewage, a man must at least know the fundamental principles underlying sewage treatment.

To obtain the highest degree of efficiency from a sewage disposal plant, each unit should be tested at frequent intervals from the physical, chemical, and bacteriological standpoint. These tests can only be made by a trained man understanding the processes involved, and having a working knowledge of chemistry and bacteriology. When a trained man is in charge, the increased efficiency and longer life of the various units of the plant will, from a financial standpoint, more than offset the increased maintenance charges due to the manager's salary.

A very good case in point has long been of interest. Of the 150 sewage disposal plants now in operation in this State, but one plant has a trained manager who controls the operation of the plant in all of its details, and who makes daily chemical and bacterial tests of the effluent from the various units. This plant has long been seriously overloaded, and steps are now under way to construct a more modern and much larger disposal works. In the hands of the ordinary sewage plant attendant the plant in question would long ago have become an unbearable nuisance, and the effluent, discharged into the stream, would undoubtedly have been unsatisfactory and would have created trouble farther down. Under the care of this manager, however, there has been no complaint of nuisance at any time, and, considering the excessive overload that the plant has to carry, the purification obtained has been surprising. Other municipalities would do well to profit by this example.

IMHOFF TANKS: It seems advisable at this time to say a word about the construction and operation of Emscher or Imhoff tanks for the clarification of sewage. During the past four years, and particualrly during the last year, the use and popularity of this form of sewage tank has increased greatly. The increase has become so marked that there seems to be a wave of enthusiasm spreading over the country, leading many people to believe that the Imhoff tank is a veritable "cure all" for all sewage disposal problems, and prompting some persons to suggest and attempt the use of this tank for purposes entirely beyond its scope of operation.

We believe that the Imhoff tank, if properly designed, constructed and operated, forms a very valuable means of sewage clarification and that a great many sewage disposal plants the installation of such tanks is advisable. Our observations have shown that, if properly designed and operated, these tanks overcome a great deal of the trouble due to odors, and, to a very great extent, simplify the sludge removal problem.

Observations have shown, however, that the proper operation of these tanks is a considerable problem, and that the cost of keeping them in working order is several times greater than in the case of septic or sedimentation tanks. An Imhoff tank, to be kept in proper condition, should receive several hours' attention daily. The scum in the gas vents must be broken up and kept from forming a layer of considerable thickness, the sides of the sedimentation chambers and the slots may have to be scraped daily, and whatever scum or floating material that appears in the sedimentation chambers must be removed.

In view of the obviously initial cost of this form of clarification tank as compared with the older single story types of tank, we believe that in cases where the disposal works are reasonably far removed from a thickly populated community, so that the odor problem is not serious, it is doubtful whether the Imhoff tank has any material advantage over a properly constructed, well baffled sedimentation tank of the old type.

THE APPLICATION OF SEWAGE TO CONTACT BEDS: Following the practice employed at the sewage disposal plants at Essex Fells and Plainfield, we have given considerable attention during the past year, to the method of applying sewage to contact beds through "scum restricting areas" or cinder strainers. At these plants the tank effluent is applied on the top and at one corner of the contact beds. From a small area at the point of application, from six inches to one foot of the contact material is removed from the top of the beds and the excavation is filled with fine cinders. An embankment about a foot high is constructed of the same material around this area so that all the tank effluent that is applied to the contact beds strains through the cinders. A great deal of suspended matter is thus removed from the tank effluent, and the clogging of the body of the bed is materially reduced with a corresponding increase in the effective life of the contact beds.

With the growing practice of reducing the storage capacity of sedimentation tanks, the value of underfed contact beds is diminishing. With a long period of tank storage, the tank effluent is usually very septic and contains considerable quantities of offensive gases. With a tank effluent of this nature, odors are probably reduced by having contact beds of the underfed type. With the present practice of constructing sedimentation tanks so that the storage period is reduced, the effluent as a rule is not septic, and offensive gases are not present to any great extent. In such a case the overfed contact bed is preferable to the underfed type.

In the overfed type of contact bed we believe that the use of distribution troughs or pipes to distribute the sewage over the surface of the beds is inadvisable. These troughs distribute the clogging suspended material over the whole surface of the beds, and sometimes require considerable cleaning and attention.

The cinder straining areas not only prevent, to a large degree, the clogging of the whole surface and body of the bed, but they serve as

an index of the operation of the sedimentation tanks. The scum accumulating on these areas can be removed from time to time between doses. The rapidity with which the scum forms will serve to indicate to the attendant whether or not the tanks should be cleaned.

The results obtained at Essex Fells and Plainfield have been of such a nature that we have advised a similar application of sewage of the contact beds at other disposal plants,—notably at Ridgewood, Collingswood and Roebling. The results have been entirely satisfactory, and similar changes will be recommended in the future at various other plants.

NEW PLANTS: The following plants have been placed in operation during the past year: Absecon (Sea View Golf Club), Ancora (Camden County Sanatorium), Audubon, Bonnie Burn (Union County Sanatorium), Far Hills (two plants for G. B. Schley), Hackettstown (Lackawanna Leather Company), Hammonton, Helmetta (George W. Helme Company), Hightstown, Hopatcong (Breslin Hotel), Leonia, New Brunswick (Marconi Wireless Station), Oceanic (Estate of Howard L. Borden), Pluckemin (Superior Thread and Yarn Company), Princeton (Princeton University), South Plainfield (Spicer Manufacturing Company), Sunnyside (Lehigh Valley Creamery), Tuckerton (Radio Station), Vineland (State Institution for the Care and Training of Feeble Minded Women), Wildwood Crest.

The disposal plant at Moorestown and the two plants at Wenonah have been remodeled during the past year, and the White City and old college disposal plants at Princeton have been abandoned, the sewage now flowing to the new Princeton University plant.

A description of all these new plants may be found in the current report of the Engineering Division.

SEWAGE DISPOSAL WORKS HAVING SEDIMENTATION WITHOUT ANY SUBSEQUENT TREATMENT: There are at this writing thirty-six plants of this type in operation in this State. For the most part these plants have been found, upon inspection, to be in a fairly satisfactory condition, discharging an effluent free from large particles of sewage matter. During the past two years all of these plants were inspected in the early spring, so that, should the tanks be found to require cleaning, the cleaning could be completed before the summer months.

In cases where cleaning is necessary the local authorities are notified in writing. The results obtained have been very satisfactory, the recommendations being complied with speedily in practically all cases. This has brought about a decided improvement.

The following table will show the number of inspections made on the above disposal works, and the conditions found at each inspection:

SEWAGE DISPOSAL WORKS HAVING SEDIMENTATION WITHOUT ANY SUBSEQUENT TREATMENT.

TABLE SHOWING INSPECTIONS MADE AND CONDITION OF PLANT.

NAME OR LOCATION OF PLANT.	Date of Inspection.	CONDITION OF		REMARKS.
		Tank.	Effluent.	
Allenhurst	March 27, 1914	Fair.	Fair.	Tank required cleaning, and was cleaned after March inspection.
	July 17, 1914	Good.	Good.	
Asbury Park	Dec. 23, 1913	Good.	Good.	Sewage receiving sedimentation.
	Feb. 6, 1914	Poor.	Poor.	Sewage discharged without sedimentation.
	April 7, 1914	.....	Poor.	Sewage discharged without sedimentation.
	May 25, 1914	.....	Poor.	Sewage discharged without sedimentation.
	Aug. 25, 1914	.....	Fair.	Tank placed in service July 28.
	Sept. 2, 1914	Fair.	Fair.	Noticeable odor at plant.
	October 15, 1914	Good.	Good.	Slight odor evident.
Avon	April. 6, 1914	Good.	Good.	Tank was cleaned in December, 1913.
	June 30, 1914	Poor.	Poor.	Outfall pipe to sea was obstructed.
	August 26, 1914	Poor.	Poor.	Tank required removal of collected sludge.
Avon (Kling's Boat House)	April 6, 1914	.....	.....	House was unoccupied and tank was boarded up.
	August 27, 1914	.....	.....	Water prevented inspection.
Beach Haven	March 18, 1914	Good.	Good.	No odor. Effluent well clarified.
	July 31, 1914	Fair.	Fair.	Entire tank used during the summer months.
Belmar	November 25, 1913	Good.	Good.	See supplemental report on page 223.
	April 29, 1914	Good.	Good.	Two compartments being used. Sewage then passing one section without storage.
	August 25, 1914	Poor.	Poor.	
	Aug. 27 & 28, 1914	Poor.	Fair.	
	Sept. 2 & 9, 1914	Fair.	Fair.	
Bradley Beach (Two Tanks)	April 7, 1914	Poor.	Fair.	Both tanks required cleaning
	August 26, 1914	Good.	Good.	Tanks cleaned in April.
Carlstadt	January 26, 1914	Bad.	Bad.	Tanks filled with sludge. Not cleaned as advised.
Deal Beach	April 7, 1914	Good.	Good.	Tank cleaned in November; contained small amount of sludge.
	July 16, 1914	Fair.	Fair.	Considerable amount of sludge at inlet end. Recommended that tank be cleaned.
Delford	March 19, 1914	Good.	Good.	Small amount of sludge in tank.
	July 14, 1914	Fair.	Fair.	Scum boards need repairing.
East Rutherford	January 26, 1914	Fair.	Fair.	2½ feet of sludge at inlet end. Tank required no cleaning at this inspection. Grit Chamber should be installed.
Englewood	April 16, 1914	Fair.	Good.	All sections of tank contain a considerable amount of solids.

SEWAGE DISPOSAL WORKS HAVING SEDIMENTATION WITHOUT ANY SUBSEQUENT TREATMENT—(*Continued*).

NAME OR LOCATION OF PLANT.	Date of Inspection.	CONDITION OF		REMARKS.
		Tank.	Effluent.	
Interlaken	April 7, 1914	Fair.	Fair.	Sewage pumped into Loch Arbour tank.
Loch Arbour	March 27, 1914	.....	.....	Cleaning of tank in progress at inspection.
	July 17, 1914	Good.	Good.	Tank contained small amount of sludge.
Long Branch	January 6, 1914	Fair.	Fair.	Excessive amount of removed sludge stored at plant. This sludge is removed from screens at plant.
	March 20, 1914	Fair.	Fair.	
	July 16, 1914	Fair.	Fair.	
	October 9, 1914	Fair.	Poor.	Portion of sewage being by-passed without any treatment.
Manasquan	March 26, 1914	Poor.	Poor.	Tank contained two feet of scum and three feet of sludge.
	August 29, 1914	Good	Good	Tank cleaned in the spring.
Neptune Township	January 28, 1914	Good.	Good.	
	March 25, 1914	Poor.	Poor.	Unusually high tides raised sewage level in tank.
	July 15, 1914	Fair.	Fair.	Scum boards to be constructed to prevent solid material discharging with effluent.
Ocean Grove (Two Tanks)	March 26, 1914	Good.	Good.	Tanks cleaned in spring.
	July 15, 1914	Good.	Good.	No noticeable particles in effluent. No odor.
Point Pleasant	March 26, 1914	Good.	Good.	Tank was cleaned early part of March.
	July 9, 1914	Poor.	Fair.	Outlet pipe clogged. Emergency pipe installed.
Sea Girt	March 25, 1914	Good.	Good.	Tank contains very small amount of solids. Effluent good.
	August 29, 1914	Good.	Good.	Free from noticeable particles
Sea Girt (State Camp)	March 15, 1914	Good.	Good.	Solids removed in the winter.
Spring Lake (Three Tanks)	April 29, 1914	Poor.	Poor.	All tanks require cleaning.
	August 29, 1914	Fair.	Fair.	Effluent from tank contained large particles.
Trenton, (P. R. R. Shops)	January 7, 1914	Good.	Good.	Well operated. Cleaned frequently.
	June 25, 1914	Good.	Good.	
Trenton, (De Laval Steam Turbine Co.)	January 7, 1914	Good.	Good.	
	June 25, 1914	Good.	Good.	
Water Witch	.....	.....	.....	Closed when inspector visited the plant.
Woodbury	June 6, 1914	Poor.	Poor.	Sewage discharged on flood tide, carrying solid matter up stream to the town.
	October 10, 1914	Fair.	Poor.	
Woodbridge (Sewaren)	February 13, 1914	Good	Good	Small amount of sludge in tank.

INVESTIGATION OF SEWAGE SEDIMENTATION TANK AT BELMAR: In response to complaints received from officials and residents of the Borough of Belmar, an investigation of the sewage sedimentation tank connected with the sewerage system of that Borough was made. The complaints were due to the presence of offensive odors in the vicinity of the plant and solid sewage particles in the sea water near the bathing beaches between Seventh and Ninth Avenues.

Physical, chemical and bacteriological examinations of the raw sewage, tank contents, tank effluent and sea water were made. It was found that the excessive odors were due to sea water backing up in the tank and mixing with the decomposing organic matters in the bottom. It was also found that, due to carelessness when the tank was cleaned in the spring, one of the sludge outlets valves had been left open, and that the stop planks separating the tank into sections had in some cases been placed improperly and in other cases left out entirely. The results of the investigation were transmitted to the Borough with directions for correcting these faulty conditions.

SEWAGE DISPOSAL WORKS HAVING SEDIMENTATION AND DISINFECTION: The eighteen sewage disposal works having sedimentation and disinfection with calcium hypochlorite are all in an unsatisfactory condition. This is due in part to faulty design and construction; but, it is largely due to careless and inefficient operation.

We have endeavored, with varying success, to remedy conditions, but the improvement, if any, is at best only temporary. It is obvious that disinfection is adopted with but one purpose in view: to disinfect and render harmless the sewage effluent as discharged. Unless this is accomplished, the disinfection plant does not fulfill the purpose for which it was constructed. When it is considered that out of eighty-eight inspections made of the disinfection plants in this State during the past year, presumptive tests for B. coli have shown that organism to be present in the final effluent in eleven cases to the extent of more than 100,000 per cubic centimeter, and in sixteen cases more than 10,000 per cubic centimeter, the unsatisfactory condition of these plants is apparent.

There are various contributory causes which tend to bring about the present state of affairs. We are handicapped on account of the small size of the appropriation available, and the small staff of men who can be assigned to this work. The best than can be done is to inspect the larger and more important disinfection plants once a month, although the experience has been that until the local authorities appoint trained and competent attendants weekly visits should be made to some of these works.

Faulty design and poor construction also contribute to the generally poor condition of these plants as does also the fact that a suitable, reliable and proportional device for applying hypochlorite solution to the sewage has not to date been brought to our attention. The dosing

devices that are in use are either subject to frequent clogging are not proportional, or wear out so rapidly as to make their installation inadvisable.

In the last analysis, however, the main trouble with works for the disinfection of sewage is the same as with sewage disposal works of any character that are found to be in an unsatisfactory condition; that is, unintelligent and careless operation. Here, in particular, is intelligence and industry required, for an attendant at a sewage disinfection plant must give several hours attention to the plant every day. The disinfecting solution must be mixed regularly and properly the dosing device must be kept in condition and the pipes and orifices cleaned and flushed at frequent intervals.

The Division of Water and Sewerage Inspection in conjunction with the Division of Food and Drugs is at present carefully studying the situation with a view of adopting a standard for each disinfection plant. This standard will apply to the final effluent, will be expressed as not more than 1, 10 or 100 B. coli per cubic centimeter as the case may be, and will be based upon the geographical location of the plant and its relation to water supplies or oyster beds.

With such standards there will be a definite object to strive for in each disinfection plant and it is the intention to have the utmost done to improve the operating conditions of the plants. It is desired, however, to call the attention of municipal officials to the fact that the representatives of the State cannot produce satisfactory results without their coöperation, and unless the plant attendants, appointed by them are careful, hard-working men of reasonable intelligence.

In connection with sewage disinfection plants, it should be mentioned that much trouble is caused by housing pumps, motors, engines, ejectors, and other pumping or mixing machinery in the same building in which the hypochlorite is stored or the solution applied to the sewage. The fumes given off by the hypochlorite are very corrosive and rapidly disintegrate washers, bushings, shaftings, etc. There have been instances in this State where considerable damage has been caused by the corrosive action of hypochlorite fumes on the pumping machinery. In all cases where machinery of any nature is required, the hypochlorite should be stored and applied to the sewage in a separate, well ventilated building.

The following table shows the inspections that have been made and the conditions found to exist at the sewage disinfection plants during the past year:

SEWAGE DISPOSAL WORKS HAVING SEDIMENTATION AND DISINFECTION WITH CALCIUM HYPOCHLORITE.

TABLE SHOWING INSPECTIONS MADE AND CONDITION OF PLANTS FOR FISCAL YEAR ENDING OCTOBER 31, 1914.

NAME OR LOCATION OF PLANT.	Date of Inspection.	Flow of sewage, gallons per day.	CONDITION OF			Dose of available chlorine in parts per million.	B. Coli in the final effluent indicated by the presumptive test per c.c.	REMARKS.
			Sedimentation tank.	*Final effluent.	Dosing device.			
Atlantic City	Nov. 18	Approximately 300,000	Practically no sedimentation. Sewage is well screened	Poor.	Good.	Approximately 4.0 to 5.0	.....	Sewage by-passed, additional screens being installed.
	Jan. 19			Fair.	Good.		.....	Hypochlorite applied to unscreened sewage.
	Mar. 12			Fair.	Good.		10,000	Hypochlorite applied to screened sewage.
	May 6			Good.	Good.		.....	Final screen installed, 40 meshes to an inch.
	May 28			Good.	Good.		10,000	
	July 2			Good.	Good.		1,000	About 10 cubic feet of screenings per day.
	July 23			Good.	Good.		.....	General appearance of plant satisfactory.
Beverly	Dec. 17	Approximately 35,000	Poor.	Fair.	Not in Use.	0.0	.....	Section 1 badly sludged. Flow changed to sections 2, 3 and 4, in series. Hypochlorite not applied to sewage. Section 1 requires cleaning. Sewage contains waste hypochlorite from factory.
	Jan. 22		Good.	Good.		0.0	1,000	
	April 18		Good.	Good.		0.0	100	
	June 24		Fair.	Good.		0.0	100,000	
Bridgeton (Glass Street)	Nov. 12	200,000	Good.	Good.	Fair.	12.5	.....	Pumping machinery corroded by hypochlorite fumes.
	Dec. 19	200,000	Good.	Good.	Fair.	12.5	.....	Approximately 100,000 gals. of low level sewage discharged untreated.
	Jan. 2	280,000	Good.	Good.	Fair.	6.0	.....	
	Feb. 5	200,000	Good.	Poor.	Fair.	0.6 to 2.3	100,000	Low level pumping machinery operative. Low level sewage pumped for about 4 hours out of 24. This increases the rate of flow to approximately 400,000 gals. during the pumping periods. Hypochlorite solution is applied at constant rate, no provision being made for increased flow. Plans have been approved for a liquid chlorine dosing apparatus.
	Mar. 10	190,000	Good.	Poor.	Fair.	2.4 to 4.3	10,000	
	April 14	190,000	Good.	Poor.	Fair.	0.5	10,000	
	May 4	175,000	Good.	Poor.	Fair.	2.7 to 4.7	10,000	
	June 8	175,000	Good.	Poor.	Fair.	1.3 to 3.5	10,000	
Bridgeton (Lincoln Street)	Nov. 12	90,000	Good.	Good.	Good.	10.0	.....	Not sufficient attention is paid to the two disinfection plants at Bridgeton to keep a constant dose of hypochlorite solution. Recommended that the dose of hypochlorite be increased. No improvement has resulted.
	Dec. 19	90,000	Good.	Good.	Good.	10.0	.....	
	Jan. 2	90,000	Good.	Good.	Good.	6.0	.....	
	Feb. 5	95,000	Good.	Poor.	Good.	6.8	10,000	
	Mar. 10	95,000	Fair.	Good.	Good.	5.7	10	
	April 14	95,000	Fair.	Fair.	Good.	6.2	1,000	
	May 4	95,000	Poor.	Poor.	Good.	8.2	100	Section of tank in use badly sludged. Needed cleaning.
	June 8	110,000	Poor.	Poor.	.....	.....	.....	Solution tank empty. No disinfectant.

SEWAGE DISPOSAL WORKS HAVING SEDIMENTATION AND DISINFECTION WITH CALCIUM HYPOCHLORITE—Continued

NAME OR LOCATION OF PLANT.	Date of Inspection.	Flow of sewage, gallons per day.	CONDITION OF			Dose of available chlorine in parts per million.	B. Coli in the final effluent indicated by the presumptive test per c. c.	REMARKS.
			Sedimentation tank.	*Final effluent.	Dosing device.			
Cape May Real Estate Company (Sewell's Point)	May 11	.....	.....	.....	.....	.....	.....	Plant not in operation.
	June 11	.....	.....	.....	.....	.....	.....	Hypochlorite dosing apparatus not installed.
	Sept. 1	.....	Good...	.....	Poor...	0.0	.....	Temporary dosing device installed. No disinfectant applied to sewage.
Longport (Two Plants)....	Jan. 29	.....	Good...	Good..	Fair...	0.0	.....	Tanks are of Imhoff type. Were cleaned in November. No hypochlorite.
	April 12	.....	Good...	Good..	Fair...	0.0	.....	No hypochlorite added.
	July 3	250,000	Fair....	Fair...	Poor...	8.0	10,000	Dosing device clogged.
	July 23	.....	Fair....	Fair...	Good..	.....	.....	General conditions improved.
	Oct. 23	150,000	Good...	Good..	Good..	0.0	.....	No hypochlorite added during flood tide. Tanks cleaned in October.
Keyport.....	Nov. 19	.....	Good...	Good..	Fair...	6.0	100	The disinfection plant at Keyport has not been operated in a satisfactory manner during the past year. The dosing device is not reliable and requires constant attention.
	Jan. 28	175,000	Good...	Good..	Fair...	8.6	100	
	Feb. 20	.....	Good...	Good..	Fair...	8.0	1,000	
	Mar. 11	185,000	Fair....	Fair...	Fair...	6.3	10	Sewage being by-passed at Florence Street Pumping Station.
	April 8	192,000	Fair....	Fair...	Poor...	7.2	10	Approx. 18 minutes detention in disinfection chamber.
	May 15	240,000	Fair....	Fair...	Poor...	8.9	10	
	June 3	212,000	Fair....	Poor...	Poor...	2.9	.....	Poor attention on part of attendant.
	July 21	250,000	Poor....	Poor...	Poor...	3.0	1,000	Operation very unsatisfactory.
	Aug. 5	250,000	Poor....	Poor...	Poor...	0.0	100,000	Conditions more unsatisfactory. No hypochlorite added to sewage.
	Sept. 4	250,000	Poor....	Poor...	Bad...	.....	.....	Effluent very bad. Conference with local authorities. Tanks to be cleaned.
Margate City (Two Plants).....	Nov. 10	Approximately 90,000	Good...	Fair...	Fair...	0.0	.....	No hypochlorite added to sewage.
	Feb. 10		Good...	Fair...	Fair...	6.6	.....	Hypochlorite added to sewage at Adams Ave. Plant.
	April 27		Fair....	Fair...	Fair...	0.0	.....	No hypochlorite added to sewage.
	Sept. 2		Fair....	Fair...	Poor..	0.0	100,000	No hypochlorite added to sewage.

Ocean City	Nov.	5	220,000	Fair.	Poor.	Good.	8.0	10,000	Sewage is screened. Screenings removed every two days.
	Feb.	11	90,000	Poor.	Poor.	Good.	3.6	10,000	Tank required cleaning.
	May	7	160,000	Good.	Good.	Good.	10.8	.....	Tank was cleaned in February.
	June	20	160,000	Good.	Good.	Good.	7.5	100	Both sections of tank placed in service.
	June	25	.....	Poor.	Poor.	.....	.....	.....	Large particles of sewage matter in effluent.
	July	1	.....	Poor.	Poor.	Fair.	.....	.....	Scum boards recommended.
	July	24	.....	Poor.	Poor.	.....	.....	.....	Scum boards not installed.
	Oct.	26	280,000	Bad.	Bad.	Fair.	7.2	.....	Tank filled with sludge, and required cleaning.
Rahway (New Jersey State Reformatory)	Nov.	18	Approximately	Good.	Fair.	Fair.	.....	100,000	Sewage is screened. Screenings removed daily.
	Sept.	23	200,000	Fair.	Fair.	Fair.	.....	1,000	Tank required cleaning.
Red Bank	Nov.	11	.....	Fair.	Fair.	Good.	.....	.....	Plant in fair condition.
	Dec.	16	.....	Fair.	Fair.	Fair.	.....	10,000	
	Jan.	23	410,000	Poor.	Poor.	Fair.	8.3	.....	Gritchamber needed cleaning.
	Feb.	16	.....	Poor.	Poor.	Poor.	.....	.....	Gritchamber cleaned. Only portion of sewage receiving hypochlorite.
	Feb.	25	.....	Poor.	Poor.	Fair.	.....	.....	Sedimentation tank badly sludged. Required cleaning.
	April	4	425,000	Bad.	Bad.	Good.	8.4	.....	Tank not cleaned. Solid sewage matters in effluent.
	May	14	374,000	Bad.	Bad.	Good.	7.2	.....	Tank not cleaned. Very unsatisfactory effluent.
	June	2	297,000	Bad.	Bad.	Good.	8.5	10,000	Tank not cleaned. Conditions unimproved.
	July	18	273,000	Bad.	Bad.	Good.	8.0	10,000	Tank not cleaned. Conditions unimproved.
	Aug.	5	225,000	Bad.	Bad.	Good.	8.5	100,000	Tank not cleaned. Conditions worse.
	Sept.	4	289,000	Bad.	Bad.	Good.	10.8	100,000	Tank not cleaned. Effluent very poor. Proper disinfection impossible.
	Oct.	8	228,000	Bad.	Bad.	Good.	10.5	100,000	Tank not cleaned. Gritchamber needed cleaning. General conditions bad.
Smith's Landing (Atlantic County Institutions)	Jan.	19	Approximately	Fair.	Fair.	Poor.	.....	.....	No hypochlorite added to sewage. Solution tank frozen.
	Mar.	24		Fair.	Fair.	Poor.	.....	.....	No hypochlorite added to sewage.
	April	27	8,000	Fair.	Fair.	Poor.	8.5	1,000	Hypochlorite added to raw sewage.
	May	7		Fair.	Fair.	Poor.	.....	.....	No hypochlorite added to sewage.
	July	2		Poor.	Fair.	Poor.	5.9	10	Tank half filled with sludge.
	Oct.	2		Bad.	Poor.	Poor.	13.0	10,000	Tank completely filled with solids. Needed cleaning.
	Oct.	24		Bad.	Poor.	Poor.	.....	.....	
Stone Harbor	Dec.	2	30,000	Good.	Bad.	Bad.	0.36	100,000	Plant in bad condition. Dosing device very unsatisfactory.
	Mar.	17	.....	Good.	Fair.	Fair.	.....	.....	Dosing device repaired.
	June	10	60,000	Good.	Fair.	Fair.	1.0	100,000	Calcium hypochlorite below normal strength. 14.3% available chlorine.
	Aug.	25	.....	Poor.	Poor.	Poor.	0.0	.....	No hypochlorite added to sewage.
	Sept.	18	95,000	Poor.	Bad.	Poor.	1.0	100,000	Operation very unsatisfactory.
	Sept.	25	.....	Poor.	Poor.	Fair.	.....	.....	
Ventnor (Two Plants)	Jan.	29	150,000	Fair.	Bad.	Fair.	0.6	10,000	Sewage discharged at Cornwall Avenue Plant without disinfection.
	April	13	200,000	Fair.	Bad.	Fair.	1.0	10,000	Little Rock Plant operated in an unsatisfactory manner.
	July	3	300,000	Fair.	Bad.	Fair.	2.3	.....	Sewage screened. Screenings removed daily.
Wildwood Crest	Sept.	3	.....	.....	.....	Poor.	.....	.....	Sewage discharged into thorofare without sedimentation or disinfection.

*Refers to physical condition of effluent only.

MISCELLANEOUS SEWAGE DISPOSAL WORKS: Under this heading are grouped all plants having two or more processes of sewage treatment. Some of the most important plants in the State are in this group. A somewhat new departure has been attempted this year in reporting on the condition of these disposal plants. The conditions found upon inspection have been incorporated in a table and a general rating given to the plant. The comparative terms of excellent, good, fair, poor, and bad are used in the rating scheme.

The rating is based largely upon the care and intelligence with which the disposal plant is operated, and only secondary consideration is given to the design and construction of the works. The purpose of making this tabulation is to give the persons in charge of disposal plants some means of comparing the operation of the plant under their charge with other plants throughout the State, with the hope and expectation that this comparison will be an incentive to greater care and more intelligence in the operation of the disposal plants as a whole.

To obtain a rating of excellent, a plant must be operated in the best manner possible, consistent with the design and construction; the attendant must be faithful and willing at all times to cooperate with the representatives of this Department in an endeavor to improve operating conditions.

In the following table 49 plants are compared. Only 2 have a rating of excellent, 18 have a rating of good, 20 fair, 7 poor, and 2 bad. A year hence we hope to be able to increase greatly the number of plants in excellent condition. Detailed reports on some of the disposal plants will be found on the pages following the table.

MISCELLANEOUS SEWAGE DISPOSAL PLANTS.

TABLE SHOWING INSPECTIONS MADE AND CONDITIONS FOUND DURING FISCAL YEAR ENDING OCTOBER 31, 1914.

NAME OF DISPOSAL PLANT.	Number of inspections made during year.	SEDIMENTATION. CONDITION OF Tanks.	SEDIMENTATION. CONDITION OF Effluent.	Condition of dosing devices.	CONTACT BEDS. CONDITION OF Beds.	CONTACT BEDS. CONDITION OF Effluent.	SPRINKLING OR TRICKLING FILTERS. Distribution.	SPRINKLING OR TRICKLING FILTERS. CONDITION OF Beds.	SPRINKLING OR TRICKLING FILTERS. CONDITION OF Effluent.	SAND OR EARTH FILTERS. Distribution.	SAND OR EARTH FILTERS. CONDITION OF Beds.	SAND OR EARTH FILTERS. CONDITION OF Effluent.
Asyla (Camden County Insts.)	5	Fair.	Fair.	Poor.	.....	.....	Poor.	Poor.	Fair.	.....	.....	.....
Bordentown.	7	Good.	Good.	Good.	Good.	Good.	.....	.....	.....	Fair.	Good.	Good.
Browns Mills.	6	Poor.	Poor.	Poor.	Bad.	Poor.	.....	.....	.....	.....	.....	.....
Burlington.	9	Fair.	Fair.	Fair.	.....	.....	.....	.....	.....	Poor.	Fair.	Good.
Burlington (Thos. Devlin Co.).	4	Good.	Good.	Good.	.....	.....	Good.	Good.	Good.	Good.	Good.	Good.
Changewater (Hopatcong Woolen Mills)	1	Fair.	Fair.	Poor.	.....	.....	.....	.....	.....	Poor.	Poor.	Fair.
Chatham-Madison (Joint Disposal Plant.)	10	Fair.	Good.	Fair.	Good.	Good.	.....	.....	.....	Good.	Fair.	Fair.
Collingswood.	13	Good.	Fair.	Good.	Good.	Fair.	.....	.....	.....	.....	.....	.....
Deal Golf Club	2	Good.	Good.	Good.	.....	.....	.....	.....	.....	Good.	Good.	Good.
Essex Fells.	6	Good.	Good.	Poor.	Fair.	Good.	.....	.....	.....	Good.	Fair.	Good.
Flemington	5	Good.	Good.	Good.	.....	.....	.....	.....	.....	Good.	Good.	Good.
Freehold.	6	Fair.	Fair.	Poor.	.....	.....	.....	.....	.....	Fair.	Fair.	Good.
Glen Gardner (N. J. Tuberculosis Sanitorium)	2	Poor.	Poor.	Good.	.....	.....	Poor.	Poor.	Poor.	Poor.	Poor.	Poor.
Grenlock (Bateman Mfg. Co.).	5	Good.	Good.	Fair.	.....	.....	.....	.....	.....	Fair.	Fair.	Fair.
Haddonfield.	5	Fair.	Fair.	Good.	.....	.....	Good.	Good.	Fair.	Poor.	Bad.	Poor.
Haddon Heights.	8	Fair.	Poor.	Good.	.....	.....	.....	.....	.....	Good.	Good.	Good.
Helmetta (Geo. W. Helme Co.).	1	Good.	Good.	Poor.	Poor.	Fair.	.....	.....	.....	.....	.....	.....
Hightstown.	6	.....	.....	.....	.....	.....	.....	.....	.....	Poor.	Good.	Fair.
Hilliards Island.	1	Fair.	Fair.	Fair.	.....	.....	.....	.....	.....	Poor.	Poor.	Fair.
Hopewell (St. Michael's Orphan Asylum)	2	Fair.	Fair.	Poor.	Poor.	Poor.	.....	.....	.....	.....	.....	.....
Island Heights.	4	.....	.....	Fair.	.....	.....	.....	.....	.....	Fair.	Good.	Good.
Jamesburg (N. J. State Home for Boys)	4	Fair.	Fair.	.....	.....	.....	.....	.....	.....	Poor.	Fair.	Fair.
Lakehurst.	4	Poor.	Poor.	.....	.....	.....	.....	.....	.....	Poor.	Poor.	Fair
Lakewood.	6	.....	.....	.....	.....	.....	.....	.....	.....	Fair.	Fair.	Fair.
Mahwah (American Brake Shoe Co.)	1	Good.	Good.	Good.	.....	.....	.....	.....	.....	Good.	Poor.	Good.

Merchantville	11	Fair	Good	Not used						Bad	Fair	Fair
Millville	7	Fair	Poor	Poor	Poor	Poor						
Moorestown	17	Fair	Good	Good			Good	Good	Good			
Morris Plains (N. J. State Hospital)	2	Good	Good	Good						Fair	Good	Good
Morristown	4	Good	Good	Good	Good	Good				Good	Good	Good
New Lisbon (Burlington Co. Hospital)	5	Fair	Fair	Good	Fair	Good				Good	Good	Good
Newton (Clinton Street)	3	Fair	Fair	Good						Fair	Good	Good
Newton (Sparta Avenue)	3	Fair	Fair	Poor						Fair	Good	Good
Overbrook (Essex Co. Hospital)	5	Poor	Poor		Fair	Good				Good	Good	Good
Plainfield	5	Fair	Good		Fair	Fair						
Pleasantville (New Rodney Hotel)	2	Fair	Fair	Fair	Fair	Fair						
Princeton (North East Field.)	14	Fair	Fair							Poor	Fair	Fair
Princeton University	14	Poor	Poor	Good			Good	Good	Good			
Ridgewood	11	Bad	Bad		Fair	Fair						
Riverside	12	Good	Good	Fair	Fair	Good				Good	Good	Good
Roebling	7	Good	Fair	Fair	Good	Fair				Good	Good	Good
Ross Fenton Farm (Asbury Park)	3	Fair	Fair	Fair						Fair	Fair	Fair
Skillman (N. J. State Village for Epileptics)	7	Fair	Fair	Poor	Bad	Bad				Bad	Bad	Bad
Trenton (Odd Fellows' Home)	3	Good	Good							Good	Good	Good
Vineland	8	Poor	Fair							Poor	Poor	Fair
Washington	7	Fair	Good	Good	Good	Good				Fair	Fair	Good
Wenonah (Two plants)	1	Good	Good	Good						Good	Good	Good
Westfield	6	Fair	Good							Good	Good	Good
Woodstown	5	Fair	Fair	Good						Fair	Fair	Good
Wortendyke (Granite Linen Co.)	2									Poor	Fair	Fair

MISCELLANEOUS SEWAGE DISPOSAL PLANTS—Continued.

NAME OF DISPOSAL PLANT.	FINAL EFFLUENT.							OPERATION.	
		PUTRESCIBILITY % RELATIVE STABILITY.			B. COLI CONTENT PER C.C. BY PRESUMPTIVE TEST.				
	Physical appearance.	Maximum.	Minimum.	Average.	Maximum.	Minimum.	Average.	General appearance of plant.	Attention paid to plant.
Asyla (Camden County Insts.)	Fair.	60	48	54	100,000	1,000	10,000	Poor.	Poor.
Bordentown	Excellent.							Good.	Good.
Browns Mills	Fair.	48	37	43	10,000	10	1,000	Bad.	Poor.
Burlington	Good.	96	69	92				Fair.	Good.
Burlington (Thos. Devlin Co.)	Excellent.							Good.	Good.
Changewater (Hopatcong Woolen Mills)	Fair.							Poor.	Poor.
Chatham-Madison (Joint Disposal Plant)	Good.	96	60	72	10,000	1,000	4,000	Good.	Good.
Collingswood	Poor.	60	37	48	100,000	100,000	100,000	Good.	Good.
Deal Golf Club	Good.							Good.	Good.
Essex Fells	Excellent.	96	96	96	1,000	1,000	1,000	Good.	Good.
Flemington	Good.	96	48	84	10,000	10,000	10,000	Good.	Good.
Freehold	Good.	96	60	90	10,000	10	3,500	Fair.	Good.
Glen Gardner (N. J. Tuberculosis Sanitorium)	Fair.							Bad.	Bad.
Grenlock (Bateman Mfg. Co.)	Fair.	96	37	90	100,000	1,000	10,000	Good.	Good.
Haddonfield	Fair.	60	20	47	1,000,000	10,000	100,000	Fair.	Poor.
Haddon Heights	Excellent.	96	96	96	10,000	1,000	3,000	Good.	Good.
Helmetta (Geo. W. Helme Co.)	Fair.							Fair.	
Hightstown	Fair.	96	20	80	100,000	100,000	100,000	Good.	Fair.
Hilliards Island	Fair.							Fair.	Fair.
Hopewell (St. Michael's Orphan Asylum)	Poor.							Poor.	Poor.
Island Heights	Good.	96	90	95	1,000	1,000	1,000	Good.	Fair.
Jamesburg (N. J. State Home for Boys)	Fair.	37	37	37	100,000	10,000	50,000	Fair.	Poor.
Lakehurst	Fair.	96	47	80	1,000	10	500	Poor.	Poor.
Lakewood	Good.	96	69	92	100,000	10,000	50,000	Fair.	Fair.
Mahwah (American Brake Shoe Co.)	Good.	96	96	96				Fair.	Fair.

Merchantville	Fair	69	37	47				Fair	Fair
Millville	Fair				10,000	10,000	10,000	Fair	Fair
Moorestown	Excellent	96	75	90				Good	Fair
Morris Plains (N. J. State Hospital)	Good	80	80	80				Good	Good
Morristown	Excellent	96	93	95	10,000	10,000	10,000	Good	Excellent
New Lisbon (Burlington Co. Hospital)	Excellent	96	96	96				Good	Good
Newton (Clinton Street)	Good	96	96	96				Good	Good
Newton (Sparta Avenue)	Good	96	96	96				Fair	Fair
Overbrook (Essex Co. Hospital)	Excellent	96	96	96				Good	Good
Plainfield	Fair	96	47	93				Good	Excellent
Pleasantville (New Rodney Hotel)								Fair	Fair
Princeton (North East Field)	Fair	96	93	90	100,000	10,000	50,000	Fair	Fair
Princeton University	Good	96	96	96	10,000	10,000	10,000	Good	Good
Ridgewood	Fair	69	69	69				Good	Fair
Riverside	Good	96	21	88	100,000	100	15,000	Good	Good
Roebling	Good							Good	Good
Ross Fenton Farm (Asbury Park)	Fair	37	37	37				Fair	Poor
Skillman (N. J. State Village for Epileptics)	Poor	37	37	37				Poor	Poor
Trenton (Odd Fellows' Home)	Good							Good	Good
Vineland	Good	96	60	80	10,000	100	5,000	Poor	Good
Washington	Good	96	96	96	10,000	10,000	10,000	Good	Good
Wenonah (Two plants)	Good							Good	Good
Westfield	Good							Good	Good
Woodstown	Good	96	96	96	100	10	50	Fair	Poor
Wortendyke (Granite Linen Co.)	Good							Fair	Fair

MISCELLANEOUS SEWAGE DISPOSAL PLANTS—Continued.

NAME OF DISPOSAL PLANT.	General rating of plant.	REMARKS.
Asyla (Camden County Insts.)	Poor.	Distribution and operation uniformly unsatisfactory.
Bordentown	Good.	Effluent uniformly satisfactory.
Browns Mills	Poor.	Contact bed effluent disinfected with hypochlorite.
Burlington	Fair.	Conditions have improved during past year.
Burlington (Thos. Devlin Co.)	Excellent.	Effluent uniformly satisfactory.
Changewater (Hopatcong Woolen Mills)	Poor.	Sand bed ponded to depth of over four feet.
Chatham-Madison (Joint Disposal Plant)	Good.	See detailed report on following pages.
Collingswood	Fair.	Plant receives careful attention.
Deal Golf Club	Good.	Clear odorless effluent.
Essex Fells	Good.	Effluent uniformly satisfactory.
Flemington	Good.	Earth Beds Plowed and harrowed regularly.
Freehold	Fair.	Sewage is screened; screenings removed daily.
Glen Gardner (N. J. Tuberculosis Sanitorium)	Bad.	Plant in a very unsatisfactory condition.
Grenlock (Bateman Mfg. Co.)	Fair.	Sewage and trade wastes treated.
Haddonfield	Fair.	Sand beds not usually used.
Haddon Heights	Good.	Tank effluent passes through coke strainers.
Helmetta (Geo. W. Helme Co.)	.....	Plant not finished at time of inspection.
Hightstown	Fair.	Sewage well screened; screening fairly effective.
Hilliards Island	Fair.	Sand bed to be reconstructed.
Hopewell (St. Michael's Orphan Asylum)	Poor.	Reconstruction of plant in progress.
Island Heights	Fair.	Sewage is screened; screening not very effective.
Jamesburg (N. J. State Home for Boys)	Fair.	Sewage is screened; screening not very effective.
Lakehurst	Poor.	Insufficient attention paid to plant.
Lakewood	Fair.	Sewage is well screened.
Mahwah (American Brake Shoe Co.)	Fair.	Sand beds overhauled following inspection.

Merchantville	Fair	See detailed report on following pages.
Millville	Poor	See detailed report on following pages.
Moorestown	Good	See detailed report on following pages.
Morris Plains (N. J. State Hospital)	Good	Uniformly discharges a clear effluent.
Morristown	Excellent	Effluent uniformly satisfactory.
New Lisbon (Burlington Co. Hospital)	Good	Sedimentation could be improved.
Newton (Clinton Street)	Good	Tanks cleaned during Summer.
Newton (Sparta Avenue)	Fair	New dosing device should be installed.
Overbrook (Essex Co. Hospital)	Good	Tanks and stone in contact beds to be cleaned.
Plainfield	Fair	Greatly overloaded; new plant to be constructed.
Pleasantville (New Rodney Hotel)	Fair	Tanks cleaned in May.
Princeton (North East Field)	Fair	See detailed report on following pages.
Princeton University	Good	See detailed report on following pages.
Ridgewood	Fair	See detailed report on following pages.
Riverside	Good	Use of sand beds has been discontinued.
Roebling	Good	Contact stone cleaned during summer.
Ross Fenton Farm (Asbury Park)	Fair	Sand bed frequently clogged.
Skillman (N. J. State Village for Epileptics)	Bad	Structural changes in progress.
Trenton (Odd Fellows' Home)	Good	Effluent uniformly satisfactory.
Vineland	Poor	Effluent disinfected with hypochlorite.
Washington	Good	Tanks cleaned in June.
Wenonah (Two plants)	Good	Plants recently reconstructed.
Westfield	Good	Effluent uniformly satisfactory.
Woodstown	Fair	Distribution should be improved.
Wortendyke (Granite Linen Co.)	Fair	Sedimentation tank not installed.

ALDENE: *Watson Stillman Company.*—The sewage from the factory flows into an ejector chamber, and from there is lifted into the sedimentation tank by a 100-gallon air ejector. From the tank the sewage discharges upon a small cinder filter. On April 20, 1914, it was found that the disposal plant was in an unsatisfactory condition. On May 27, 1914, upon investigation it was found that the ejector, instead of discharging a dose of 100 gallons every five or six minutes was discharging a much smaller dose about once every minute. This resulted in a practically constant discharge of settled sewage from the sedimentation tank on to the cinder filter, and destroyed the intermittent action. The surface of the cinders had become clogged to such an extent that sewage was ponded over its entire surface to a depth of three inches. The company was advised to repair the ejector and to overhaul and clean the filter. On a subsequent inspection, October 1, 1914, the disposal plant was found to be in a satisfactory condition, discharging a clear and odorless effluent.

CHATHAM-MADISON: The experiences during the past year have tended to confirm the statements made in regard to this plant in the annual report for 1913. Under normal conditions the plant as a whole operates in a satisfactory manner, discharging a clear and nonputresible effluent.

Owing to the excessive amount of infiltration into the sewer system, and owing to the rapid fluctuations of the Passaic River, into which the effluent discharges, weather conditions have a very prompt and decided effect upon the operation of this disposal plant. The normal capacity of the plant is 600,000 gallons per day. On several occasions, following a heavy precipitation, the flow has been well over 1,500,000 gallons; and in the fall, following a summer of exceptional dryness, the flow was found to be as low as 150,000 gallons per day.

With an exceptionally heavy flow, the contact beds are unable to handle the sewage arriving at the plant, and the period of sedimentation is greatly reduced. At these times the contact beds are cut out of service, and the effluent from the tank is discharged directly upon the sand beds. At such times the stage of the Passaic River is well above the underdrains in the sand beds, and this results in a ponding of these areas, converting the sand beds into strainers.

With an exceptionally low flow there are such evidences of oversepticization that the use of the high level contact beds and the final settling tank is discontinued, in order to avoid excessive storage and the production of odors.

During the past year the roof has been removed from the high level tanks, and the partition walls and gas vents raised. Considerable difficulty has been caused by foaming scum in the gas vents of one of the Imhoff Tanks. The installation of a water-pressure system for use in

the laboratory, for sprinkling and washing around the plant, and in checking scum troubles, would be a valuble improvement.

A detailed report on this sewage disposal plant may be found in the current report of the Engineering Division.

KENILWORTH: *American Circular Loom Company.*—Sewage from about thirty employes, and a considerable amount of manufacturing wastes containing large quantities of sulphuric acid, are discharged. On April 20, 1914, it was found that time was being added to neutralize the wastes; but on June 27, 1914, an inspection showed that the use of the sedimentation area, or lagoon, had been discontinued, permitting the wastes to discharge into the swamps with very little sedimentation or neutralization. The operation of the disposal area was taken up with the company, and on September 29, 1914, the plant was operating in its usual manner.

MEDFORD: During the past year five inspections of this plant have been made, and on four occasions the sand beds were found to be in an entirely unsatisfactory condition, discharging a cloudy effluent having a strong odor. The average relative stability of the final effluent was 60%, and the average B. Coli content 10,000 per c. c. A proper intermittency of dose is not obtained, and a consequent ponding and clogging of the beds results. The installation of an automatic dosing device is recommended.

MERCHANTVILLE: During the past year several changes of doubtful utility have been made at this plant. The coke and stone in the sprinkling or roughing filters have been removed and these beds now serve practically as basins for the further sedimentation of the effluent from the sedimentation tanks; the distributing troughs have been removed from the sand beds, and new lines of underdrains have been laid in the beds and covered with coke. The dosing siphons have been cut out of service in order to prevent stirring up the sediment in the converted roughing filter basins, and this causes a constant flow of sewage upon the sand beds.

These measures have resulted in such changes in operation that the treatment now given to the sewage consist of sedimentation and rapid straining. This plant has been inspected twelve times during the past year, and on every occasion the surfaces of the sand beds have been in an unsatisfactory condition, the distribution has been poor, and holes have been washed in the beds permitting a rapid discharge of sewage into the underdrains. The present practice of permitting the sand beds to be wet continually is detrimental to the proper action of the beds, and causes them to be in poor condition. The average relative stability of the final effluent has been 47%. Such corrective measures should be taken at this plant as to insure a proper grading of the material in the sand beds to prevent holes washing through to the underdrains; proper

distribution of the dose over the entire surface of the sand areas should be obtained; a proper intermittency of dose should be arranged, and the various sand beds should be used in rotation and provision made for a considerable period of rest for any unit between successive doses.

MILLVILLE: Seven inspections of this plant have been made during the past year, and at all instances it has been found to be in an entirely unsatisfactory condition. The flow of sewage is much greater than the plant can handle properly. The storage tank is not large enough to store the effluent discharged during flood tide, and this causes the contact bed effluent to back up in the underdrains, and siphon chambers, and prevents the proper operation of the dosing apparatus. This destroys the intermittent action of the beds, and in effect converts them into coarse strainers.

The following results obtained by use of the sewage recording machine from November 21, 1913 to December 5, 1913, will be of interest:

Flow of sewage, maximum rate per day, 1,363,000 gallons; minimum rate, 819,000 gallons; average rate, 1,035,000 gallons; population (Industrial Directory, 1912), 12,500; gallons of sewage per capita per day, 83; capacity of sedimentation tank, 240,000 gallons; average theoretical period of storage, 4 hours, 20 minutes; total area of contact beds, 0.46 acre; average rate of sewage flow to contact beds, 2,250,000 gallons per acre per day.

Extensive structural changes should be made at this plant immediately. The disinfection given by copper sulphate, as applied to the contact bed effluent, has been found to be very slight, and a more effective method of disinfection should be adopted. This has been repeatedly brought to the attention of the local authorities during the past three years, but to date nothing has been done to improve conditions. Practically no attention has been paid to orders and directions given by the Board to the local authorities.

MOORESTOWN: The sewage disposal plant connected with the sewerage system of Moorestown has been remodeled during the past year. The plant formerly consisted of sedimentation tanks, dosing chamber, and contact beds; but a heavy overload made the reconstruction of the works advisable. The sedimentation tanks were converted into tanks of the Imhoff type, the contact beds were made over into sprinkling filters, a new dosing chamber was constructed, a new sludge bed built, and a final settling basin installed. The resulting improvement in the final effluent is very gratifying.

The reconstructed tanks have not been operated in an entirely satisfactory manner, there being excessive accumulations of scum in the gas vents, and more or less scum in the flow chambers. This is due in part to insufficient attention, and in part to the fact that the wooden sloping sides of the flow chambers are not gas tight.

The distriubution on the sprinkling filters is very satisfactory, and the dosing apparatus is reliable. The final effluent is uniformly clear, with but little odor, and has had an average relative stability of 90%. Seventeen inspections of this plant have been made during the past year.

PLUCKAMIN: *Superior Thread and Yarn Company.*—In response to a complaint received at this office in reference to the pollution of Chambers Creek by sewage and wastes from the factory of the Superior Thread and Yarn Company at Pluckamin, New Jersey, an inspection of this stream and of this factory was made in August. It was found that all sewage from about 100 employees and all manufacturing wastes discharged into the creek without treatment, and caused the creek to be in a filthy condition. This factory was formerly occupied by the Somerville Manufacturing Company and an experimental sewage disposal plant was approved in 1907 by the State Sewage Commission. Upon this company going out of business the factory was vacant for several months until occupied by the Superior Thread and Yarn Company. This company discontinued the use of the sewage disposal plant. Five inspections were made in the course of this investigation, and the work of reconstructing the disposal plant is now in progress. Further reference to this matter may be found in the current report of the Engineering Division.

PRINCETON: *North East Sewage Disposal Plant.*—This plant, as a rule, is in an unsatisfactory condition, due to overloading. During the summer months, when the sewage flow is small, by using three of the six sand areas each day, allowing them to rest on alternate days, the effluent is fairly satisfactory, and the plant is able to handle the sewage effectively. During the rest of the year, with a greatly increased sewage flow, three beds a day are not sufficient, and usually all six areas are used in twenty-four hours. As a result, there is no opportunity for cleaning the beds and consequently the surfaces clog up and the beds become ponded. When this occurs, the sewage is diverted from the disposal plant, and is allowed to run over the adjacent farm land down the hillside; and, unless special precautions are taken, the sewage reaches the waters of Harry's Brook, a tributary of Carnegie Lake, and creates a decided nuisance along the bed of the stream.

An investigation was made in February, March and April of this year, and with the aid of the sewage recording machine the maximum daily flow was found to be 480,000 gallons, the minimum 336,000 gallons, and the average 356,000 gallons. An investigation of the trunk sewer running to the plant showed that there was a daily infiltration of ground water amounting to 195,000 gallons, or 55% of the total volume of sewage arriving at the plant. The borough officials were advised to reconstruct this trunk sewer, but to date nothing has been done in this connection.

PRINCETON: *Princeton University Sewage Disposal Plant.*—A description of the new Princeton University sewage disposal plant may be found in the current report of the Engineering Division. Fourteen inspections have been made of this plant during the past year; and as a whole conditions have been satisfactory and the final effluent clear and non-putrescible.

Some trouble was experienced during the summer months by excessive accumulations of scum, and by copious foaming in the gas vents and chimneys of the Imhoff Tank. It was impossible to reach some of the scum and break it up properly on account of the design of the tank. There is no piped water service at the plant, so the scum could not be broken up, or the foaming checked by means of a stream of fresh water.

This excessive foaming was possibly caused by the tank first being filled with strong sewage instead of with clear water. Both compartments of the tank were filled with sewage, the tanks being entirely empty when the sewage was turned in; and it is possible that the lower compartments of the tank began to ferment as soon as the organisms in the sewage got sufficient headway, and as warm weather came on fermentation was so violent and the liquids so viscous, that the bubbles resulting from the fermentation would not break and the formation of foam resulted. On recent inspections, probably on account of the tank having been in operation for a longer period, the foaming was less serious.

RIDGEWOOD: The sewage disposal plant at Ridgewood is not in a satisfactory condition, due in part to the design of the works, and in part to faulty operation. In an endeavor to improve conditions the automatic dosing device, controlling the flow to and from the contact beds, which in the past has been unreliable and irregular, was taken out and hand-controlled gates substituted. This change necessitated the presence of an attendant at the plant both day and night, and conditions were somewhat improved. The clarification given to the sewage is unsatisfactory, insufficient attention is given to the operation and cleaning of the sedimentation tanks, and there are cracks or breaks in the walls between the contact beds which prevent the beds draining and airing properly between doses and cause the final effluent to be deteriorated. The local authorities have agreed to submit plans for changes to this disposal plant in the near future.

RUMSON: *Rumson Land and Development Company.*—The sewage sedimentation and disinfection plant of the Rumson Land and Development Company at Rumson, has been inspected three times during the past year. Some difficulty has been experienced, due to the formation of scum on the tanks, and to the presence of objectionable odors. Disinfection, which is accomplished by hypochlorite of lime, is not attempted during the winter months on account of the very small number of active connections during that period.

TRENTON: *Agasote Millboard Company.*—Experiments conducted in conjunction with the Agasote Millboard Company, in an endeavor to devise a satisfactory method for treating the paper pulp waste discharged from the factory of that company at Trenton, have for the present been discontinued. The experiments extended over several months, and various filtering media were used, and varying rates of dosage attempted. The results obtained to date have been for the most part negative in character. Changes in the processes of manufacture changed the character of the discharged wastes, and as these changes in process are likely to continue for some time in the future, due to the development of the industry to the rapid growth of the establishment, the experiments were discontinued temporarily.

During the past year the sewage has been separated from the manufacturing wastes. The sewage now discharges to the disposal plant, which has been overhauled and is in a satisfactory condition.

SEWAGE DISPOSAL WORKS HAVING SEDIMENTATION WITH SUB-SURFACE IRRIGATION OR WITH BROAD IRRIGATION: Disposal plants of this class are connected for the most part with institutions, factories, estates, and communities where the sewage flow is relatively small.

In the case of sub-surface irrigation systems, if the distribution lines are frequently alternated and if sufficient lengths of tile are installed, so that the area available is not overloaded, satisfactory results may be obtained.

With broad irrigation or ground absorption systems the sewage can be disposed of effectively if the areas used are given frequent periods of rest, and if the surfaces of these areas are occasionally plowed or loosened up.

The following table covers the inspections made of these types of disposal plants during the past year:

SEWAGE DISPOSAL WORKS HAVING SEDIMENTATION WITH SUB-SURFACE IRRIGATION OR BROAD IRRIGATION.

TABLE SHOWING INSPECTIONS MADE AND CONDITIONS FOUND DURING FISCAL YEAR ENDING OCTOBER 31, 1914.

NAME AND LOCATION OF PLANT.	Number of inspections made during year.	Sedimentation.	Dosing appliances.	Condition of sub-surface system.	Condition of broad irrigation or ground absorption areas.	REMARKS.
Ancora (Camden County Sanatorium)	1	Good. .	Good. .	Good. .	.....	Plant recently placed in operation.
Caldwell (Essex County Penitentiary)	4	Poor. . .	Bad. . .	Poor. . .	.....	Sewage soaks through ground into brook. Conditions generally unsatisfactory.
Cresskill (Cresskill Slope Sewerage Company)	3	Poor. . .	.....	.....	Fair. . .	Plant should be overhauled.
Gibbsboro (John Lucas & Co.)	2	Good. .	Good. .	Fair. . .	Good. .	Three separate disposal plants.
Gibbstown (E. I. du Pont de Nemours Powder Co.)	1	Good. .	.....	.....	Good. .	Slight odor in vicinity of plant.
Morris Plains (N. J. State Hospital)	2	Good. .	.....	.....	Good. .	Plant receives careful attention.
New Lisbon (Burlington County Almshouse)	2	Good. .	.....	Good. .	.....	Conditions satisfactory.
Pemberton	2	Good. .	.....	.....	Fair. . .	Sedimentation accomplished in open lagoons.
Princeton (Northwest Field)	3	.....	.....	.....	Fair. . .	No sedimentation.
Ralston (St. Margaret's Home)	1	Good. .	.....	Good. .	.....	Conditions satisfactory.
Smithville (H. B. Smith Machine Co.)	2	Fair. . .	.....	Good. .	.....	Tanks cleaned following inspection.
Verona (Newark City Home for Boys)	3	Fair. . .	.....	Poor. . .	.....	Conditions generally unsatisfactory. Sewage soaks through ground to brook.
Vineland (State Institution for Women)	2	Good. .	Fair. . .	.....	Fair. . .	Sewage is screened. Distribution should be improved.
Vineland (Training School)	1	Good. .	Good. .	.....	Good. .	Conditions satisfactory.

PLANTS FOR THE TREATMENT OF CREAMERY WASTES: The disposal plants for the treatment of creamery wastes in this State are still in an unsatisfactory condition, and with the present facilities little can be done to bring about an improvement. The problem of satisfactorily treating and disposing of creamery wastes is a difficult one, and offers a very fertile field for research and experimentation. For the most part the creameries are small and cannot afford to employ expert experimen-

tors to solve the problem for them. On this account it is a duty incumbent on some central body, such as the State Board of Health, to conduct experiments along this line for the purpose of devising some satisfactory means for handling these wastes. Provision for constructing and operating an experimental disposal plant for the treatment of such wastes is urgently needed.

The existing plants for the treatment of creamery wastes are all operated in the principle of sedimentation and chemical precipitation. The wastes are discharged into a sedimentation tank and there mixed with milk of lime in considerable quantity. A storage period of several hours is given to the treated wastes and the clear liquid is then drawn off and permitted to discharge through the outfall. In some cases the supernatant liquid is strained through gravel or some other medium before discharge. The experiences in the field have tended to show that in cases where milk of lime is applied regularly in sufficient quantity, and a subsequent storage or settling period of 8 to 12 hours is provided, that the effluent will be fairly well clarified and will not produce a local nuisance at the point of discharge.

The following table will show the inspections made and the conditions found to exist during the past year at the plants for treating wastes from creameries:

LOCATION AND NAME OF CREAMERY.	Number of inspections made.	Condition of sedimentation tank.	Regularity of lime application.	Appearance of effluent.	General condition of plant.	REMARKS.
Clinton (L. V. R.R. Creamery).	4	Fair. . .	Fair. . .	Poor. . .	Fair. . .	Effluent unsatisfactory.
Colt's Neck (Colt's Neck Creamery Co.).	4	Fair. . .	Good. .	Fair. . . .	Fair. . .	Wastes are strained through cinders after sedimentation.
Metuchen (Woodbrook Farms).	1	Fair. . .	Good. .	Fair. . .	Fair. . .	Wastes are strained through gravel after sedimentation.
Neshanic (L. V. R.R. Creamery).	4	Fair. . .	Poor. . .	Poor. . .	Poor. . .	Very poor attention paid to operation.
Sunnyside (L. V. R. R. Creamery).	1	Good. .	Poor. . .	Poor. . .	Bad. . .	Conditions very unsatisfactory.
Three Bridges (L. V. R. R. Creamery).	2	Fair. . .	Fair. . .	Fair. . .	Fair. . .	Good results are obtained when lime is added.
Woodstown (Supplee Alderney Co.).	4	Good. .	Good. .	Good. .	Good. .	Waste are strained through gravel after sedimentation.

INSPECTION OF WATER SUPPLIES HAVING SURFACE WATERSHEDS: During the past year all of the water supplies obtained from surface watersheds, have been inspected by the water and sewerage inspectors, with the exception of the watersheds of the Montclair Water Company, the Somerville Water Company, Newark and Flemington. Some considerable work has been done on these four sheds, but the inspection has not been complete.

The following table will show the watersheds that have been inspected during the past year, the number and nature of all existing pollutions, and the general condition of the watershed. In all cases the inspection has been complete, the entire area from which water is obtained having been covered.

The number of pollutions that have been reported is undoubtedly lower than would have been reported had the watersheds been inspected under normal weather conditions. The past summer having been one of exceptional dryness, the surface run-off was low and the number of existing pollutions was correspondingly diminished.

TABLE SHOWING INSPECTIONS OF SURFACE WATER SUPPLIES MADE DURING THE FISCAL YEAR ENDING OCTOBER 31, 1914.

NAME OF WATER SUPPLY.	NUMBER AND NATURE OF POLLUTIONS REPORTED.													REMARKS.
	Public sewers.	Private sewers.	Cesspool pollutions.	Privies.	Sink, washstand, bath and washtub drainage.	Factory pollutions.	Farmyard pollutions.	Garbage dumps, refuse dumps.	Outlets from disposal plants.	All other pollutions.	Number of previously reported pollutions found abated.	Total No. of existing pollutions.	General condition of watershed.	
Allentown	..	..	..	..	....	..	..	....	....	..	....	0	Fair. . .	Considerable pollution from pasture land.
Atlantic City	..	..	..	..	....	..	..	....	....	..	....	0	Good. .	Shed patrolled by local authorities.
Bernard's Water Co.	..	..	..	..	1	..	..	....	....	..	....	1	Fair. . .	Land around reservoir should be cleaned.
Blackwood	..	..	..	1	2	..	..	....	2	..	....	5	Fair. . .	Only used as an emergency supply.
Bloomsbury	..	..	..	..	....	..	..	....	....	..	....	0	Good. .	Reservoirs fed by springs.
Boonton	..	..	..	..	....	..	1	....	....	..	....	1	Fair. . .	United Water Supply Co.
Bound Brook	..	..	..	..	....	..	1	....	....	..	....	1	Fair. . .	Probably many more pollutions in wet weather.
Branchville	..	..	..	..	....	..	1	....	....	..	....	1	Fair. . .	Considerable pollution from pasture land.
Bridgeton	..	..	..	3	....	..	..	....	....	..	....	3	Good. .	Considerable pollution from pasture land.
Buckhorn Springs Water Co.	..	..	..	..	....	..	..	....	....	..	....	0	Good. .	Fence built around entire water shed.
Butler	..	..	..	..	....	..	..	....	....	..	....	0	Good. .	
Clinton	..	..	..	1	....	..	..	....	....	..	....	1	Fair. . .	Possible pollution from pasture land.
Dover	..	..	..	..	....	..	..	....	....	..	....	0	Poor. . .	Considerable surface wash.
Elizabethtown Water Co.	1	..	..	2	....	7	3	....	....	1	....	14	Bad. . .	Shed thickly populated.
Frenchtown	..	..	..	3	7	..	1	....	....	1	....	12	Poor. . .	Considerable pollution from pasture land.

TABLE SHOWING INSPECTIONS OF SURFACE WATER SUPPLIES MADE DURING THE FISCAL YEAR ENDING OCTOBER 31, 1914—Continued.

NAME OF WATER SUPPLY.	NUMBER AND NATURE OF POLLUTIONS REPORTED.													REMARKS.
	Public sewers.	Private sewers.	Cesspool pollutions.	Privies.	Sink, washstand, bath and washtub drain ge.	Factory pollutions.	Farmyard pollutions.	Garbage dumps, refuse dumps.	Outlets from disposal plants.	All other pollutions.	Number of previously reported pollutions found abated.	Total No. of existing pollutions.	General condition of watershed.	
Glen Gardner												0	Good. .	
Gloucester												4	Poor. . .	Emergency supply only.
Hackensack Water Co.					1							1	Fair. . .	Company has its own inspection service.
Hackettstown (Mine Hill Supply)												0	Fair. . .	Receives considerable surface wash.
Hackettstown (Morris Co. Supply)												0	Fair. . .	Receives considerable surface wash.
Haledon												0	Fair. . .	
High Bridge							4					4	Bad. . .	Considerable pollution from pasture land.
Jamesburg (N. J. State Home for Boys)												0	Fair . .	Emergency supply only.
Junction Water Co.							1				1	1	Fair. . .	Considerable pollution from pasture land.
Lambertville												0	Fair. . .	Considerable pollution from pasture land.
												0		
Lopatcong Water Co.												0	Fair. . .	
Lumberton				1					1			2	Fair. . .	
May's Landing												0	Fair. . .	
Medford				1					1			2	Fair. . .	
Mendham												0	Good. .	
Middlesex Water Co., (Supply No. 1)			1	1	1							3	Fair. . .	Shed thickly populated.
Middlesex Water Co., (Supply No. 2)				2	3		3		1		1	9	Fair. . .	Shed thickly populated.
Millville Water Co.				1		2			1		3	4	Fair. . .	Considerable bathing and boating on lake.
Monmouth County Water Co.												0	Fair. . .	Possible pollution from pasture land.
Moorestown					10					1	7	11	Poor. . .	Supply is to be abandoned.
Morris Plains (N. J. State Hospital)												0	Fair. . .	Considerable surface wash.
Morris Aqueduct Co.													Good. .	Shed in very good condition.
Mount Holly									1			1	Fair. . .	Considerable animal pollution.
New Brunswick			1	2	5	3	1	1	1			14	Poor. . .	
New Lisbon									1			1	Fair. . .	Considerable animal pollution.
Netcong												0	Good. .	Shed well protected.
Newton												0	Good. .	
Orange			1		2							3	Fair. . .	Considerable surface wash.
Pemberton									1			1	Fair. . .	Considerable animal pollution.
Perth Amboy												0	Poor. . .	Used to supplement supply from wells.
Pleasantville												0	Good. .	
Pluckamin												0	Bad. . .	Considerable pollution from pasture land. Reservoir in bad condition.
Rahway		1	20	2	12						13	35	Poor. . .	Shed thickly populated.
Rockaway										1		1	Fair. . .	Fence broken around reservoir.
Salem												0	Poor. . .	Used only as emergency supply.
Sparta (Dr. T. H. Andress Supply)												0	Fair. . .	Wall around spring should be repaired.
Sparta (David Fisher's Supply)												0	Good. .	
Sparta (Rob't M. Smith's Supply)			1				1				2	2	Bad. . .	Considerable surface wash and animal pollution.
Skillman (N. J. State Village for Epileptics)												0	Fair. . .	Considerable pollution from pasture land.
Tintern Manor Water Co. (Swimming River)		2	1	7	6		5					21	Fair. . .	Considerable pollution from pasture land.
Tintern Manor Water Co. (West End)												0	Good. .	
Tuckerton												0	Good. .	
Vincentown				1								1	Fair. . .	Considerable animal pollution.
Washington				2			1					3	Fair. . .	Considerable pollution from pasture land.
Woodbury													Poor. . .	Supply to be abandoned.

THE INSPECTION OF STREAMS AND WATER-SHEDS: During the past year there has been some work done in connection with the inspection of streams outside of the water-sheds which are used as sources of water supply. The Hackensack River and its tributaries below the dam at New Milford were completely inspected, and the results of this inspection will be found elsewhere in this report.

The water-sheds of the following streams have been completely or partially inspected: Raritan River, Passaic River, Cohansey Creek, Maurice River, Absecon Creek, Rancocas Creek, Assanpink Creek and Shark River.

INSPECTION OF THE HACKENSACK RIVER AND ITS TRIBUTARIES FROM NEW MILFORD TO BERGEN POINT: During the past year a thorough inspection has been made of the Hackensack River and its tributaries from the dam at New Milford down to Kill van Kull at Bergen Point.

The work extended over a considerable period; the first inspections being made in January, 1913, and the final inspections in April, 1914. During this period fifty-seven and one-half working days were required to cover the drainage area, and a total of 354 pollutions were reported.

The streams are all tidal streams, the effect of the tide extending up to the dam at New Milford. For the purpose of this investigation, the area covered was divided into two parts: the Hackensack River and its tributaries below New Milford, and Newark Bay. The first portion extends from the dam at New Milford down to, and including West Bergen. The second portion extends from West Bergen down stream on the east side of Newark Bay to the junction of Newark Bay and Kill van Kull. The west side of Newark Bay was not inspected, this territory being under the jurisdiction of the Passaic Valley Sewerage Commission.

Following the completion of the inspection, notices were served on all of the major polluting municipalities and corporations, requiring them to cease such pollution on or before October 1, 1916; and letters were sent to the owners of all minor polluting properties, informing them that it would be necessary for them to cease polluting the waters of the Hackensack River and its tributaries prior to that date.

CLASSIFICATION OF POLLUTIONS IN DIFFERENT TOWNS ON THE HACKENSACK RIVER AND NEWARK BAY.

TOWN.	Public Sewers.	Private sewers.	Properties connected with private sewers.	Toilet drains.	Privies.	Factories.	Miscellaneous.	Total.
Bayonne	13	4	17	10	1	7	.....	52
Bogota	3	.....	...	3	5	1	.....	12
Carlstadt	1	.....	.....	.....	.....	.....	.....	1
East Rutherford	1	.....	.....	.....	.....	.....	.....	1
Englewood	1	.....	.....	.....	.....	.....	.....	1
Fairview	.....	.....	.....	.....	.....	1	.....	1
Greenville	3	2	.....	2	1	2	.....	10
Hackensack	4	4	8	9	3	3	.....	31
Jersey City	6	1	.....	1	4	4	1	17
Kingsland	.....	.....	.....	3	.....	1	1	5
Leonia	3	2	.....	.....	.....	.....	.....	5
Little Ferry	.....	.....	.....	6	2	1	.....	9
Morsemere	.....	.....	.....	1	.....	.....	.....	1
New Milford	.....	.....	.....	4	.....	.....	.....	4
Nordhoff	.....	.....	.....	.....	.....	1	.....	1
North Bergen	9	.....	.....	.....	7	1	.....	17
North Hackensack	.....	.....	.....	7	2	.....	.....	9
Palisades Park	.....	3	.....	9	3	.....	.....	15
Ridgefield	1	4	.....	4	1	1	.....	11
Ridgefield Park	7	.....	.....	11	8	1	.....	27
Riverside	.....	2	53	3	1	.....	.....	59
Rutherford	1	.....	.....	.....	.....	.....	.....	1
Secaucus	2	.....	.....	2	4	2	12	22
Snake Hill	.....	5	.....	.....	.....	.....	.....	5
Teaneck	.....	2	5	19	.....	.....	.....	26
W. Bergen	1	2	.....	4	1	3	.....	11
Total	56	31	83	98	43	29	14	354

DIVISION OF ENGINEERING: C. G. Wigley, Chief Sanitary Engineer in charge.

The work of the Engineering Division relating to sewerage works is briefly summarized below.

INSPECTIONS: Number of inspections of works under construction, 100; number of special investigations, 141.

Special investigations and reports of the operation of sewage disposal plants were made at Chatham and Belmar.

Sewerage works acted upon by the Board were:

Plans for sewer systems approved, 12; plans for sewer systems held for investigation, 1; plans for sewer systems disapproved, 3; plans for municipal sewage disposal plants approved, 20; plans for municipal sewage disposal plants held for revision, 5; plans for municipal sewage disposal plants disapproved, 3; plans for institutional or factory sewage disposal plants approved, 8; plans for factory sewage disposal plants disapproved, 2; plans for private sewage disposal plants approved, 11; plans for alterations to existing disposal plants approved, 7; plans for new sea outfall approved, 1; plans for disinfection apparatus approved, 1; plans for sewer extensions approved, 171; plans for sewer extensions held for further information, 12.

ROUTINE AND SPECIAL INVESTIGATIONS: During the year this Division has made 317 inspections which are separated into two classes, routine and special. A routine inspection is a visit made to inspect work under construction. It was intended that two or three inspections would be made of each new sewage or water installation during the time of construction. By the term "special investigation" is meant in general, a visit to make suggestions in the design of proposed plants or to judge of the feasibility of new projects. Other special investigations that have been made in the past year were sanitary and instrument surveys. Observations were made also on the operation of some sewerage treatment works, with the idea of making constructive criticisms, so that faults in construction or operation could be remedied. Some special visits have been made to learn what certain municipalities and companies have done to comply with orders of the State Board of Health. The inspections and investigations are tabulated as follows: Number of water works inspections and investigations, 76; number of sewage works inspections and investigations 241.

SPECIAL INVESTIGATIONS RELATING TO SEWERAGE WORKS, AND ADVICE GIVEN AS TO DESIGN OF TREATMENT PLANTS: For the past two years it has been the rule of this Department that the site of the proposed sewage plant must be visited before any action is taken upon the plans. In many instances the plans have not been satisfactory to the Department as regards certain details of construction or design. In all such cases attempts have been made to have the unsatisfactory details altered by making a visit to the engineers designing the works, and taking the matter up personally with them. The results have been very satisfactory.

Numerous requests are received from public and charitable institutions and private individuals for advice as to the construction of sewage disposal plants. In cases where it is apparent that money is not available for the employment of an engineer, the Department has given the necessary advice, and thus greatly helped in removing minor pollutions from the streams. The amount of this kind of work which can be done by the Department is necessarily small as the Engineering Division at the present time consists of only two men.

NOTES RELATING TO THE LEAKAGE OF UNDERGROUND WATERS INTO SEWER SYSTEMS: There prevails in some sections a popular belief that the infiltration of ground water into a sewer system is desirable. This belief is based upon the assumption that it is necessary to wash out the sewers, and provide a flow of water adequate to float the solid material. The benefits, however, are greatly overestimated as a properly constructed sewer on a proper grade will cleanse itself, and if it is necessary to flush sewers laid on low grades it is better to rely on some means of flushing that can be readily controlled, such as the periodic flushing of the sewers with a fire hose, hand operated flushing manholes, or automatic flush tanks.

The ground water admitted into the sewer systems in some cases is so great as to overflow some of the manholes, and in other cases causes sewage disposal plants to operate in an unsatisfactory manner, or not at all for a considerable portion of the year. It is not easy to place the responsibility for such leakage where it properly belongs. In some cases the sewer system just after construction appears to be satisfactorily tight, but after house connections have been made the infiltration increases. In one case where the sewage is treated, the dry weather flow was found to be about 400,000 gallons, and the storm water flow at times was at least four times this quantity. The result is that the plant becomes inoperative for several days.

It has been suggested that house connections in wet soil could be made with cast iron pipe, with leaded joints, without greatly increasing the cost per foot of connection.

If this leakage into the sewer system, which enters in greatest quantities during stormy weather, was taken care of in a satisfactory manner, each 1,000 gallons of such infiltration would necessitate the expenditure of from $25 to $100, for additional treatment works, depending upon the nature of the treatment provided. It also would increase materially the cost of operation of the plant. It is, therefore, highly desirable to keep the leakage at as low a figure as is possible at reasonable cost for the construction of the house sewers.

JOINT OUTLET SEWERS FOR CERTAIN MUNICIPALITIES IN ESSEX AND UNION COUNTIES: This trunk sewer has for some time past, during stormy weather, overflowed into the waters of the State. A recent inspection showed that at eighteen manholes sewage had risen to such a

height as to flow out of the top of manholes onto the ground, and thence to the streams.

Unless some remedial measures are undertaken, it would appear that this condition must become more objectionable with the extension of the sewer system in sections which are rapidly building up into residential communities. Several hearings have been given for the purpose of arriving at some solution of the difficulty.

SPECIAL REPORT ON THE OPERATION OF THE CHATHAM-MADISON SEWAGE DISPOSAL PLANT.

"In compliance with the motion of the Board, passed at a meeting held April 7, 1914, the Engineering Division made certain investigations at the Chatham-Madison sewage disposal plant. The plant was designed to care for a flow of 600,000 gallons of sewage per day, and was supposed to have a bacterial efficiency of at least 95 per cent. The plans for this disposal plant were approved August 16, 1910.

"It has been reported at frequent intervals that at times of rain the plant does not perform its functions in a satisfactory manner.

"Under normal conditions a plant of this character should produce an effluent low in suspended solids, clear in appearance, and low in bacterial count. An effluent which would compare very favorably with the water in the Passaic River, and might very easily be even better in its general aspects than the water in the stream. Especially would this be so if the disinfection apparatus at Chatham operated in a satisfactory manner.

"We will endeavor to consider this plant and its appurtenances in succession as the sewage passes through the plant, beginning with the sewer system.

"It is apparent, on visiting this plant during rainy weather, that the infiltration into the sewer system is so great as to seriously affect the quality of the effluent discharged from the plant. The ordinary dry weather flow of the sewers is stated to be in the neighborhood of 300,000 gallons per day. Our own measurements, made after a period of about one week of dry weather, would indicate that the sewage flow is about 650,000 gallons per day, so that in our estimation it is probable that the dry weather flow lies somewhere between these two figures.

"On May 6, 1914, after a rainfall of 1.15 inches, lasting from sometime in the night of May 4th, until 7 A. M., May 6th, the sewage flow at the plant was measured and showed a flow of 2,500,000 gallons per day. It is probable that this figure is at times exceeded, but it is not probable that it would be the case more than once or twice a year, and it is probable that ordinary storms would not cause such a large quantity of sewage to be delivered at the plant.

"As above stated, the rainfall, when this measurement was made, was 1.15 inches for a period of two days, the rainfall record being as follows:

"May 4, 1914, rain began falling during the night; precipitation 8 A. M., May 5th, one-tenth of an inch; storm ended May 6th at 7 A. M.; precipitation 8 A. M., May 6th, 1.05 inches.

"Therefore, the rainfall for the two days was 1.15 inches, with 1.05 inches falling from 8 A. M., May 5th, to 7 A. M., May 6th. This flow made it impossible to operate the plant in a satisfactory manner for a period of three days.

"Upon investigating the rainfall at Chatham, it was found that storms of this severity occurred on an average of about twelve times per year.

"If it is true that a precipitation of one inch rainfall in a single night will cause the plant to operate in an unsatisfactory manner for three

days it is, therefore, probable that the plant will operate in an unsatisfactory condition for about 36 days in each year. The rainfall, however, which caused the unsatisfactory operation of the plant in this particular instance was distributed over a period of two days, and tabulating the number of times in which the combined precipitation of two consecutive days has been more than one inch, it is found that the average number of times which this occurs is 20 times a year. If each of these causes the plant to operate unsatisfactorily for a period of three days, the plant would then be unsatisfactory on an average of 60 days per year. It is, however, probable that the actual figure lies somewhere between 36 days and 60 days, as the flood condition would depend greatly upon the degree of saturation of the soil, and the rate at which the rain falls.

"It was apparent at the time of inspection that considerable trouble was caused by the infiltration of the storm water into the low level Chatham sewer line, as the sewage from this pipe line was, for a considerable distance from the plant, backed up as high as two feet above the sewer pipe. It has been stated to us that at times the sewage has overflowed a shallow manhole, which is the third from the plant, not counting the manholes at the weir chamber. Because of this fact, examination of this trunk line was made for the purpose of obtaining some idea as to the quantity passing to the plant. As the pipes were running full, or nearly full, uranine dye was placed in the upper manhole and the time taken until a strong dye color was apparent in the lower manhole. In this way a rough idea of the velocity in the sewer was obtained.

"The following table gives data relating to the flow of sewage, the probable quantity of domestic sewage, and the probable quantity of infiltration entering the sewer on this date:

Section	Theoretical flow, 500 gals. per house connection, and 10,000 gals. of infiltration per mile of sewer.	Actual flow after heavy rain for each section of the sewer.	Excessive infiltration.
Above D. L. & W. R. R.....	23,500	42,000	18,500
D. L. & W. R. R. to Main St...	5,500	235,000	229,500
Main St. to Hedges Ave.	8,500		
Hedges Ave. to Florham Road.	62,500	49,000	22,000*
Florham Road to Plant	19,000	334,000	315,000
Totals	119,000	660,000	563,000

*The reversal of the figures in this section was probably due to the leakage of sewage from the sewer system into the adjacent soil. A few instances of this character were observed at the time the inspection was made.

"It seems apparent from these figures that storm water enters the sewer system in enormous quantities, because of the fact that between certain points the quantity of sewage increases in quantity much beyond what would be anticipated as being discharged from the house connections. This is especially noticeable on the upper section of the trunk line above Main Street, where the flow increases from about 42,000 gallons to 277,000 gallons, without any apparent reason except the infiltration of the water.

"On going over the ground along the trunk sewer there were many holes adjacent to the joints in the pipe line, which would seem to indicate that they form direct means for ground water to enter the system.

"It is obvious that this trunk line should be very carefully inspected, and broken or leaking joints repaired.

"The above table, showing the quantity of sewage flowing in the low level trunk line, very clearly shows the difference between a reasonable anticipated quantity of sewage and the actual flow.

"On the high level trunk line, carrying sewage from the northern section of Chatham and from the Borough of Madison, a siphon has been constructed, which is not shown upon the original plan. The siphon was constructed by dropping the 18-inch pipe down about four feet, and then permitting the sewage to rise at the disposal plant. This siphon is about 1,500 feet long, and its construction was necessitated by the fact that it was impossible to obtain a right-of-way along the original line. Particular objection is made to this siphon, as it is claimed that because of the large diameter of the sewer, the velocity of flow is so low as to cause the deposition of solid material from the sewage. It is also claimed that this velocity would be so low as at times to cause septic conditions to arise before the sewage is received at the plant. From measurements made on a flow of sewage somewhat above the probable normal flow, the velocity in this sewer was found to be 0.68 of a foot per second, which velocity is so low as in all probability to cause a deposit of some of the solid material in the sewage. The time of passage through this siphon, however, would be of such duration that we do not feel that it would seriously affect the quality of the sewage. It might have been a serious factor when the number of sewage connections was small. As to the deposit of solid material, steps should be taken to flush out the siphon at least every few days.

"It is reported that there are one or two leaks on the high level line between the sewage disposal plant and the siphon from the Borough of Madison. As to the storm infiltration on this sewer, no definite data has as yet been obtained. It is evident that the infiltration is of considerable quantity, and the flow in stormy weather probably approximates one and one-half million gallons per day. It is stated that the sewers of Madison were tight when first constructed, but at the present time the wet weather flow is sometimes four times as great as the dry weather flow. It is believed that this condition is caused by the fact that the house connections have not been made in as careful a manner as is desirable. Within a short time, we hope to install some recording weir gauges on these sewer lines, and obtain more definite information as to the amount of filtration into the sewer system.

"It is our opinion that the unsatisfactory operation of this plant during stormy weather is primarily due to the fact that the infilrations is greater than was anticipated, and is in fact considerably more than would be expected on work that was constructed in a first class manner. The conditions, however, may have been caused in part by frost action or settlement, or other causes, on sections of the sewer line which are very close to or above the normal surface of the ground.

"From the Borough Clerk of Chatham, we obtained the information that the water consumption in the Borough is 250,000 gallons per day, which is an average figure. The total population of Chatham is estimated at the present time as 2,100 persons, which would make the average consumption 119 gallons per capita per day, so that the total flow of sewage from the Chatham low level line is estimated at about 97,000 gallons per day. This figure is based on the assumption that five persons dwell in each house, and includes no allowance for infiltration. The actual figure is probably less than this, as much of the water is used for sprinkling lawns, etc.

"The Borough Clerk of Madison informed us that the population of the Borough is 5,130. The average water consumption is 486,000 gallons per day. He further stated that there are 650 house connections to the sewers in Madison. An average of 95 gallons per capita of water is used per day. The average flow of sewage based upon the above assumption, would be 309,000 gallons per day, not including infiltration."

SCREEN CHAMBER.—"From our inspection made at this time, it does not appear that the screen chamber is taken care of in a satisfactory manner. It seems that these screenings are not removed periodically, and at the time of inspection sewage was flowing over the top of the screens. On one or two other occasions, we have found this same condition to exist. In the grit chamber there was a deposit of solid material, at some points two and one-half feet in depth, and it does not appear that this deposit is removed at periodic intervals as should be the case.

IMHOFF TANKS (HIGH LEVEL).—"In constructing the high level Imhoff tanks, the horizontal baffles in one of them was omitted, thus converting it into an ordinary sedimentation tank. I am informed that originally the plans did not contemplate the construction of a third Imhoff tank, but due to the fact that the plans were not completed until work had progressed in accordance with the older plans, it was considered advisable to construct the third tank. From a theoretical consideration, and from such observations as were made, it would appear to be very desirable to construct the horizontal baffles in this third unit. This would increase the theoretical capacity of the plant when the capacity of the septic tank is figured on an eight-hour detention period. It is claimed that there was a change made in the original plans, and that due to the omission of the horizontal baffles, a considerable quantity of suspended matter is carried into the effluent by the ebullition of gas, and there is little doubt but that this is true. If the horizontal baffiles were constructed in this unit, it would be necessary to remove the roof, which has not been done at the present time. The roof, however, has been removed from the two Imhoff tanks, and considerable improvement in their operation is reported. The high water marks in these tanks show that at times water has risen above the top of the wall of the digestion chamber, and for this reason has broken up the scum in the gas vents, and carried quantities of it into the effluent. At the present time certain changes are being made by means of which the top of the wall of the sedimentation compartments will be raised about one foot, and it is anticipated that this will prevent any such discharge of scum by the sewage from the sedimentation basin.

"Objection is also made in relation to the failure of the contractor to put into the sludge compartments certain water pipes for the purpose of breaking up the sludge, in order that it may be more readily discharged. We were informed that these pipes had been omitted because the Borough of Chatham refused to lay a water pipe to the plant, as it was considered too expensive. The installation of such pipes would no doubt greatly aid in the operation of the plant if water pressure can be obtained. The attendant stated that wires, used for holding the forms in place, were left projecting from the concrete so that deposits of sludge accumulated about them, which, when gasified, came to the top. These, however, are to be removed as soon as possible.

IMHOFF TANKS (LOW LEVEL).—"At the low level Imhoff Tanks, conditions are of a similar nature, but of greater importance. Due to the fact that the combined heavy infiltration of sewage and the lack in capacity of certain discharge pipes from the contact beds, there is during wet weather a backing up of sewage, particularly through the low level Imhoff tanks. This backing up is so great as at times to cause the sewage to rise about six or eight inches above the top of the walls of the digestion

chamber. This causes a general flooding of the plant, and scum from the digestion chamber is mixed with the incoming sewage and carried to the contact beds. The attendant reports that he has had considerable difficulty in removing sludge from the low level tanks, and feels that this work would be greatly aided by the installation of a water pressure pipe.

CONTACT BEDS.—"During the wet weather the sewage is discharged into the central distributing compartment in such quantities and with such force as to make the operation of the automatic distributing device unsatisfactory. The operation of this apparatus is also seriously affected by the backing up of the sewage in the central outlet chamber, which at times floods the pails of the dosing apparatus, and thus causes unsatisfactory operation of the control apparatus. This condition has been considerably aided by inserting baffles on the outlet of the contact beds, which hold back the sewage and permits it to flow in comparatively small quantities into the outlet chamber. From data obtained during this inspection, it does not appear that the control apparatus is satisfactory in its operation, nor that any particular pains have been taken to make its operation satisfactory. It would seem that the high level contact beds are seldom used, though the reason for this is not apparent.

NOTES ON THE OPERATION OF THE CONTACT BEDS.—"On the morning of May 5th, the plant was beginning to feel the effects of the heavy rain of the previous night. The south high level Imhoff tank and septic tank were in use, also the low level Imhoff tank, during our entire visit. The sewage was not turned into the upper level contact beds all day. The attendant said that this had been done for the past ten days, and would not be turned into them until the concrete walls in the upper level Imhoff tanks were finished. His reason was to keep the upper level contact beds from being clogged with suspended matter.

"When a contact bed empties, the water in the central outlet chamber backs up into the beds that are supposed to be resting. This measured in one gate chamber was fifteen inches deep. The attendant says he raises the chains on each of the outlet valves from the valve chamber in the daytime, so that each bed will drain out after this backing up. He lowers the chain on the valve whose bed is about to fill. This would indicate that the pipe leading from the contact beds to the secondary settling tank is not of sufficient size, or does not have the required fall to carry off the heavy flow.

"The control in the high level contact beds worked considerably better than that in the low level contact beds. However, it was necessary to clean the pails because the sediment in the bottom blocked the small hole through which the sewage drains. All pipes leading to the pails should be cleaned out and adjusted. The baffles in the valve chambers seem to help the operation by not allowing the beds to drain too quickly, and they prevent the sewage backing up into the beds that are resting when a bed empties.

SAND BEDS.—"During the period of heavy flow, the operation of the sand beds was by hand. This was necessary because of the high flow, and because of the after effect of the high flow. In general, during times of high flow, two beds were used for three or four hours during the daytime, then the other two beds were used. At night three beds were used. The sludge bed was also pressed into service.

LOW LEVEL CONTACT BEDS.—"The conditions at the low level contact beds are even worse under wet weather conditions than was reported for the high level contact beds. This is due in part to the fact that the high level beds, while of the same size, treat only the sewage from the high level trunk line. This sewage is augmnted by the flow of sewage from the low level Imhoff tank, and, therefore, the low level contact beds receive

about one-third more sewage than the high level beds. The pipe from the low level Imhoff tank joins the outlet pipe from the upper contact beds at a point just below the upper contact beds. Due to the fact that the quantity of sewage is so great, and the size of the pipe and available head so small, this causes a very serious backing up of sewage in the low level Imhoff tanks, which has been previously commented upon. This backing up not only floods the Imhoff tank, but floods the entire trunk line for a distance of some 2,000 feet from the disposal plant.

"Because of the fact that the outlet pipe from the low level contact beds is so small, combined with the very large quantity of sewage, it is absolutely impossible to operate the control apparatus in a satisfactory manner during wet weather. In fact, the water in the central outlet chamber stands several feet above the outlet pipe, and, due to the construction of the control apparatus, backs up and fills the contact beds within about eighteen inches of the top of the stone. At the low level contact beds, no baffles are provided for the purpose of reducing the sudden rushing out of the sewage. It is contended that this causes the washing out of solid matter which should be retained in the contact beds. Certain samples were collected for the purpose of throwing light upon this matter. The figures themselves, however, are not particularly instructive, although they would seem to indicate that in the low level contact beds considerably more solid matters are discharged than is the case in the high level contact beds. The solids are, for the most part, discharged on the first and last of the emptying.

HYPOCHLORITE DISINFECTION APPARATUS.—"At the secondary contact beds, an attempt is made to disinfect the sewage, particularly during flood conditions. This disinfection apparatus consists of a barrel with a small wooden spigot at the bottom. The hypochlorite solution, after being mixed in a second barrel, is placed into the feed barrel, and from thence runs into the sewage. This portion of the work is controlled in such an unsatisfactory manner that it has very little value, and in fact is more liable to create a false sense of security than to do anything else.

FINAL SETTLING TANK.—"In the original plan, it was proposed to settle the contact bed effluent in final settling basins. These basins were originally designed with horizontal baffles, and were similar to the Imhoff tanks. In the construction of the plant they were not put in place. Therefore, when the secondary settling tanks are in use, considerable gastification of the deposited suspended matter is caused, which seriously affects the quality of the effluent. For this reason, the secondary settling tank is seldom used, except during wet weather. Horizontal baffles should be placed in these tanks, and the tanks should form a portion of the works under normal operating conditions. During wet weather, it is customary, when the sand beds have become seriously flooded, to permit sewage to overflow from this secondary settling tank into a storm sewer, and thus directly to the river.

SAND FILTER AND SLUDGE BEDS.—"These structures appear to be satisfactory in general, and would, during wet weather, act as strainers if they were of such size as to take care of the whole sewage flow. Under these circumstances the effluent from the plant would be equal to the quality of the water in the Passaic River, provided that the contact beds were working, and that the disinfection of the sewage was also satisfactory. The fact, however, is evident that at times these sand filters are not able to handle the whole flow of sewage, and, to my mind, it is essential and of primary importance that either the infiltration into the sewer systems be reduced, or that the sand filters be materially increased in size by the construction of additional units.

CONCLUSION.—"The most difficult task of the attendant at this plant is to satisfactorily care for the storm water flow. This is primarily due to the fact of the very heavy infiltration into the sewer system. While the plant was designed to treat an ultimate quantity of 600,000 gallons per day, and 50 per cent. more than this for short intervals of time, the present flow is probably somewhat over 2,000,000 gallons per day during wet weather, and, therefore, of such quantity as to affect the operation of every unit and structure in the disposal plant. It will probably be impossible for the Boroughs of Madison and Chatham to reduce this infiltration to a normal figure, except at such great expense that it would be considerably cheaper to remodel several features of the disposal plant. The horizontal baffles in the high level Imhoff tanks, and secondary settling tanks should be put in place. The control apparatus on the contact beds and sand beds should be remodeled or altered so as to operate in a satisfactory manner, or provision made for men to stay at the plant both day and night during wet weather, to operate the plant by hand. The hypochlorite disinfection apparatus is entirely inadequate and unsatisfactory, and the construction of a permanent device which would perform this function in a more satisfactory manner is suggested. It will also be necessary to provide additional passageways for the sewage from the Imhoff tanks to the contact beds and to the secondary settling tank.

"As the most important factor tending to make this plant unsatisfactory is, in our opinion, the excessive infiltration, we feel that every effort should be made to reduce this to a minimum. It will be necessary in this connection to make a very complete investigation as to the condition of the sewers and trunk lines. This investigation would require considerable time on the part of the persons making the investigation. It is suggested that the Joint Committee have this matter thoroughly investigated by their own engineers. After the infiltration has been stopped as much as possible some reasonable conclusions may be arrived at as to whether the plant is at present of sufficient capacity to care for the flood flows of sewage."

NECESSITY FOR THE IMPROVEMENT OF CONDITIONS ALONG THE HUDSON RIVER, KILL VAN KULL AND ARTHUR KILL.

To those persons familiar with the work and reports of the Metropolitan Sewerage Commission of New York City, it is apparent that municipalities which now discharge sewage into the Hudson River, Kill van Kull and Arthur Kill, must within a short time improve upon the present methods of discharging the sewage. Many of the sewers discharge upon the shore or in shallow water between long docks so that offensive nuisances are caused. The conditions in many cases can be greatly improved by prolonging the outlet pipe to the pier head line, and in most instances this should be done immediately, so as to take advantage of the diluting power of the river as far as possible. In addition, towns so situated should contemplate the construction of preliminary treatment works, such as screening plants or settling tanks, and any improvements made at the present time should be so constructed as to permit the installation of the additional works, which will be required in the future.

During the past year inspections were made of the sewer outlets in New Jersey which discharged sewage into the Hudson river, Kill van

Kull, Arthur Kill and associated waters. This inspection showed that at many of the outlets conditions were much worse than was surmised.

The data collected has been condensed and arranged in a table that briefly gives information as to the New Jersey towns having sewerage system discharging into waters adjacent to New York Harbor, the population of each as given by the U. S. census of 1910; whether the sewer discharges combined storm water and house sewage, or simply house or sanitary sewage alone. For each separate outlet there is given the total length of the sewers in feet, the estimated flow of sewage in gallons per day, and a brief description of the outlet, together with brief notes as to the nuisance caused. It is to be noted that these inspections were made in the fall, when odors from the outlets would not be so noticeable as in the warmer summer months. The waste waters from factories, when discharged in large quantities, were included in the table as indicated.

A map of the waters included in the tabulation has been prepared, which shows clearly and more forcibly the large number of sewer outlets in certain sections of the harbor waters. Blue prints will be furnished on application.

TABULATION OF DATA RELATING TO SEWER OUTLETS

MUNICIPALITY.	Number on map.	Population of municipality.	Character of Sewer System.	Total length of sewers in feet.	Estimated flow of sewage in gallons per day.
Fort Lee	6683	4,472	Combined	51,500	
Fort Lee	6684		Combined		
Edgewater	6881	2,655	Combined	4,900	
Joint Outlet { Edgewater	6680		Combined	6,500	
Joint Outlet { Cliffside				7,600	565,000
Joint Outlet { Edgewater	6689		Combined street drainage and cesspool overflow		
Joint Outlet { Cliffside					
Cliffside	6686	3,394	Combined	3,900	13,000
Cliffside (Overlook Development Company)	6688		Sanitary	5,100	2,000
Edgewater			Factory waste outlets		12,485,500
Hudson Heights			Factory waste outlet		900
Woodcliffe (Woodcliffe Land and Improvement Company)	6691		Combined	5,600	181,500
Guttenberg	6692	5,647	Combined	22,900	360,000
Guttenberg			Trade waste outlets		7,500
Joint Outlet { Union	6693	21,023	Combined	138,700	775,000
Joint Outlet { Weehawken		9,000			
Joint Outlet { West New York		13,560			
Weehawken (Cossit Estate)	6694		Combined		
Joint Outlet { Union	6695		Combined	18,100	390,000
Joint Outlet { Weehawken					
Joint Outlet { West Hoboken		35,403			
Weehawken	6696		Combined		
Weehawken			Sanitary		70,000
Hoboken	6739	70,324	Combined		389,000
Hoboken	6740		Combined	Total length of sewers in Hoboken 96,600.	Included under 6739
Hoboken	6738		Combined		488,000
Hoboken	6737		Combined		39,000
Hoboken	6736		Combined		2,430,000
Hoboken	6735		Combined		367,000
Hoboken	6734		Combined		31,500
Hoboken	6733		Combined		3,177,000
Hoboken			Factory waste		246,000
Jersey City	6651	267,779	Combined		Included under 6652
Jersey City	6655		Combined	18,250	4,080,000

DISCHARGING INTO THE HUDSON RIVER.

Size and Nature of Outfall.	Location of Outfall.	Approximate elevation above or below mean high water.	Remarks.
36 inch cast iron pipe ending at established pierhead line.	At school-house No. 2 in Edgewater.	− 2 feet.	Foul odor in summer reported.
3 feet by 7 feet 6 inches, concrete sewer for storm flow, ends at shore. 40 inch cast iron pipe for dry weather flow, ends 230 feet out from shore.	Foot of Bluff Road in Edgewater.	− 2 feet.	Slight odor.
36 inch cast iron pipe discharges into slip 450 feet out from shore.	Foot of Edgawater Road.	− 3 feet.	Oily scum on water. Oily odors.
36 inch cast iron pipe, and 16 inch cast iron pipe discharges into slip under pier.	Near Warner Sugar Refinery.	− 2 feet.	Gas ebullition. Water discolored by refinery wastes.
6 feet by 7 feet, wooden box sewer.	North of Corn Products Factory.	− 1 foot.	Gas ebullition. Noticeable odors. (Outlet for Cliffside's new sewage plant will be located at this place.)
12 in. cast iron pipe discharges at shore line into slip.	North of Episcopal Church, Edgewater.	Zero.	Slight odor. Noticeable deposits of solids.
8 inch cast iron pipe ends at pierhead	Susquehanna Coal Docks.	− 5 feet.	
			Factory wastes from 8 factories.
			Trade wastes from 1 factory.
36 inch cast iron pipe ends under pier at bulkhead.	South of Gardner and Meeks Lumber Yard	−5 feet.	
36 inch cast iron pipe ends 300 feet from shore, beside dock.	Foot of Herman Avenue.	−5 feet.	Gas ebullition. Noticeable odors.
			Trade wastes from 1 factory.
48 inch cast iron pipe ends at bulkhead. Discharges into slip.	Foot of 16th St. West Shore Freight Yards.	− 4 feet.	Gas ebullition. Noticeable odors.
12 inch cast iron pipe ends at bulkhead under dock.	Between 4th and 5th Streets.	− 2 feet.	
Discharges into slip at bulkhead.	19th St., Erie R. R. Yards.		Heavy gas ebullition.
Discharges into first slip north of coal trestle.	Southern part of Erie R. R. yards.		
			Wastes from railroad terminal.
Sizes unknown. Discharges at bulkhead under dock.	14th Street.	− 5 feet.	Takes sewage from 6740 also.
22 feet 6 inches by 3 feet, wooden box sewer.	15th Street.	− 3 feet.	Reported that outlet is plugged with sand.
Size unknown. Discharges under dock.	11th Street.	Unknown.	
Three 8-inch vitrified pipes. Discharges under dock.	5th Street Hudson Square.	− 5 feet.	
60 inch circular brick sewer. Discharges at end of pier.	3rd Street.	− 5 feet.	Reported that the outlet is in good condition.
Size unknown. End of pipe bulkheaded over.	Newark Street.	Unknown.	Heavy gas ebullition. Heavy odor.
Size unknown.	Near Court Street.	Unknown.	
Two 48 inch cast iron pipes discharge at pierhead.	Ferry and Hudson Sts.	− 5 feet.	Ferry nd Hudson Street outlet, reported in good condition.
Discharges into canal. Size of wooden box unknown.	Park Avenue.	− 7.5 feet.	Park Avenue outlet. Heavy gas ebullition and odors from canal.
			Trade and toilet wastes from 4 factories.
3 feet by 4 feet, wooden box. Discharges into slip at bulkhead.	14th Street.	− 7 feet.	Heavy gas ebullition and odors.
66 inch steel pipe discharges into slip at bulkhead.	13th Street and Hoboken Avenue.	Unknown.	Heavy gas ebullition and odors.

TABULATION OF DATA RELATING TO SEWER OUTLETS

MUNICIPALITY.	Number on map.	Population of municipality.	Character of Sewer System.	Total length of sewers in feet.	Estimated flow of sewage in gallons per day.
Jersey City	6652	.....	Combined	16,880	1,980,000
Jersey City	6656	.....	Combined	35,900	1,950,000
Jersey City	6653	.....	Combined	10,600	630,000
Jersey City	6654	.....	Combined	8,930	1,720,000
Jersey City	6657	.....	Combined	9,900	1,868,000
Jersey City	6658	.....	Combined	18,700	2,120,000
Jersey City	6659	.....	Combined	9,300	950,000
Jersey City	6660	.....	Combined	11,700	353,000
Jersey City	6661	.....	Combined	1,230	36,000
Jersey City	6662	.....	Combined	25,250	2,680,000
Jersey City	6663	.....	Combined	46,000	2,900,000
Jersey City	6663A	.....	Combined	800	62,000
Jersey City	6664	.....	Combined	6,030	460,000

TABULATION OF DATA RELATING TO SEWER

Jersey City	6664A	.....	Combined	17,100	3,120,000
Jersey City	6665	.....	Combined	10,200	302,000
Jersey City	6667	.....	Combined	48,950	1,933,000
Jersey City	6669	.....	Combined	27,290	1,050,000
Jersey City	6670	.....	Combined	35,140	1,318,000
Bayonne	6743A	55,545	Combined	23,900	787,400
Bayonne	6744A	.....	Combined	31,500	1,064,000
Proposed Passaic Valley Sewer	6742A	.....	Combined	.....	.....
Bayonne	6745A	.....	Combined	4,650	166,000

DISCHARGING INTO THE HUDSON RIVER—Continued.

Size and Nature of Outfall.	Location of Outfall.	Approximate elevation above or below mean high water.	Remarks
60 inch steel pipe discharges into slip at bulkhead.	13th Street.	– 5 feet.	Heavy gas ebullition and odors.
96 inch steel pipe discharges into slip at bulkhead.	12th Street.	– 7.5 feet.	Heavy gas ebullition and odors.
3 feet by 4 feet, egg-shaped brick sewer discharging under ferry house.	Pavonia Avenue.	Unknown.	
78 inch steel pipe discharges into slip.	8th Street.	– 6 feet.	Heavy gas ebullition and odors. This sewer connected with No. 6657.
48 inch cast iron pipe discharges under dock at bulkhead.	6th Street.	– 4.5 feet.	Very heavy gas ebullition and odors.
48 inch cast iron pipe discharges into slip.	2nd Street.	–5.25 feet.	Very heavy gas ebullition and odors.
60 inch brick sewer discharges into slip at bulkhead.	Bay Street.	–4.75 feet.	Heavy gas ebullition and odors.
3 feet by 4 feet, egg-shaped brick sewer discharges under Adam's Express storehouse.	Pearl Street.	Unknown.	
3 feet by 4 feet, egg-shaped brick sewer discharges under P. R. R. ferry house.	Montgomery Street.	Unknown.	
4 feet by 5 feet, egg-shaped brick sewer discharges into slip at bulkhead.	York Street.	Unknown.	Noticeable gas ebullition.
84 inch brick sewer discharges into slip at bulkhead.	Grand Street.	Unknown.	Gas ebullition, but street odors most noticeable. Connected to Mill Creek sewer.
24 inch brick sewer discharges into slip at bulkhead.	Sussex Street.	– 2 feet.	Heavy gas ebullition and odors.
36 inch brick sewer discharges into slip under dock.	Essex Street.	Unknown.	
3 feet by 4 feet, egg-shaped brick sewer discharges into canal.	Washington Street.	Unknown.	

OUTLETS DISCHARGING INTO NEW YORK BAY.

72 inch steel pipe, and 48 inch steel pipe discharge into Mill Creek.	Grand Street and Mill Creek.	Unknown.	Noticeable odors and deposits.
54 inch brick sewer discharges into Mill Creek.	Pine Street.	– 4 feet.	Heavy gas ebullition and odor.
84 inch steel, and 96 inch steel pipes discharge onto meadows.	Jackson Avenue relief sewer.	– 7.5 feet.	
36 inch cast iron pipe, and 48 inch cast iron pipe discharge at shore line.	South of Richard Street	+1.75 feet.	
60 inch brick sewer discharges into slip at bulkhead.	Brown Place.	–5–5 feet.	
48 inch brick sewer discharges at shore.	East 48th Street.	Unknown.	Noticeable odor.
Two 48 inch steel pipes discharge at shore.	East 34th Street.	– 1 foot.	Noticeable odor.
	Robbins Reef.		
30 inch vitrified pipe discharges 30 feet out from shore.	East 30th Street.	Unknown.	

TABULATION OF DATA RELATING TO

MUNICIPALITY.	Number on map.	Population of municipality.	Character of Sewer System.	Total length of sewers in feet.	Estimated flow of sewers in gallons per day.
Bayonne	6746A	.....	Combined	32,000	1,085,300
Bayonne	6750	.....	Combined	24,500	1,276,800
Bayonne (Noye Estate)	6749A	.....	Combined and sanitary	1,300	51,100
Bayonne	6748A	.....	Combined	3,750	140,500
Bayonne	6749	.....	Sanitary	.....	.....

TABULATION OF DATA RELATING TO SEWER OUTLETS DISCHARGING INTO

Bayonne	6748	.....	Combined	4,950	187,300
Bayonne	6747	.....	Combined	1,900	59,600
Bayonne	6747A	.....	Combined	4,990	289,400
Bayonne	6746	.....	Combined	11,800	378,800
Bayonne	6745	.....	Combined	1,600	46,800
Bayonne	6744	.....	Combined	11,000	421,300
Bayonne	6743	.....	Combined	1,470	76,600
Bayonne	6742	.....	Combined	18,800	834,000
Bayonne	6741	.....	Combined	8,550	404,300
Jersey City	6671	.....	Combined	5,700	128,000
Jersey City	6672	.....	Combined	12,450	775,000
Jersey City	6672A	.....	Combined	10,000	875,000
Jersey City	6673	.....	Combined	21,200	1,340,000
Jersey City	6674	.....	Combined	31,500	1,780,000
Jersey City	6675	.....	Combined	17,300	2,200,000
Jersey City	6676	.....	Combined	27,000	2,160,000
Jersey City	6676A	.....	Combined	7,400	700,000
Jersey City	6677	.....	Combined	13,900	365,000
Jersey City	6678	.....	Combined	11,000	716,000

SEWER DISCHARGING INTO KILL VAN KULL.

Size and Nature of Outfall.	Location of Outfall.	Approximate elevation above or below mean high water.	Remarks.
54 inch steel pipe discharges 300 feet out from shore.	Near pond; Johnson coal piers.	Unknown.	
60 inch brick sewer discharges at shore.	Ingham Avenue.	Unknown.	
24 inch brick sewer, and three vitrified pipes discharge at shore.	Avenue D.	Unknown.	
24 inch brick sewer ends 100 ft. out from shore near Staten Island ferry house.	Avenue C.	Unknown.	
Two small vitrified pipes discharge at shore.	Humphreys Avenue.	Unknown.	

HACKENSACK RIVER AND NEWARK BAY.

24 inch vitrified pipe discharges at shore.	West Third Street.	− 1 foot.	
24 inch vitrified pipe discharges at shore.	West 16th Street.	− 3 feet.	
24 inch vitrified pipe discharges into ditch 40 feet from shore.	West 5th Street.	− 2 feet.	
36 inch brick sewer discharges at shore.	West 22nd Street.	− 5 feet.	Slight odor.
18 inch vitrified pipe ends 150 feet out from shore.	West 24th Street.	Unknown.	Slight odor.
36 inch brick sewer ends 125 feet out from shore.	West 25th Street.	Unknown.	Slight odor.
18 inch vitrified pipe discharges at shore.	West 30th Street.	− 2.5 feet.	Slight odor.
36 inch brick sewer discharges at shore.	West 34th Street.	Unknown.	
2.5 feet by 4 feet egg-shaped brick sewer discharges at shore.	West 59th Street.	+1.5 feet.	Slight odor.
72 inch steel pipe discharges at shore.	Neptune Avenue.	−4.5 feet.	
48 inch cast iron pipe discharges at shore.	Danforth Avenue.	− 2 feet.	Noticeable odor.
Horseshoe brick sewer equivalent to 8 foot circle, discharges at shore.	Danforth Avenue. Swampy Creek sewer	− 5 feet.	
48 inch cast iron pipe discharges into marsh.	Claremont Avenue.	Unknown.	
60 inch steel pipe discharges at shore.	Clendenny Avenue.	−4 feet.	Noticeable odor.
42 inch brick sewer discharges into ditch about one mile from river.	Duncan Avenue.	Unknown.	
54 inch brick sewer discharges into ditch about one-half mile from river.	Sip Avenue.	Unknown.	Noticeable odor.
18 inch vitrified pipe discharges into ditch about one-quarter of a mile from river.	Broadway.	Unknown.	
30 inch, egg-shaped brick sewer at Newark Avenue discharges at shore.	Newark Avenue.	Unknown.	Noticeable odor.
84 inch steel pipe at Van Winkle Avenue discharges at shore.	Van Winkle Avenue.	Unknown.	Noticeable odor.
30 inch egg-shaped brick sewer discharges at shore line.	St. Paul's Avenue.	− 2.5 feet.	Noticeable odor.

TABULATION OF DATA RELATING TO SEWER OUTLETS DISCHARGING

MUNICIPALITY.	Number on map.	Population of municipality.	Character of Sewer System.	Total length of sewers. in feet.	Estimated flow of sewage in gallons per day.
Jersey City	6678A		Combined	25,890	1,984,000
Jersey City	6679		Combined	15,100	1,150,000
Jersey City			Factory waste and sanitary sewers.		709,000
Bayonne			Factory waste and sanitary sewers.		67,300,000

TABULATION OF DATA RELATING TO SEWER

Elizabeth	6732	73,409	Combined	30,500	426,000
Elizabeth	6731		Combined	22,100	29,800
Elizabeth	6730		Combined	57,100	2,300,400

TABULATION OF DATA RELATING TO SEWER

Elizabeth	6729A		Combined	Unknown	Unknown
Elizabeth	6729		Combined	16,050	454,400
Elizabeth	6728		Combined	13,500	656,000
Elizabeth	6727		Combined	14,250	707,200
Elizabeth	6726		Combined	17,850	1,320,600
Orange Trunk Sewer:					
Summit		7,500			
Milburn Township		3,720			
South Orange Township		2,979			
South Orange Village	6725	6,014			
West Orange		10,980	Combined	175 miles	89,000,000
Small part of Orange					
Irvington		11,877			
Part of Newark					
Union Township		3,410			
Elizabeth		3,138			
Roselle Park					
Elizabeth			Factory waste and sanitary sewers.		2,590,600
Linden	6701A	2,000	Sanitary	62,120	
Linden			Factory waste		25,000,000
Grasselli			Factory waste		60,000
Roosevelt (Cartaret Section)	6709	5,786	Sanitary	4,900	36,000
Roosevelt Cartaret Section)	6710		Sanitary	1,700	37,800
Roosevelt (Cartaret Section)	6713		Sanitary	6,000	90,000
Roosevelt (Cartaret Section)	6714		Sanitary	1,600	32,400

INTO HACKENSACK RIVER AND NEWARK BAY—Continued.

Size and Nature of Outfall.	Location of Outfall.	Approximate elevation above or below mean high water.	Remarks.
54 inch cast iron pipe discharges onto meadows.	Manhattan Avenue.	Unknown.	Noticeable odor.
48 inch cast iron pipe discharges into ditch about one-half mile from Penhorn Creek.	Secaucus Road.	+ 4 feet.	Noticeable odor. (Drains 189 acres of West Hoboken also.)
			Factory and toilet wastes from 16 factories.
			Factory and toilet wastes from 4 factories.

OUTLETS DISCHARGING INTO NEWARK BAY.

54 inch brick sewer discharges into Woodruff Creek.	Alina Street.	Unknown.	
48 inch brick sewer discharges into Woodruff Creek.	Fairmount Avenue.	Unknown.	
60 inch brick sewer discharges at shore line.	Singer Mfg. Company's premises.	– 5 feet.	

OUTLETS DISCHARGING INTO ARTHUR KILL.

15 inch cast iron pipe discharges 100 feet in from shore.	Pine Street.	Zero.	Noticeable odors.
3 feet by 4.5 feet, egg-shaped brick sewer discharges into slip at bulkhead.	Magnolia Avenue.	– 5 feet.	Noticeable odors.
3 feet by 4.5 feet, egg-shaped brick sewer discharges 60 feet out from shore.	Livingston Street.	– 7 feet.	Noticeable odors.
3.5 feet by 5.25 feet, egg-shaped brick sewer discharges under dock.	Elizabeth Avenue.	– 4.5 feet.	Noticeable odors.
3 feet by 4.5 feet, egg-shaped brick sewer discharges at shore.	Third Avenue.	– 4.5 feet.	
72 inch brick sewer discharges at shore.	Bayway.		
			Factory and toilet wastes from 8 factories.
20 inch vitrified pipe discharges at shore.	Grasselli near Tremly Point Road.	– 3.5 feet.	
			Trade wastes from one establishment.
			Trade and toilet wastes.
12 inch vitrified pipe discharges into creek.	Rahway Avenue and Deep Creek.	– 2.5 feet.	Serves district north of Rahway Avenue.
12 inch vitrified pipe discharges at shore.	Rahway Avenue near Warner Chemical Company.	– 2.5 feet.	
12 inch vitrified pipe discharges into Noe's Creek.	Colwell Street.	– 2.5 feet.	
12 inch vitrified pipe discharges into Noe's Creek.	Third Street.	– 2.5 feet.	

TABULATION OF DATA RELATING TO SEWER OUTLETS

MUNICIPALITY.	Number on map.	Population of municipality.	Character of Sewer System.	Total length of sewers, in feet.	Estimated flow of sewage in gallons per day.
Roosevelt (Chrome Section) (Canda Realty Company)	6718	.....	Sanitary	10,000	162,000
Roosevelt (Chrome Section)	6723	.....	Sanitary	6,000	72,000
Roosevelt	.....	.....	Factory waste and sanitary sewers	.....	252,500
Maurer	.....	.....	Factory waste and sanitary sewers	.....	346,000
Perth Amboy	6751	32,121	Combined	21,100	Estimated amount of sewage from Perth Amboy, 8,000,000 gallons.
Perth Amboy	6752	.....	Combined	6,130	
Perth Amboy	6753	.....	Combined	28,630	
Perth Amboy	6754	.....	Combined	1,570	.....
Perth Amboy	6755	.....	Combined	11,330	.....
Perth Amboy	6756	.....	Combined	3,610	.....
Perth Amboy	6757	.....	Combined	1,570	.....
Perth Amboy	6758	.....	Combined	2,630	.....

TABULATION OF DATA RELATING TO

Perth Amboy	6759	.....	Combined	2,260	.....
Perth Amboy	6760	.....	Combined	4,020	.....
Perth Amboy	6761	.....	Combined	1,030	.....
Perth Amboy	6762	.....	Combined	2,940	.....
Perth Amboy	6763	.....	Combined	3,500	.....
Perth Amboy	6764	.....	Combined	6,860	.....
Perth Amboy	6765	.....	Combined	12,000	.....
Perth Amboy	6766	.....	Sanitary	12,440	.....
Perth Amboy	.....	.....	Factory waste and sanitary sewers	.....	1,982,800
South Amboy	6767	.....	Sanitary	40,100	400,000

DISCHARGING INTO ARTHUR KILL—Continued.

Size and Nature of Outfall.	Location of Outfall.	Approximate elevation above or below mean high water.	Remarks.
24 inch vitrified pipe discharges at shore.	Near Goldschmidt-Detinning factory.	− 2.5 feet.	
12 inch vitrified pipe discharges at shore.	Near P. & R. R. R. in Chrome	− 2.5 feet.	
.....	.....	.....	Trade and toilet wastes from 4 factories.
.....	.....	.....	Trade and toilet wastes from 2 factories.
84 inch brick sewer discharges into ditch 1200 feet from river.	Near United Lead Works.	.....	
2.33 feet by 3.5 feet, egg-shaped brick sewer discharges at bulkhead into slip.	Buckingham Avenue.	.....	
3.5 feet by 4.5 feet, egg-shaped brick sewer, with 100 feet of 4 feet iron pipe leading out from shore.	Washington Street.	.....	Reported odors.
2 feet by 3 feet egg-shaped brick sewer discharges at shore	Commerce Street	.....	Reported odors.
2.33 feet by 3.5 feet, egg-shaped brick sewer discharges at shore.	Fayette Street.	.....	Reported odors.
2 feet by 3 feet, egg-shaped brick sewer discharges at shore.	Smith Street.	.....	Reported odors.
2 feet by 3 feet, egg-shaped brick sewer discharges 60 feet out from shore.	Garden Street.	.....	Reported odors.
15 inch vitrified pipe with 150 feet of 15 inch iron pipe leading out from shore.	Lewis Street.	.....	

SEWER OUTLETS DISCHARGING INTO RARITAN RIVER.

2 feet by 3 feet egg-shaped brick sewer. Dry weather flow is conducted out 300 feet from shore in 12 inch iron pipe.	High Street.	.....	Reported odors.
2 feet by 3 feet, egg-shaped brick sewer discharges at shore.	State Street.	.....	
12 inch vitrified pipe, with 12 inch steel pipe leading out from shore.	Catalpa Street.	.....	
2 feet by 3 feet, egg-shaped brick sewer discharges at shore.	Brighton Avenue	.....	Reported odors.
2 feet by 3 feet, egg-shaped sewer. Dry weather flow is conducted out through 500 feet of 12 inch steel pipe.	Madison Avenue	.....	
2 feet by 3 feet, egg-shaped brick sewer. Dry weather flow conducted out through 600 feet of 12 inch steel pipe.	First Street.	.....	
4 feet, circular brick sewer. Dry weather flow conducted out through 500 feet of 12 inch steel pipe.	Second Street.	.....	
24 inch vitrified pipe. 500 feet of 24 inch steel pipe leading out from shore	Sheridan Street.	.....	
.....	.....	.....	Trade and toilet wastes from 7 factories.
24 inch vitrified pipe. 24 inch cast iron pipe leads out 650 feet from shore.	Henry Street.	.....	

SEWAGE TREATMENT PLANTS CONSTRUCTED DURING THE YEAR.

ANCORA.—A sewage disposal plant of the sedimentation and subsurface irrigation type, was completed for the new Camden County Sanitorium. Each of the two sedimentation tanks are four feet six inches wide, seventeen feet long, and have an effective depth of seven feet six inches; the dosing tank is four feet six inches wide, seven feet six inches long, and has an effective depth of one foot six inches. A diverting chamber allows the sewage to be discharged into either or both of two tile fields. Each tile field has 1,400 feet of four-inch tile laid with open joints, in the sandy soil.

AUDUBON.—About thirteen miles of sewers, ranging in diameter from six inches to fifteen inches will discharge sewage into the treatment works. The works consist of two open sedimentation tanks which are twenty feet wide, fifty feet long, and have an effective depth of seven feet; two dosing tanks, each of which is twenty feet long, eleven feet wide, and has an effective depth of four feet; a sprinkling filter ninety feet square, which has a depth of five feet, six inches of stone, and is under-drained with tile; a secondary settling basin sixty feet long, thirty feet wide, and five feet deep. There are two sludge beds, each of which is forty feet wide and eighty-four feet long, with three feet of sand. The effluent discharges into the main branch of Newton Creek.

BURLINGTON, *Thomas Devlin Manufacturing Company.*—A concrete sludge bed fifteen feet square, with two feet of sand over a layer of gravel, averaging one foot six inches in depth, has been constructed.

EAGLE ROCK, *Eagle Rock Manufacturing Company.*—The Eagle Rock Manufacturing Company has constructed a disposal plant which consists of a sedimentation tank eleven feet six inches long, four feet wide, having an effective depth of four feet three inches; a dosing tank three feet eleven inches square, with a drawing depth of one foot eleven inches; and two subsurface irrigation fields each having 700 feet of three-inch tile. A small sludge bed has also been constructed. The subsurface irrigation field was excavated, underdrained and refilled with porous soil before the tile was laid.

FAIRVIEW.—Three and one-half miles of sewers and sewage treatment works have been constructed at this place. The two circular, radial flow, Imhoff tanks are each thirty feet in diameter, having an effective depth of twenty-six feet; and will discharge the effluent into three contact beds, each of which is thirty-five feet wide, 100 feet long, and five feet deep. A sludge bed fifty feet square and one foot deep is provided for drying the sludge. Control devices have been installed to operate the contact beds. The final effluent is discharged into Bellman's Creek.

FAR HILLS.—Mr. Grant B. Schley has had constructed two sewage treatment plants, one for his own residence and farm buildings, the other to

serve two other houses on his estate. The first mentioned plant consists of a two-story settling tank eight feet wide, nine feet long, and fifteen feet deep; a dosing device of two chambers, one of which is a circular tank five feet in diameter, the other a rectangular tank six feet wide and ten feet long, with a drawing depth on the siphon of two feet; two sand beds sixty feet square, two feet nine inches deep; and a sludge bed seven feet square, one foot three inches deep. The last mentioned plant has three small settling tanks, the largest of which is four feet wide, twelve feet long, and has an effective depth of six feet. The inside dimensions of the dosing chamber are: width, five feet; length, ten feet, and has an eight-inch drawing depth. There are also two covered sand filters, thirty feet wide, ninety feet long, and three feet deep. These plants discharge into small brooks leading into the North Branch of the Raritan River.

GALLOWAY TOWNSHIP.—There has been completed for the Seaview Golf Club a sedimentation tank which is six feet wide, twelve feet long, and has an effective depth of five feet. The effluent will be treated with calcium hypochlorite solution before it is discharged into Reed's Bay.

HACKETTSTOWN.—Additions were made to the surface seepage beds, making the total area four and three-quarters acres. These beds are used by the Lackawanna Leather Company for the disposal of its manufacturing wastes.

HAMMONTON.—This town has built ten and a half miles of sewers and a sewage disposal plant. The sewage treatment plant consists of a circular, radial flow, Imhoff tank, twenty-seven feet in diameter and twenty-seven feet deep; two centrifugal pumps which discharge the tank effluent to a tapered dosing tank which feeds a sprinkling filter seventy-seven feet wide, eighty-five feet long, and seven feet six inches deep. The filter effluent is disinfected with a solution of calcium hypochlorite and is then settled in two secondary settling basins, each nine feet wide, thirty feet long, and four feet six inches deep; the flow is then diverted to two shallow sand filters, each twenty-six feet wide, one hundred and eight feet long, one foot six inches deep, and thence to Hammonton Run.

LEONIA.—About seven miles of sewers have been constructed which will discharge through an inverted siphon under the Erie Railroad tracks to the sewage disposal plant. At the present time this plant is for the removal of solids only, and consists of two Imhoff tanks, each of which is thirteen feet wide, forty feet long and seventeen feet deep. The sludge bed is twenty-six feet wide, forty feet long, and one foot deep. The effluent from the tanks is piped to Overpeck Creek.

LONG BRANCH.—At the plant of the Seaboard Utilization Company a storage tank, eleven feet wide, twenty feet long and six feet deep, has been installed, to which the liquids from the garbage digestion tanks and night soil storage are piped. It is then pumped through 2,600 feet of two-inch pipe into the Long Branch sewer system.

MAYWOOD.—A disposal plant has been installed to treat the liquid wastes from the Schaeffer Alkaloid Works. The wastes are discharged intermittently into subsurface tile, of which there is 4,000 feet.

MOORESTOWN.—One-half mile of eight-inch sewer has been constructed on South Church Street, discharging to a pumping station, from which it is pumped to the disposal plant. The sewage disposal plant has been reconstructed and now consists of four sedimentation tanks of the Imhoff type, each twelve feet wide, thirty-six feet long, and ten feet ten inches deep; a sludge bed, twenty-five feet wide, forty feet long; and a twenty-four inch Miller siphon placed in a tapered dosing tank which operates sprinklers on the filters. The sprinkling filter is eighty-five feet wide, one hundred and seventy-four feet long, and five feet three inches deep. The filter effluent is then settled in a tank twenty-nine feet wide, thirty-six feet ten inches long and three feet deep. The effluent pipe discharges into Pensauken Creek.

NEW BRUNSWICK.—At the Marconi Wireless Station there has been constructed a sedimentation tank four feet wide, eleven feet six inches long, and having an effective depth of four feet three inches; a siphon chamber four feet square, with a two-foot drawing depth upon the siphon. From the siphon chamber the liquid discharges into two tile fields, each field containing 1,300 feet of subsurface tile.

NEW PROVIDENCE, *Bonnie Burn Sanatorium.*—The old sedimentation tanks are used with the new structures. The new work comprises a dosing tank fifteen feet two inches wide, fifteen feet six inches long, and five feet deep; three primary and three secondary contact beds each twenty-two feet long, seventeen feet wide, and four feet six inches deep; and a subsurface distribution area in which are 900 lineal feet of trenches filled with broken stone.

OCEANIC.—Part of the sewage treatment plant owned by H. S. Borden was washed away during a storm last winter. Therefore this plant has been reconstructed and at the present time consists of two circular settling tanks, one of which is five feet six inches in diameter and five feet deep, the other is eight feet in diameter, and five feet deep. The dosing tank is five feet six inches in diameter, with two feet drawing depth on the siphon. There are also two covered cinder filters, each four feet wide, forty feet long, and three feet deep. The effluent discharges into the Shrewsbury River.

PRINCETON.—The new sewage treatment plant for Princeton University consists of three Imhoff tanks, each eighteen feet wide, twenty feet long, nineteen feet six inches deep; a sprinkling filter eighty-eight feet long, seventy-seven feet wide, seven feet deep; two secondary settling basins, each eighteen feet three inches wide, thirty-three feet six inches long, four feet three inches deep; a sludge bed for the Imhoff tanks, thirty-seven feet square, two feet deep; and a sludge bed for the secondary settling basins, eighteen feet wide, twenty feet long, and two feet deep. The effluent from the sprinkling filter is discharged into Carnegie Lake.

ROEBLING.—A sludge bed with concrete walls has been constructed. The bed is thirty feet wide, forty feet long, and one foot four inches deep.

SOUTH PLAINFIELD.—The Spicer Manufacturing Company has constructed a sewage disposal plant which consists of a sedimentation tank six feet wide, twenty-five feet long, six feet deep; a seepage bed eighty feet long, fifteen feet wide; and a sand bed eighty feet long, fifteen feet wide and three feet deep. The sand bed was not included in the original plans, but since the seepage bed did not care for all the wastes, the sand bed has been installed. Intermittent flow on the beds is obtained by the slow discharge of fresh sewage into the tank from the pump well, the flow from the tank going onto either the sand bed or the seepage bed, as desired. The effluent from this sewage treatment plant is discharged into Dismal Brook.

TUCKERTON.—At the Tuckerton Radio Station there has been completed a sedimentation tank eight feet wide, sixteen feet long, two feet six inches deep. This structure was divided into two compartments of equal size, and the floor is the natural soil. It is necessary to pump the liquid from the second compartment into a seepage bed six feet long, six feet wide, six feet deep, which is filled with broken stone.

VINELAND.—At the State Home for Feeble Minded Women there has been completed a sewage disposal plant which consists of a small grit and screen chamber; two circular settling basins, one being twenty feet in diameter, six feet deep, the other twenty-four feet in diameter, three feet six inches deep; the liquid from these is pumped to an irrigation field 300 feet square, upon which it is distributed by a network of cast iron pipe.

WENONAH.—The Mantua Avenue plant was entirely reconstructed. It consists of a double sedimentation tank, each compartment being ten feet three inches wide, twenty-four feet long, three feet six inches deep; a dosing chamber with alternating siphons seven feet three inches wide, twenty feet six inches long, two feet six inches deep; two sand filters, each fifty feet wide, one hundred and forty feet long, two feet six inches deep; and also a sludge bed twenty-five feet square. At the Princeton Avenue plant there has been constructed for use with the old settling tank a dosing chamber eight feet square, with a drawing depth of two feet six inches and a sand filter fifty feet wide, one hundred feet long, and three feet deep. The effluent from these plants is discharged into a branch of Mantua Creek, called Monongahela Brook.

WOODBRIDGE.—About a mile of ten-inch sewer discharges sewage into a sedimentation tank in Port Reading. This sedimentation tank is divided into two compartments, each being five feet wide, sixty feet long, and four feet deep. The effluent is piped across the land of the Port Reading Railroad freight yards to an open ditch leading into Smith's Creek. The Woodbridge Avenue plant has a double sedimentation tank, each compartment being six feet wide, twenty-four feet long and three feet deep. At present there is about three-quarters of a mile of ten-inch sewer tributary to this plant. The effluent discharges into Cove Creek.

WATER WORKS.—The work of the Division of Engineering, relating to water works, is briefly summarized as follows: Number of routine inspections of works under construction, 46; number of special investigations, 30. Water works acted upon were: Plans of water supply systems approved, 4; additions to water supply systems approved, 9; plans of water treatment plants approved, 6; plans for alterations to water treatment plants approved, 2; plans of disinfection plants approved, 2.

COMPLETED WATER PLANTS.

ALLENDALE.—At this place a water distribution system has been completed. The town of Ramsey supplies Allendale with water from its infiltration well. This well is located on a small watershed, and has a diameter of twenty feet, with a depth of twenty-eight feet.

BLACKWOOD: *Blackwood Water Company.*—The water from three driven wells, which average eighty feet in depth, is treated to remove iron by aeration and filtration. Six trays of coke are used as an aerator, each tray being three feet square. After falling through these trays the water passes through a coke strainer three feet wide, seventeen feet long, three feet deep, and then through a sand filter seventeen feet wide, twenty feet long, three feet deep. The dimensions given above are the inside measurements.

FLEMINGTON: *Flemington Water Company.*—A filtration plant has been installed to filter the water from three of the four sources of supply. These three sources are enumerated as follows: (1) The South Branch of the Raritan River, (2) an abandoned copper mine, and (3) several springs. It is not necessary to treat the water from the fourth source of supply, which is obtained from a driven well four hundred and five feet deep. The sedimentation basin has the effective dimensions, width, twelve feet; length, thirty feet; depth, thirteen feet. The filter is twelve feet in diameter, with a depth of three feet of sand and gravel. A 540,000 gallon reservoir, already constructed, is used as a clear water basin. Provision has been made to treat the water with alum and hypochlorite of lime solutions.

FRANKLIN: *The New Jersey Zinc Company.*—The inhabitants of Franklin are supplied with water from Franklin Pond. A filtration plant has been built by the above Company to treat the water. The coagulation basin is divided into three baffled compartments; each compartment has the effective dimensions, width, ten feet; length, thirty feet; depth, eight feet, two inches. Each of the two rapid sand filters has the dimensions, width, seven feet, eleven inches; length, eleven feet, with three feet of sand and gravel. The clear water basin is thirty feet, six inches square, and has an effective depth of three feet, six inches. Devices for the proportional feeding of alum and hypochlorite of lime solutions have been installed.

FREEHOLD.—A receiving tank and pump well have been installed, for the purpose of storing the water from the wells previous to pumping it to the standpipe. This tank is thirty feet wide, sixty feet long and six feet deep.

GLEN GARDNER: *The New Jersey Sanatorium for Tuberculous Diseases.*—This institution has installed a filtration plant to treat the water from Rocky Run Brook. The sedimentation tank is twenty feet wide, twenty-one feet long and six feet deep. The rapid sand filter is eight feet wide, twelve feet six inches long, the filtering material being three feet of sand over eight inches of gravel. The clear water basin is twenty-one feet wide, twenty-nine feet long and nine feet deep. Devices for the addition of a solution of alum and also hypochlorite of lime have been installed.

KEYPORT.—An iron removal plant has been constructed to treat the water from six driven wells. Two air compressors supply air to the air lift pump. The water passes over an aeration device, and then flows to a small settling basin. After being filtered through two sand filters, each forty feet square with four feet of sand and gravel, the water passes to a storage basin. This basin is twenty feet wide, twenty-five feet, six inches long, and fourteen feet, six inches deep.

LITTLE FALLS: *Montclair Water Company.*—The coagulation basin installed by the above Company is one hundred and five feet wide, three hundred and thirty feet long and twenty-two feet deep.

MIDDLESEX: *The Piscataway Water Company.*—This water company during the past year constructed a water pumping station and drove fourteen wells, from which the water supply was to be obtained. Analyses showing these wells to be polluted, the matter was investigated with the collection of data given below:

"This plant consists of fourteen driven wells, located near Union Avenue and Prospect Place, in the Borough of Middlesex. Thirteen of these wells have been connected to the pumping plant, which consists of two 100-horse power Erie boilers, which supply steam to a McGowan double acting, two cylinder, triple expansion pump. This pump has a capacity of 4,000,000 gallons per day. Eight of the wells are located north of Union Avenue, and the other six wells are located south of Union Avenue. The engineer stated that the wells north of Union Avenue would yield 2,500,000 gallons per day, and that the wells south of Union Avenue would yield 500,000 gallons per day.

The land adjacent to the wells is used for residential purposes. These residences, for the most part, have cesspools, and the land on which the wells are located is used for pasturage purposes.

	Possible Pollution From:	Distance From Nearest Well.	Remarks.
No. 1	Cesspool	More than 600 feet from well No. 7	
2	Cesspool	More than 550 feet from well No. 7	
3	Cesspool	More than 500 feet from well No. 7	
4	Cesspool and henyard	More than 122 feet from well No. 7	Cess pool reported to have overflow to brook.
5	Cesspool	286 feet from well No. 1.	
6	Cesspool	375 feet from well No. 9.	
7	2 cesspools and hens	About 350 feet from well No. 9	
8	Cesspool	About 325 feet from well No. 9	
9	Cesspool	About 300 feet from well No. 10	
10	Cesspool and privy	About 250 feet from well No. 10	Old sewer from No. 10 broken off. No sewage visible.
11	Cesspool	186 feet from well No. 10.	
12	Privy, barn and cesspool	120 feet from well No. 11.	Cesspool overflowing.
13	Privy and cesspool	120 feet from well No. 11.	
14	Privy and cesspool	125 feet from well No. 12.	
15	Open sink drain and privy	125 feet from well No. 13.	

PISCATAWAY

RESULTS OF ANALYSES

SAMPLE. Number.	Well.	Color.	Odor.	Turbidity.	NITROGEN AS AMMONIA. Free.	Alb.
1591	1	0	1e	0	.002	.012
1592	3	0	0	0	.016	.020
1438	4	0	1e	0	.002	.006
1437	5	0	0	0	.008	.012
1726	6					
1439	7	0	0	0	.004	.006
1590	8	0	0	0	.008	.014
1595	9	0	2v	5	.012	.032
1594	10	0	1v	0	.012	.026
1593	11	0	1v	5	.010	.024
1717	12	0	1e	10	.002	.020
1716	13	0	1e	5	.002	.022
1715	14	0	1e	0	.002	.026
1203	Composite 9 to 14 inc.	0	0	0	.004	.012

NOTE:—Lactose bile tubes giving gas production confirmed on Endo's medium.

"Cesspool No. 12 is three feet, six inches in diameter; six feet deep, which is probably a fair average size of the cesspools mentioned above.

"The following gives the shortest distance of the wells from Green Brook:

No. 7, 89 feet; No. 5, 33 feet; No. 4, 181 feet; No. 6, 48 feet; No. 3, 76 feet; No. 1, 41 feet; No. 8, 32 feet; No. 9, 37 feet; No. 10, 71 feet; No. 11, 66 feet; No. 12, 45 feet; No. 13, 51 feet; No. 14, 56 feet.

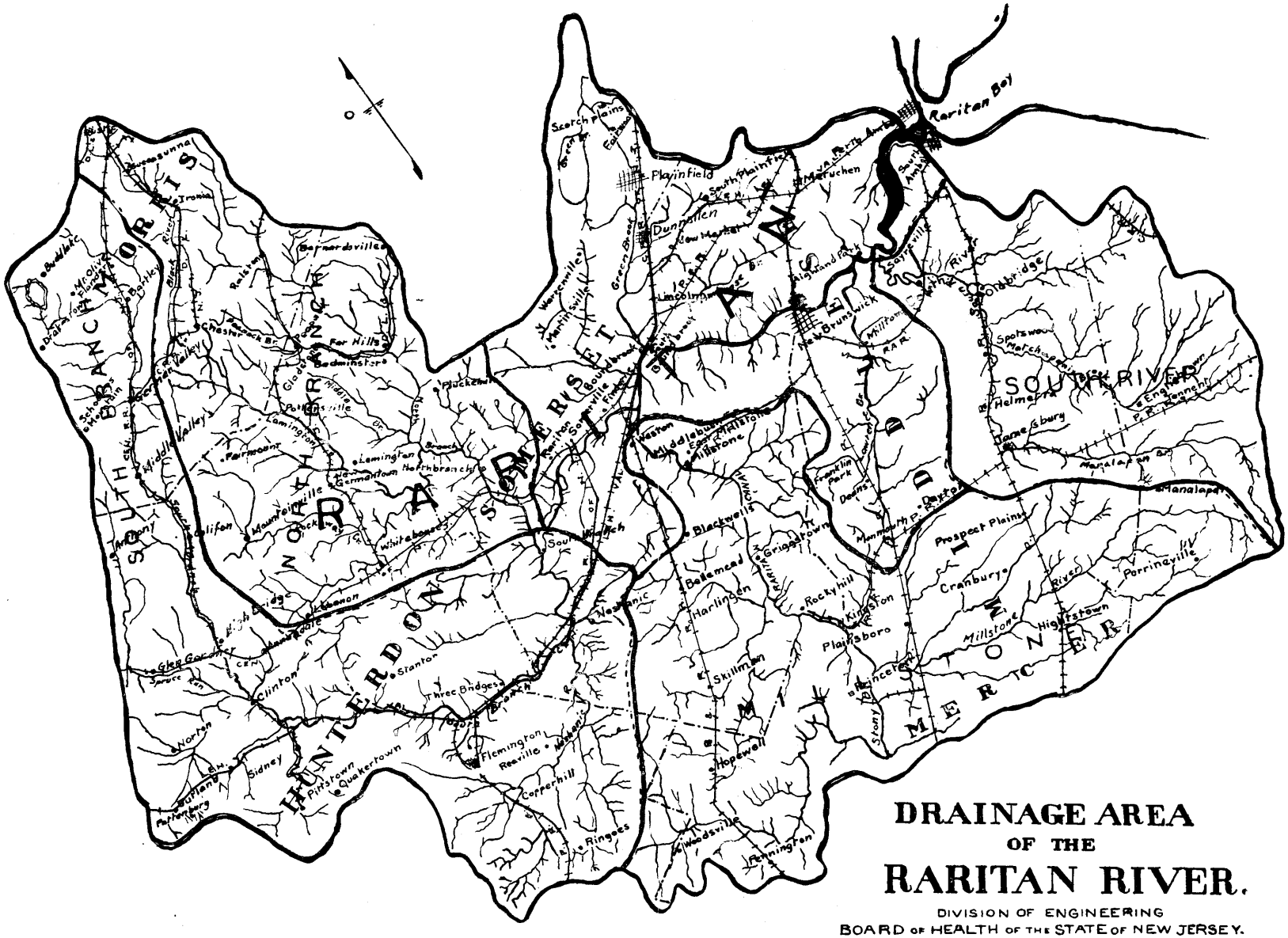
DATA RELATING TO THE COLLECTION OF SAMPLES.—"On July 7th the pumps were started at 11 A. M., and closed down at 5:30 P. M., which gives a period of pumping of six and one-half hours for the day previous to taking of samples. In the afternoon it was learned that all the wells had been connected for the pumping except No. 8, which was connected on the morning of July 8th.

"On July 8th, all the wells were pumped from 7:06 A. M. to 9:40 A. M., which gives a period of pumping from all the wells of about two and one-half hours.

"All the wells south of Union Avenue were pumped from 10:02 A. M. to 10:05 A. M. for sample W-01203.

"Table below gives the information regarding the pumping from each well, and also the level of the water below the surface of the ground for the wells south of Union Avenue. It was impossible to take separate samples from the wells south of Union Avenue by pumping, so the samples were taken by unscrewing the cap and suspending a 100 c. c. sterile bottle for a bacteriological sample.

Well.	Time Pumped.	Sample No.	Distance of water table below surface.
No. 8	10:05–10:25 A. M	W—01590	
1	10:48–11:08 A. M.	W—01591	
3	11:13–11:58 A. M.	W—01592	
14	(Taken by suspending bottle in well at 11:42 A.M.)	W—01715	15 inches.
13	(Taken by suspending bottle in well at 11:51 A.M.)	W—01716	20 inches.
12	(Taken by suspending bottle in well at 2:10 P.M.)	W—01717	18 inches.
11	(Taken by suspending bottle in well at 2:17 P.M.)	W—01593	18 inches.
10	(Taken by suspending bottle in well at 2:37 P.M.)	W—01594	18 inches.
9	(Taken by suspending bottle in well at 3:22 P.M.)	W—01595	18 inches.
4	12:00–12:38 M.	W—01438	
7	12:38–1:18 P.M.	W—01439	
6	1:37–2:45 P.M.	W—01726	
5	2:47–3:25 P.M.	W—01437	



DRAINAGE AREA
OF THE
RARITAN RIVER.

DIVISION OF ENGINEERING
BOARD OF HEALTH OF THE STATE OF NEW JERSEY.
1914.

WATER COMPANY.

—JULY 8, 1914.

NITROGEN AS		CHLORINE.	BACTERIA.	BACTERIA PER 37°		(PRESUMPT.) B. COLI.
Nitrites.	Nitrates.		per c.c. 20°	Total.	Red.	Lactose bile confirmed on Endo.
.001	1.20	12.0	37	1	0	2 in 10 c.c.
.001	1.40	9.5	43	3	0	Ab. in 5 c.c.
.001	2.40	9.5	35	2	0	Ab. in 5 c.c.
.003	1.00	12.0	75	slipped	. . . . .	10 in 10 c.c.
.003	0.56	15.0	23	1	0	Ab. in 5 c.c.
.001	2.40	9.0	28	3	0	Ab. in 5 c.c.
.001	2.00	10.5	55	2	0	4 in 10 c.c.
.032	2.80	13.0	11000	slipped. . . .	. . . . .	Ab. in 5 c.c.
.020	1.20	18.0	2000	slipped. . . .	. . . . .	2 in 10 c.c.
.030	1.12	19.5	2500	2700	. . . . .	4 in 10 c.c.
.024	2.00	19.5	5000	20	0	4 in 10 c.c.
.001	4.80	18.5	3000	35	3	10 in 10 c.c.
.001	2.40	17.0	2500	11	1	Ab. in 5 c.c.
.001	3.60	15.0	90	0	0	2 in 10 c.c.

"The thirteen wells in use are each 125 feet deep. The outer casing of the wells extend only 25 feet below the surface of the ground. The wells have twelve-foot strainers; which generally extend from ten feet below the ground to twenty-two feet below the surface. In driving the wells water was generally obtained at a depth of ten feet.

"The geological formation is composed of a ten-foot layer of soil, underneath which is a stratum of gravel twelve to fifteen feet deep. Below this lies the red shale stone which is common to this section of the country.

"According to the contractor, the only test for quantity was made on well No. 1, which gave 215 gallons per minute for 24 hours. This is equivalent to 309,600 gallons per 24 hours. In this test the water table was lowered twenty-one feet."

DESCRIPTION OF CASINGS.—"An average casing for the wells north of Union Avenue consists of ten feet of solid pipe, eight inches in diameter; twelve feet of slotted pipe, and one foot of solid pipe. These pieces are joined together with unions. An average casing of the wells south of Union Avenue consists of nine feet of solid eight-inch pipe; ten feet of slotted pipe and three feet of solid pipe. These are joined together with unions. The slotted pipe is eight inches in diameter and is made as follows: A black pipe is taken; slots three-sixteenths inches wide and twelve inches long are cut in the metal two inches apart. The next row of slots are staggered, and so on. Afterwards this black pipe is galvanized so the slots are but one-fourth of an inch wide."

MOORESTOWN.—Five wells have been driven, which have depths varying from one hundred and twelve feet to four hundred and eighty feet. The water passes through a siphon to the receiving basin, which is sixteen feet, six inches in diameter and twenty-four feet deep. From the receiving basin the water is pumped to an aeration device, from which it falls to the settling basin, which is forty-five feet wide, seventy-eight feet long and fifteen feet deep. The two filters and two coagulation tanks already installed will be used at times, if necessary, for settled water. The water

will pass from the filters to a storage basin. This new clear water basin is forty feet square and ten feet deep.

NEW BRUNSWICK.—At the city water pumping station a chlorine gas disinfecting device has been installed.

POINT PLEASANT: *Point Pleasant Water Works Company.*—Six shallow wells have been driven for the above company. These are about thirty-five feet deep. The Borough was ordered to remove several privies which might effect the quality of the water.

RAHWAY.—Additions to the water plant have been constructed as follows: A sedimentation tank, divided into two compartments, each twenty-three feet wide, one hundred feet long and twelve feet deep; the capacity of the clear water basin was doubled by constructing an additional compartment similar to the one already installed, each of these is twenty-five feet wide, one hundred feet long and ten feet deep.

RIVERTON: *Riverton-Palmyra Water Company.*—Two driven wells have been added to the plant of the above company. These are shallow wells, one thirty-eight feet deep and the other fifty-five feet deep.

ROEBLING: *John A. Roebling's Sons Company.*—The water filtration plant at this place was recently partly reconstructed. Worn parts were replaced and new fittings added, in order to make the plant operate in a more satisfactory manner.

SEA VIEW GOLF CLUB.—A water supply system for this institution has been constructed. The supply is derived from a driven well one hundred and eighty-two feet deep.

SOUTH ORANGE.—Seven wells ranging in depth from two hundred and seventy-five feet to three hundred feet have been driven.

SWEEDESBORO: *Woolwich Water Company.*—A well has been driven for the above company, which is one hundred and forty-five feet deep.

TRENTON.—This water filtration plant has been completed. The two sedimentation basins are sixty-two feet, three inches wide, two hundred and nine feet long and nineteen feet, six inches deep; each of the sixteen rapid sand filters is twenty-four feet wide, thirty feet, four inches long, with two feet, six inches of sand and six inches of gravel over the strainers. The clear water basin under the filters is sixty feet wide, two hundred and nine feet long and eleven feet, three inches deep. Provision has been made for the addition of a solution of alum, and also of soda ash.

WHITE HORSE: *Joseph Lacy.*—A small water supply system has been installed at this place. The supply is derived from a single six-inch driven well sixty feet deep.

A REPORT UPON THE DISPOSITION OF SEWAGE IN THE RARITAN RIVER DRAINAGE AREA.

With the exception of the Delaware, the Raritan River is the largest stream in New Jersey, although not so important commercially as the Passaic, as there is not the same opportunity for the development of water power for industrial purposes. It is formed by the junction of the North and South Branches, at a point about three miles west of Raritan. These two tributaries have their sources a few miles apart in the hills of Morris

County, near Succasunna, and flow in a southerly direction, draining the western portion of Morris County, the eastern half of Hunterdon County, and the western half of Somerset County.

From the junction of these two streams the main body of the river flows in a southeasterly direction to Raritan Bay, being joined by the Millstone River just west of Bound Brook. This stream has its source in the western portion of Monmouth County, and flows northward and eastward. The Millstone drains a small portion of Monmouth County, about one-third of Mercer County, the western end of Middlesex County, and the southern portion of Somerset County.

Another important tributary to the Raritan, which enters it about five miles from the Bay, is the South River. This stream has its source in Monmouth County, and flows in a northerly direction, draining portions of Monmouth and Middlesex Counties. There are several smaller tributaries to the main stream, which are important, either because of their use as sources of water supply, or because of the municipalities situated along them; among these being Lawrence Brook and Green Brook.

The Raritan River is tidal and navigable for small vessels to a point about five miles above New Brunswick. At this place a dam has been constructed across the stream.

The total area of the watershed is 1,105 square miles, about six per cent. of which is forested. The highlands in the northern portion of the drainage area consists mostly of trap rock, and contain a large proportion of the wooded areas of the basin. The central portion consists of trap rock and red sandstone. The southern portion is composed of sandy soil. Along the lower part of the Raritan, and including considerable areas along the North and South Branches, there are broad expanses of low land. A wide tract between Metuchen, Plainfield, Bound Brook and Millstone is below an elevation of 100 feet. The remainder of the shed is above this elevation, permitting the development of some water power.

The Raritan watershed has an average population of 154 persons per square mile, or a total population of 170,000, distributed over 1,105 square miles. Of this population, about 122,000 are urban, and about 48,000 rural.

The larger cities are as follows:

	Population
New Brunswick	23,000
Plainfield	21,000
Perth Amboy (Part of)	10,000
South Amboy	8,000
North Plainfield	6,300
Somerville	5,500
Princeton	5,200
South River	5,000
Sayreville	5,000
Bound Brook	4,000
Raritan	3,800
Flemington	2,800
Metuchen	2,250
Bernardsville	2,200
Hightstown	2,100
Dunellen	2,000
Highland Park	1,600
High Bridge	1,600
Jamesburg	1,600
Old Bridge	1,500

Milltown	1,500
Fords	1,500
South Bound Brook	1,200
Peapack	1,100
Hopewell	1,070
South Plainfield	1,050
Total	121,870

There are 102 municipalities having a population of 100 or over. These, together with the above places, are listed below, according to the drainage district in which they are located.

Green Brook is considered separately as it is a small stream with a large urban population within its drainage area, therefore requiring special consideration from the standpoint of sewage disposal.

NORTH BRANCH WATERSHED.

Town	*County*	*Water supplied to*	*Population*
Bedminster	Somerset	Raritan	275
Bernardsville	Somerset	"	2,200
Chester	Morris	"	400
Fairmount	Hunterdon	"	150
Far Hills	Somerset	"	350
Gladstone	Somerset	"	200
Ironia	Morris	"	225
Lamington	Somerset	"	250
Lebanon	Hunterdon	"	550
Mountainville	Hunterdon	"	100
New Germantown	Hunterdon	"	220
North Branch	Somerset	"	200
Peapack	Somerset	"	1,100
Pluckemin	Somerset	"	200
Pottersville	Somerset	"	250
Ralston	Morris	"	250
Rustic	Morris	"	150
Succasunna	Morris	"	600
White House	Hunterdon	"	450

Total Urban Population	8,120
Total Population	11,090
Area of Watershed	191.6
Total Population per square mile	58

SOUTH BRANCH WATERSHED.

Town	*County*	*Water supplied to*	*Population*
Annandale	Hunterdon	Raritan	550
Anthony	Hunterdon	"	100
Bartley	Morris	"	225
Budd Lake	Morris	"	150
Califon	Hunterdon	"	600
Centreville	Hunterdon	"	160
Clinton	Hunterdon	"	900
Copper Hill	Hunterdon	"	110
Drakestown	Morris	"	150
Flanders	Morris	"	350

Town	*County*	*Water supplied to*	*Population*
Flemington	Hunterdon	Raritan	2,800
German Valley	Morris	"	700
Glen Gardner	Hunterdon	"	800
High Bridge	Hunterdon	"	1,600
Jutland	Hunterdon	"	100
Middle Valley	Morris	"	200
Mount Olive	Morris	"	100
Neshanic	Somerset	"	250
Norton	Hunterdon	"	200
Pattenburg	Hunterdon	"	300
Pittstown	Hunterdon	"	175
Quakertown	Hunterdon	"	170
Reaville	Hunterdon	"	150
Ringoes	Hunterdon	"	300
Schooley's Mountain	Morris	"	300
Sidney	Hunterdon	"	110
South Branch	Somerset	"	350
Stanton	Hunterdon	"	240
Three Bridges	Hunterdon	"	350
Urban Population			12,490
Total Population			17,500
Area of Watershed			276.5
Population per square mile			63

MILLSTONE WATERSHED.

Town	*County*	*Water supplied to*	*Population*
Bellemead	Somerset		125
Blackwell's Mills	Somerset		150
Cranbury	Middlesex		800
Dayton	Middlesex		300
East Millstone	Somerset		500
Griggstown	Somerset		200
Harlingen	Somerset		200
Hightstown	Mercer		2,100
Hopewell	Mercer		1,070
Kingstone	Somerset		475
Middlebush	Somerset		150
Millstone	Somerset		150
Pennington	Mercer		720
Perrineville	Monmouth		300
Plainsboro	Middlesex		400
Princeton	Mercer		5,200
Prospect Plains	Middlesex		175
Rocky Hill	Somerset		600
Skillman	Somerset	Skillman	400
Weston	Somerset		150
Woodsville	Mercer		100
Urban Population			14,265
Total Population			23,650
Area of Watershed			285.7
Population per square mile			83

SOUTH RIVER WATERSHED.

Town	*County*	*Water supplied to*	*Population*
Englishtown	Monmouth		450
Helmetta	Middlesex		660
Jamesburg	Middlesex		1,600
Manalapan	Monmouth		400
Old Bridge	Middlesex		1,500
South River	Middlesex		5,000
Spotswood	Middlesex		600
Tennent	Monmouth		250

Urban Population	10,460
Total Population	13,790
Area of Watershed	132.8
Population per square mile	104

CHIMNEY ROCK WATERSHED.

Town	*County*	*Water supplied to*	*Population*
Martinville	Somerset	Bound Brook	300
Warrenville	Somerset	" "	200

Urban Population	500
Total Population	1,000
Area of Watershed	16.7
Population per square mile	60

GREEN BROOK WATERSHED.

Town	*County*	*Water supplied to*	*Population*
Dunellen	Middlesex		2,000
Fanwood	Union		475
Lincoln	Middlesex		300
Metuchen	Middlesex		2,250
New Market	Middlesex		450
North Plainfield	Somerset		6,300
Plainfield	Union		21,000
Scotch Plains	Union		900
South Plainfield	Middlesex		1,050

Urban Population	32,925
Total Population	34,600
Area of Watershed	61.5
Population per square mile	563

LAWRENCE BROOK WATERSHED.

Town	*County*	*Water supplied to*	*Population*
Deans	Middlesex	New Brunswick	250
Franklin Park	Middlesex	" "	500
Milltown	Middlesex	" "	1,500
Monmouth Junction	Middlesex	" "	400

Urban Population	2,650
Total Population	3,800
Area of Watershed	45.0
Population per square mile	84

LOWER RARITAN RIVER WATERSHED.

Town	*County*	*Water supplied to*	*Population*
Bound Brook	Somerset		4,000
Finderne	Somerset		250
Fords	Middlesex		1,500
Highland Park	Middlesex		1,600
New Brunswick	Middlesex		23,000
Perth Amboy	Middlesex		10,000
Raritan	Somerset		3,800
Sayreville	Middlesex		5,000
Somerville	Somerset		5,500
South Bound Brook	Middlesex		1,200
Urban Population			55,850
Total Population			60,700
Area of Watershed			95.0
Population per square mile			640

SUMMARY.

	Area of Watershed	*Population per sq. mile*
North Branch	191.6 sq. miles	58
South Branch	276.5 " "	63
Millstone River	285.7 " "	83
South River	132.8 " "	104
Chimney Rock	16.7 " "	60
Green Brook	61.5 " "	563
Lawrence Brook	45.0 " "	84
Lower Raritan River	95.0 " "	640
Whole River	1104.8 " "	154

From the above tables it can be seen that with the exception of Green Brook, and the lower portion of the Raritan River, from the Village of Raritan to the mouth of the river, the territory is mostly rural.

In the valley of Green Brook the municipalities are mostly residential in character, although there are a number of factories. In the cities along the lower portion of Raritan River the manufacturing industries are very important, particularly at New Brunswick.

WATER SUPPLIES.—From about one-half of the whole watershed, potable water is taken from the following places:

Stream	Intake at	Water Supplied to	Average Quantity Water taken daily
Prickett's Brook	Jacksonville	Perth Amboy	1,000,000
Lawrence Brook	Weston's Mills	New Brunswick	3,500,000
Middle Brook	Chimney Rock	Bound Brook	275,000
Rock Brook	Skillman	State Village for Epileptics	80,000
Raritan River	Raritan	Raritan & Somerville	2,000,000
South Branch	Flemington	Flemington	200,000
Rocky Run	Glen Gardner Sanatorium		50,000
Total quantity used daily			7,105,000 gals

This river is now one of the most important sources of water supply in the State, and its use for potable purposes will constantly increase. It is accessible as a source of supply for a considerable area of the State,

a large portion of which is increasing rapidly in population, particularly in sections adjacent to New Brunswick and Plainfield. As the watersheds in the northern portion of the State are already controlled and utilized as sources of supply, it is likely that future generations will resort to the use of the Raritan River in greatly increasing numbers.

As having an interesting bearing upon this subject, the following note from the New Brunswick News for October 7, 1914, is given:

"The Board of Water Commissioners is hastening the work to prevent such a water famine as now menaces this City and the commissioners are following out the suggestions as made by the get-together meeting held at the Hotel Klein on Monday evening. No definite action can be taken until the engineer completes the survey of the watershed. Yesterday afternoon the Commissioners with the consulting engineer went over the entire watershed, which is now running dry, because of the absence of much rain in over a month. The matter of diverting a stream which flows through Sand Hills into the Millstone River at Kingston, to the watershed was also discussed at the meeting. During average wet weather, it produces about 500,000 gallons of water daily."

TREATMENT OF WATER FOR POTABLE USES.—The river above Raritan and also certain of its tributaries entering the stream below that point are suitable as sources of potable water, provided that certain precautions are taken. During rainy weather the Raritan River, Millstone River, and some of the minor branches carry a large quantity of mineral matter in suspension. This fact would in itself make it advisable to filter any water taken from those streams for potable purposes, as the turbidity is not easily removed.

The whole watershed is already so polluted from uncontrollable sources such as the drainage from country roads, streets in towns, fields used for agricultural purposes, pollution from transient population, railroads, refuse from isolated buildings such as garbage, drainage from barnyards, pig pens, etc., that the importance of treating the water as a precautionary process is evident. While some of the above mentioned pollutions may be controlled to some extent, an absolute control, especially during heavy storms, is impossible. Therefore, we are led to the conclusion that any water used for potable purposes should only be so utilized when provision is made for its proper purification and treatment.

The filtration of all water supplied for domestic use might appear to be a satisfactory remedy in itself, automatically taking care of all sewage pollutions; and it is true that under conditions similar to those existing on portions of this stream, with a very complete and elastic installation coupled with the supervision of honest, intelligent chemists and bacteriologists, and adequate laboratory facilities, a water treatment plant can be operated so as to produce satisfactory water for considerable periods of time. With sufficient expenditure for duplication of important portions of the plant and experienced technical men, the plant may be made almost infallible. This statement has been borne out by the very satisfactory work of some of the larger water purification plants.

With smaller water plants, it appears that such great operating expenses are prohibitive. Just why they are prohibitive, is not exactly clear, except that consumers have been accustomed to obtain water service at very small cost, and object to paying much more for improved service, even in some cases preferring to take very grave risks. For this reason the supervision of the operation of a water purification plant often becomes the work of some machinist or other mechanic who is intelligent and generally honest in his desire to perform a difficult duty, but unsuited from the standpoint of training, and incapable of making accurate chemical or bacterial tests as to the efficiency of the filtration process. The works are,

therefore, necessarily run in a haphazard manner. The filtering devices in this class of water works, moreover, are not so perfect but that at times it becomes necessary to use raw or partly treated water. As having a bearing upon this matter, attention is directed to the fact that either because of a lack of confidence or for other reasons, enlightened persons have a natural feeling of abhorrence at the thought of drinking water which, before treatment, has received discharges of sewage apparent to the eye. This is true to such an extent as to seriously affect the value of water works as a public utility even when it is supplying a well-treated and safe water derived from a polluted source. Such persons resort to the use of special bottled spring waters, costing in the aggregate sums of money which would be sufficient in a few years to pay for considerable sewage treatment works. Therefore, due to the unreliability of the human element, and also to the same fault in structures and mechanical devices, we believe that it is necessary, in a large measure, to protect waters used as sources of water supply from the pathogenic bacteria contained in sewage, and also from other matters in sewage tending to seriously impair the quality of the water, in order to reduce the burden placed upon the water plant, and prevent the chances of serious and costly accidents.

This attitude is further borne out by the fact that the discharge of the water contained in sewage into some watercourse is as necessary as is the use of the stream for water supply purposes, and it would, therefore, appear that it would be just to apportion the cost of the improvements between the two uses of the stream.

SEWAGE DISPOSAL.—Sewage is usually treated to remedy or prevent one or more of three objectionable conditions. The first of these is to prevent unsightly appearances in the streams. From the standpoint of the sanitarian, this feature has little importance in itself. However, it is so closely allied to the questions of odor and danger of disease, as to require similar treatment. This type of nuisance is, however, one of the most serious objections from persons dwelling along the streams, as it has a direct effect upon the value of real estate and minor uses of the river for pleasure. The second reason for treating sewage is to prevent nuisances from the occurrence of malodorous conditions; and thirdly, to prevent the contamination of water by the pathogenic bacteria contained in intestinal discharges. The latter precaution is by far the most important from the standpoint of the sanitarian, as its neglect might cause much sickness and death, with consequent economic loss to individuals, the community, and the State.

UNSIGHTLY APPEARANCES.—The sight of human waste materials is always and naturally objectionable to the minds of men. For this reason, unsightly discharges of wastes have an appreciable effect in depreciating property values, or in causing the discontinuance of the use of a stream for boating and bathing. These small items relating to appearances and pleasures and general effect upon the environment cannot be readily put into money values, but in most instances, are of sufficient importance to make it desirable to avoid such conditions if it can be done at reasonable expense. This is possible, and when for other reasons it is advisable to further treat the sewage, the expense of removing unsightly objects is often merely nominal.

This phase of sewage disposal is very closely associated with the production of odors, as the unsightly floating objects or solids tend to collect in reaches of the stream where the velocity is lower than at the point of discharge. They also collect in eddies, quiescent pools, at dams, or along the shore line, forming bad smelling deposits and causing local nuisances.

MALODOROUS CONDITIONS.—Nuisances of this character are caused by the discharge of sewage in such quantities, and concentrated at such points as

to reduce the dissolved oxygen of the streams to practically zero. Theoretically, as long as any dissolved oxygen in the stream is available, no offensive odors should be produced. In practice, however, it is found that although oxygen is available in the theoretical combination of the whole flow of the stream and sewage, there are generally localities immediately adjacent to the sewer outlets within which the oxygen is not available in sufficient quantity to prevent obnoxious odors. With well constructed outfalls discharging into the main portion of the stream, a greater portion of the available oxygen supply in the diluting water can be utilized. In this connection, a certain minimum quantity of oxygen in the stream has been suggested as that below which the oxygen figure should not fall. This limit has been variously stated as from 30 per cent. to 70 per cent. of the oxygen saturation value. The saturation value during summer temperatures is usually taken, as this is the most unfavorable period of the year, and the time at which the worst odors usually arise.

This factor can probably be better expressed in parts per million of available oxygen. At 68° Fahrenheit, or summer temperature, the oxygen figures would be 2.76 to 6.44 parts per million respectively. These dissolved oxygen figures are valuable only when taken into consideration with other items relating to the general environment. From an economic standpoint, it is believed that in general the lower figure should be used in connection with proposed works, as it is easier to construct additional works, when changing conditions make this desirable, than it is to refund money expended on works which are afterwards found to be unnecessary.

It was hoped that with these facts in mind, it would be possible to deduce figures showing the approximate or probable quantity of residual oxygen in the Raritan River at various points during average dry weather flows. It was soon discovered, however, that it was impossible to even approximate the probable conditions, and this portion of the project was consequently abandoned.

It was then apparent that the only available figure which could throw light upon the matter was that obtained from the probable dilution of the sewage. From this information, it will only be possible to indicate hypothetical conditions which it is probable would become established. It will also serve to aid in deciding in a general way upon the processes of disposal which should be installed at particular localities.

Local conditions will affect the general scheme in some cases, but it is believed that a policy can be outlined which will establish the degree of purification which it is advisable to require along certain portions of the rivers and their tributaries. As it is practically impossible to obtain exact data, especially in relation to the future conditions on this watershed, the process of outlining methods for the disposal of the sewage, with respect to offensive odors, therefore becomes, in a large measure, a matter of judgment based upon experience with existing sewage works.

BACTERIAL CONTAMINATION.—This is the most important consideration from the standpoint of public health, when sewage is disposed of within a watershed, water from which is used for potable purposes. Due to the great advance made in sanitary science during the last ten years, it is now possible to disinfect sewage effluents, destroying the pathogenic bacteria at a very low cost. This process, however, has not reached the stage at which the operation of small installations is so perfect as to remove the whole danger. Such devices require very careful and conscientious attention. Intermittent sand filters also materially reduce the bacterial content of sewage waters while performing other important functions. Such filters, in connection with preliminary processes of sedimentation, are very satisfactory for small installations, as the amount of attention required is small.

It has been shown by several investigations that the average cost of treating a case of typhoid fever is at least $100, and a death from typhoid causes a direct financial loss of about $6,000, including the value of the life destroyed. In this connection, it would be advantageous to quote some actual figures, and the following is from the report of an inspector of the State Board of Health after a very careful study of an epidemic of typhoid fever.

"Replies were received in 44 of the 53 cases occurring during this outbreak. This is briefly summarized as follows:

1. Total cost in treating 25 cases in private families, $6,837.20—equal to $273.48 per case.
2. Cost to 9 patients receiving treatment in hospitals, $1,685.50—equal to $187.20 per case.
3. Estimated cost in treating 10 charity patients in hospitals, including actual incidental expenses, $820.00—equal to $82.00 per case.
4. Loss in wages by 15 patients, $2,358.46—equal to $157.23 per case.
5. Total loss in 44 cases, $11,701.16—equal to $294.68 per case.

Four of the nine cases in which no data as to the cost were obtained succumbed to the disease, and among these nine cases were probably some that proved most expensive."

It dos not, therefore, take many cases and deaths from this water-borne disease to make it advisable to carefully treat sewage where the dangers of contamination may be considered as serious.

POLLUTION OF THE RIVER.—In making investigations relative to present and future sewage disposal, certain assumptions relating to future conditions have necessarily been made. In the investigation of existing conditions, this has not been necessary to an equal extent.

The first study was made upon the assumption that every village, town or city having a population of 100 or over was discharging raw sewage into the streams. The reason for such an investigation was the idea that all such municipalities should first be considered together, with relation to their possible effect upon the whole stream and their relation to the tributaries and smaller streams in the watersheds of which the places are situated. Possibly, for the reason that there should be a just distribution of the burden, in the future, towns having a population of 100 are rather smaller than it is necessary to consider, but in this study they were later found to have considerable effect upon the problem. A defense for their inclusion is the fact that public or quasi-public water systems are being installed in many of these villages, and we may naturally expect sewer systems to follow in time.

The probable sewage flow per capita is taken as 100 gallons per day, as this appears to be a safe average figure as determined from existing works.

The dilution figures, as given in the table, neglect the reæration of the stream and the natural purification taking place; so that the figures indicate the theoretical dilution if all the sewage was simultaneously discharged at the point under consideration. This fact must, of course, be taken into consideration when using the dilution figures.

Due to the small increase in population in rural sections, it is not anticipated that the quantity of sewage 25 years hence will be materially larger, except along Green Brook and along the Raritan River from Raritan to its mouth.

POPULATION.—The populations given are taken from the 1910 census. In plotting the curves of the growth of population for typical municipalities it became apparent that in the rural sections the population is not increasing with any rapidity, and in many sections is actually decreasing. The smaller towns in general have a slow but steady growth, probably due to the endeavor of such places to induce manufacturing plants to locate therein.

Along Green Brook and the lower Raritan River, however, the increase in population is fairly rapid and steady. Plainfield, for instance, has increased as follows:

1890	11,267
1900	15,369
1910	20,550

This is an increase in population averaging about 465 persons per year. Along the lower section of the Raritan River, the rate of increase is almost as high as along Green Brook.

Bound Brook has increased at the average rate of about 123 persons per year, and New Brunswick averages about 240 persons per year increase.

These figures would seem to indicate that we may naturally expect a steady increase of population in these two sections of the watershed.

The theoretical dilution figures may be taken as representing in a general manner the condition of the stream 25 years hence, as many of the towns considered will possibly not construct sewerage works, while other towns constructing works will increase in population to a number equal to the towns included in the tabulation, but which will not construct works for the removal of sewage.

It is apparent from the tabulation that the possible increased sewage flow at present from all places with a population of 100 or more, is only about 50 per cent. greater than the whole sewage flow as discharged at the present time. This is due to the fact that all the large municipalities already have fairly complete sewer systems discharging into the river. The large municipalities are situated mostly along Green Brook and the main portion of the Raritan River from Raritan to Perth Amboy. The only towns of a population above 1,000 outside of the above mentioned sections are Princeton, Flemington, Metuchen, Bernardsville, Hightstown, High Bridge, Jamesburg, Old Bridge, Peapack and Hopewell. Of these, Princeton, Flemington, and Hightstown have sewerage systems, the sewage from which is at present treated at disposal works.

Scattered throughout the watershed are various factories and institutions which at present discharge wastes into the streams. Some of the factories discharge considerable quantities of sewage and trade wastes. Should the number of factories increase greatly, as is probable, they may seriously affect the question of future sewage disposal.

INVESTIGATION OF EXISTING CONDITIONS.—This study relates to the existing conditions, and the data are based upon the following information:

Data relating to the dry weather flow of the Raritan River have been taken from the Report on Water Supply, published by the Geological Survey of New Jersey. The aim has been to base the figures of dilution upon a probable dry weather flow which might extend over a period of two or three months. This figure would be somewhere between the dry weather flow of an ordinary year and that of an extremely dry year. It is therefore probable that the flow will not reach this low flow for any great length of time, except on an average of one year out of ten. This figure, therefore, presumes a certain leniency, in that the worst conditions have not been taken. It has not been easy to arrive at satisfactory figures in this respect, and the dry weather flow at Bound Brook was at first computed as being 64,926,000 gallons per day. This figure was somewhat less than the observed minimum flow for twenty-four hours as given in the above mentioned report, being about 79,000,000 gallons on October 13 to 19, 1892. The figures were, therefore, adjusted so as to make the computed flow more nearly that of average dry weather conditions.

PRESENT CONDITIONS ON THE NORTH BRANCH.—Black River and Rockaway Creek are main tributaries of the North Branch which do not at the present time receive sewage in any appreciable quantity, although some minor pollutions may exist.

On the main portion of North Branch, the sewage is so highly diluted with the water in the stream as to make any general nuisance at this time impossible.

At Ralston there is an institutional sewage disposal system discharging about 3,000 gallons of sewage effluent. At Far Hills are two private sewage disposal plants discharging about 15,000 gallons of sewage effluent. The construction of another and larger disposal plant is proposed to treat the wastes from the town. At Bernardsville, it is proposed to install a sewer system and sewage disposal plant within a short time to take care of the sewage from the municipality. This sewage flow has, therefore, been included in the tabulation of present conditions. A factory at Pluckemin discharges about 20,000 gallons of sewage and manufacturing wastes into a watercourse which is dry at certain seasons of the year. This has caused offensive conditions which are to be obviated by the construction of settling tanks and sand filters.

PRESENT CONDITIONS ALONG THE SOUTH BRANCH.—At Glen Gardner, the State Tuberculosis Sanatorium discharges about 50,000 gallons of sewage per day after sedimentation. The sewage generally seeps away without reaching the stream. A creamery at Clinton discharges about 300 gallons per day of milk wastes, which are first treated with lime. A sewage disposal plant at Flemington, consisting of a screen chamber, dosing tank and land filtration beds, discharges about 200,000 gallons per day of sewage effluent. A creamery at Three Bridges contributes 300 gallons of lime treated milk wastes. A similar creamery at Neshanic discharges about 200 gallons of milk wastes after similar treatment.

REASONS FOR CONSIDERING NORTH AND SOUTH BRANCHES JOINTLY.—As these two streams unite just above the town of Raritan forming the Raritan River, which is used at this place as the source of a considerable water supply, it has seemed expedient to consider the disposal of sewage within their watersheds as a joint proposition.

The reasons leading to this conclusion are given below:

If the subject of the proper disposal of sewage is approached from the standpoint of demanding the least purification necessary beginning at the headwaters of a stream, it is liable to result in overburdening the down-stream municipalities and consequently benefiting the up-stream communities. For example: the up-stream town might discharge untreated or partly treated sewage into the stream so that no nuisance would be produced; but the river might, as a result, be in such a condition that at the next town the discharge of sewage would so reduce the oxygen in the stream as to cause offensive nuisances, and therefore, necessitate the construction of a very expensive and complete plant at the lower place.

If, on the other hand, the matter is taken up from the mouth of the river to the head of the stream, the reverse is equally true. Therefore, it is better to consider the several sections of the river according to the uses made of them, and for these sections to endeavor to define a policy which will apply to all places similarly situated.

This is much better from the standpoint of State policy, as individuals are not always easily educated as to the merits of particular cases, and many not understanding clearly would feel aggrieved at a supposedly unfair decision as relating to two towns in the same watershed under somewhat similar conditions. The people can readily understand the need for better purification in a watershed, the water from which is used for potable purposes, as compared with a stream which is not so used; but

they could hardly grasp the justice of permitting a small up-stream town to discharge partly purified sewage into the stream because the dilution is high, and compelling a large city immediately below to treat the sewage completely because the dilution is low, the uses of the stream being the same.

It would also appear that this method of deciding upon the degree of purification is just and reasonable, as all the towns have contributed to the section of the stream offensive matters, which combined, are liable to cause a serious nuisance, and it is incumbent on all to treat the wastes in a similar manner.

In considering, therefore, the North and South Branches of the Raritan, which after joining are used as sources of water supply, the object in view is first to arrive at some general policy which may apply to all the towns in this section of the watershed. This general policy may necessarily have to be modified in particular instances where municipalities are so unfavorably located as to be unable to use the diluting power of the main stream. Therefore, it may be necessary to consider each municipality separately, and amend the general policy in some cases.

Unsightly Appearances on North and South Branches.—As pointed out above, this phase of pollution is so closely associated with the production of odors that it can be best treated in conjunction with that subject. In some particular cases where it affects fastidious real estate developments or bathing beaches, it is occasionally of particular importance.

Generally, the cost of removing unsightly objects of sewage origin is so slight, particularly when treatment processes for other purposes are necessary, as to be merely nominal.

Malodorous Conditions.—The total quantity of sewage which will be discharged into these two rivers within a short time will be 508,850 gallons per day. The combined dry weather flow of the streams is 65,000,000 gallons per day, consequently the sewage would be diluted with at least 130 times its own volume of river water; so that at the junction of these two rivers, the possibility of the production of foul odors would appear to be extremely slight.

For the North Branch alone, the dilution figure is even higher; the sewage being diluted with 133 times its volume of river water. At the mouth of the South Branch, the dilution figure is 122, and the possibility of offensive odors being produced is still slight.

If the question of dilution was the only question involved, possibly only preliminary treatment of the sewage discharged into these streams would be necessitated. It must not be forgotten, however, that the streams form the source of very important water supplies at Flemington and Raritan, and as shown above, the future use of this stream for this purpose will probably greatly increase. In fact, tentative plans for diverting considerable portions of this river for water supply are already proposed.

As also having a bearing upon this matter, we find that the velocity of flow during dry weather is at times as low as 0.33 feet per second, which would permit the formation of sludge banks with consequent dangers of bad odors. This, together with the fact that there are numerous dams along the river, would make it advisable to remove the solid materials from the sewage.

On the North Branch and its tributaries, there are 43 dams having a total fall of 625 feet, or an average fall of 15 feet each. On the South Branch and its tributaries, there are 63 dams, having an aggregate fall of 905 feet, or an average fall of 15 feet each.

It can, therefore, be seen that considerable portions of the river are ponded, and the velocity of flow greatly reduced. The fact that sewage discharges, even in fairly high dilutions, aid the growth of micro-organisms, which are offensive in water supplies because of the production of foreign tastes and odors, must also be considered. Tastes and odors may also be directly caused by the sewage itself. These facts change the whole complexion of the situation, and it is apparent that all sewage discharged should be free from objectionable solids, and well clarified.

BACTERIAL PURIFICATION.—The fact that the stream is at present used as a source of water supply, would, in our opinion, also make it necessary to materially reduce the total bacterial content of the effluent from a sewage disposal plant, as compared with the total bacteria in the raw sewage when incubated at 20° to 37°; and that specific intestinal and pathogenic bacteria, as indicated by the standard tests, should be practically eliminated. It is also probable that where sewage is discharged within a comparatively short distance above a public water supply intake, that special precautions for the disinfection of the sewage will have to be taken.

We are led to these conclusions because of the fact that where sewage is discharged into the stream in proportions as large as given above, it is proper and just to place a considerable proportion of the burden of preventing disease upon the polluters of the stream. By so doing, the burden placed upon the water filtration plant will be lighter, and any defects of operation or equipment, which are always possible, will not have such a serious effect.

FUTURE CONDITIONS.—It is believed that these demands for proper disposal should apply under existing conditions, and it is, therefore obvious that with increasing discharges of sewage, the standard could not be lowered.

OTHER POTABLE WATER SUPPLY WATERSHEDS.—For the same reasons we are led to the opinion that in other watersheds used as sources from which public supplies are obtained, sewage should be similarly treated. These watersheds are much smaller than the shed already discussed, so that special precautions with regard to the removal of objectionable bacteria will often be necessary.

The watersheds of the Raritan system from which water supplies are derived at present, beside the two streams already considered are:

Prickett's Brook, a tributary of South River above Jacksonville, used by Perth Amboy;

Lawrence Brook above Weston's Mills, used by New Brunswick;

Middle Brook above Chimney Rock, used by Bound Brook;

Rock Brook, a tributary of the Millstone River above the State Village for Epileptics at Skillman, and used by that village.

The only municipal sewers in any of these watersheds at the present time are at Milltown, at present under construction. The sewage at this place will be pumped through the New Brunswick sewer system to the Raritan River, practically removing the sewage from the shed of the water supply.

THE MILLSTONE RIVER.—At the present time, this stream receives sewage effluents aggregating 595,000 gallons, with a dilution figure of 77.

At Hightstown, 130,000 gallons of sewage effluent per day is discharged after treatment by a screen chamber and intermittent sand filters. At Princeton, there are four sewage disposal plants discharging about 400,000 gallons of sewage effluent per day, which is in general well clarified and non-putrescible. An institution at Hopewell disposes of 15,000 gallons of sewage per day by settling tank and stone filters. An institution at

Skillman discharges an average daily flow of 50,000 gallons of sewage effluent treated by settling tanks, contact beds and land filtration. At some of the Princeton plants, at Hopewell and at Skillman, the disposal plants are not satisfactory, and it will be necessary to make some changes in the methods of disposal at these places.

In the consideration of this river, a question immediately arises as to whether or not it is advisable to use the full diluting power of the river for disposing of sewage, or whether it would be advisable to take precautions to conserve this stream because of its favorable location as a future source of water for potable purposes. It has already been seriously considered by the City of Trenton for this purpose, and it is possible that New Brunswick, Bound Brook and Skillman will resort to it in the near future for additional supplies, as each of these municipalities faces at the present time a possible water famine during dry periods. The Millstone River might also be used for supplying Dunellen, Plainfield, Westfield and even Elizabeth, in all of which the present public supply of water is not much more than adequate.

Therefore, taking these facts into consideration, together with the natural desirability of the water of this stream for potable uses, we believe that it would be advisable to conserve this stream for such use. It is not believed that this policy will cause any great hardship upon municipalities within the watershed, as the quantity of sewage discharged into the stream is already fairly high in proportion to the dry weather flow of the stream. This stream, moreover, has a sluggish current; velocities as low as 0.3 feet per second having been observed. There are 22 dams on the main stream and its tributaries, which would tend to further reduce the velocity and pond considerable sections of the river because of the low slope of the stream. For these reasons sewage discharged into this stream and its tributaries should be well clarified and non-putrescible. At such a time as the stream is used as a source of water supply, all municipalities above the point of intake should, in addition, be required to materially reduce the objectionable bacterial content of the sewage effluent, and all sewage disposal works should be constructed with this end in view.

LAWRENCE BROOK.—This stream has already been considered in connection with streams used as sources of water supply. As it is the source of supply for the City of New Brunswick, it should be protected from objectionable pollution as outlined above.

SOUTH RIVER.—South River is tidal up to the town of Old Bridge. Above this point, the stream may be considered in the same category as the Millstone River; being very liable for use as a future source of water supply for South River, South Amboy and Perth Amboy. It has 19 dams along its course and its tributaries, and it is probable, from the topography of the ground, that the velocities during dry weather are not greatly in excess of those observed on the Millstone.

This stream receives sewage from an institution at Jamesburg, the town of Helmetta, and the borough of South River. At Jamesburg, 60,000 gallons of sewage effluent are discharged after screening and land filtration. At Helmetta, about 15,000 gallons of sewage effluent, treated by settling tanks and contact beds, are discharged. At South River, about 150,000 gallons of sewage are discharged without treatment. This town, however, is situated on the tidal section of the river.

The towns within this watershed should, therefore, at the present time discharge only a well clarified and non-putrescible effluent, with future provisions for the reduction of objectionable bacteria when the stream is used as a source of water supply.

Below Old Bridge, the diluting power of the stream can be used until such time as there is danger of nuisances; so that it is necessary at present to construct works only to remove the grosser suspended solids.

GREEN BROOK.—This stream receives the greatest quantity of sewage effluent, in proportion to its flow, of any of the streams in the Raritan system.

At Plainfield, about 1,800,000 gallons of sewage effluent are discharged after treatment in settling tanks and double contact beds. It is proposed to abandon this plant, and in conjunction with North Plainfield and Dunellen, construct a larger plant consisting of Imhoff tanks, sprinkling filters and secondary settling tanks. It is estimated that this plant will discharge 2,800,000 gallons of sewage effluent.

At South Plainfield, about 800 gallons of sewage effluent, after treatment by settling tanks and land filters, are discharged into the stream. Raw sewage to about 30,000 gallons per day is at present discharged at Lincoln.

As may be seen from the tables, the population in this section of the watershed is large, and such large quantities of sewage effluent are discharged into the stream, compared with the dry weather flow, as to make any use of the stream for domestic purposes impossible, except on its smaller upland tributaries. It is, therefore, evident that the least degree of purification which can be demanded is a well clarified and non-putrescible effluent.

RARITAN RIVER, MAIN VALLEY.—This is the only remaining portion of the river to be discussed. This section naturally divides into two sections, the non-tidal section from the town of Raritan to the dam at Fieldville, and the tidal section of the river from Fieldville to the mouth.

TOWN.	Sewage discharged thousand gallons daily.		Stream flow thousand gallons daily.	Tidal flow thousands of gallons.	Total thousands of gallons.	Dilution.
	Individual.	Total.				
Raritan	300	300	65,860	.....	.....	219
Somerville	450	750	67,880	.....	.....	90
Bound Brook	300	1,050	129,852	.....	.....	129
Highland Park	115	.....	.....	.....	.....	.....
New Brunswick	2,300	3,465	134,932	920,000	1,056,932	300
Perth Amboy	1,000	4,465	187,000	6,640,000	6,827,000	1,600

This table gives a concise statement of the sewage discharged into the stream, none of which is at present treated. Raritan, Somerville and Bound Brook are above the tidal section. The dilution figures at Highland Park and New Brunswick, and at Perth Amboy, include the dilution by tidal storage.

SECTION OF RIVER FROM RARITAN TO THE FIELDVILLE DAM.—This section has a total length of about 8 miles. Within this comparatively short distance, 1,050,000 gallons of untreated sewage are discharged into the main stream. Green Brook, discharging treated sewage to the amount of 2,800,000 gallons, is also, tributary to this section.

The dam below Bound Brook has a fall of 11 feet, and stores a considerable quantity of water with a consequent reduction in velocity of flow due to the enlarged section. At the present time it is reported that the river at this point emits foul odors during dry weather, due to deposits of sewage sludge.

The present untreated sewage flow from Raritan, Somerville, Bound Brook and East Bound Brook, together with the discharges from several

large factories, is probably diluted with about 100 parts of river water for each part of sewage. This figure in itself would not indicate the probability of offensive conditions arising. It is, however, apparent that due to the reduction in velocity at Fieldville, offensive conditions are caused. This, in our opinion, therefore, requires the construction of works to remove suspended solids at the present time. It is also apparent that with the increased use of the Raritan River, above Raritan, for water supply purposes, and the increased discharge of sewage from the same and other communities, it will be necessary in the future to either discharge the partially purified sewage effluent below the dam by a joint outlet sewer, or construct disposal works which will discharge a non-putrescible effluent.

The present construction of works to remove objectionable solids would also tend to obviate the existing nuisances in the immediate neighborhood of the outlets. The effluents from these works should be discharged into the main body of the stream, as a secondary and cheap preventative of local nuisances, and so that the full diluting power of the stream may be used. If water is to be taken from this section of the river for potable purposes, much more complete purification of the sewage will necessarily be required. It would then be necessary for Somerville, Raritan, Bound Brook and East Bound Brook, either to install works adequate to produce a clarified and non-putrescible effluent, having a bacterial content very materially lower than that of the raw sewage, or to carry their sewage by means of a joint trunk sewer to a point below the Fieldville dam. If this procedure was adopted, much simpler and less costly works would be necessary, as the river below this point is tidal and is not likely ever to be used as a source of water supply.

THE RARITAN RIVER FROM THE FIELDVILLE DAM TO THE MOUTH OF THE RIVER.—This section of the river at the present time receives a total sewage discharge of 3,500,000 gallons of raw sewage per day. It also receives the 1,000,000 gallons of sewage discharged into the river above the dam. If settling tanks only were constructed above the dam, the sewage would still have an appreciable effect upon the river.

This section of the river is tidal in character, having an average rise in tide of 5 feet. This fact has a considerable effect upon the dilution figure, raising it to about 300 at New Brunswick and 1,600 at Perth Amboy. Should the work outlined in this report be carried out, the dilution figures would be practically increased by the construction of sewage disposal works at Raritan, Somerville, and Bound Brook.

The oscillation of the tides, however, has a serious effect upon the deposition of the sludge, reducing the velocity of flow to such an extent that mud banks and deposits at the sewer outlets are formed; and for these reasons we feel that it is advisable for municipalities discharging sewage into this portion of the river to construct works for the removal of coarse suspended solid matter. The effluents from such works should be discharged into the river in such a manner as to use its diluting power as much as is practical.

CONCLUSIONS.—Because of the foregoing facts and considerations, it is believed that sewage within the several drainage districts should be treated to such a degree of purification as is given below:

1. WATERSHEDS FROM WHICH WATER IS TAKEN FOR DOMESTIC USE.—North Branch of the Raritan River and tributaries.

South Branch of the Raritan River and tributaries.

Raritan River from junction of North and South Branches to the intake of the Somerville Water Company at Raritan.

Lawrence Brook and tributaries above Weston's Mills.
Middle Brook and tributaries above Chimney Rock.
Rocky Run and tributaries above the State Village for Epileptics at Skillman.
Prickett's Brook above Jacksonville.
On these watersheds above the points mentioned, sewage, before being discharged into the streams, should be so treated as to be well clarified, non-putrescible, and the number of objectionable bacteria in the effluent should be materially reduced as compared with the bacterial content of the raw sewage.

2. STREAMS WHICH IT IS CONSIDERED ADVISABLE TO CONSERVE FOR FUTURE POTABLE USE.—Millstone River and tributaries.
South River and tributaries, above Old Bridge.
The effluent from sewage works discharged into these sections of the Raritan River system should be well clarified and non-putrescible.
At such time as the streams are used as a source of water supply, sewage works above the point of intake should, in addition to the above requirements, treat the sewage in such a manner as to materially reduce the number of objectionable bacteria in the effluent as compared with the raw sewage, and sewage disposal plants should be constructed with such further purification in view.

3. GREEN BROOK AND TRIBUTARIES.—Sewage effluents discharged into this stream should be well clarified and non-putrescible.

4. SMALL TRIBUTARIES TO THE RARITAN RIVER BETWEEN RARITAN AND PERTH AMBOY.—These streams generally have such small watersheds that only well clarified and non-putrescible sewage effluents should be discharged into them.

5. RARITAN RIVER FROM RARITAN TO THE FIELDVILLE DAM.—If the stream is not to be used as a source of water supply, sewage effluents discharged into it should have had most of the suspended solids removed, and the outfall should extend into the main body of the stream.
If potable water is to be taken from this section, sewage effluents discharged into it should be well clarified and non-putrescible, and the bacterial content of the effluent should be very materially lower than that of the raw sewage.
Within possibly ten years, it is expected that such effluents should be carried below the Fieldville dam in a joint outlet sewer.

6. RARITAN RIVER FROM THE FIELDVILLE DAM TO THE MOUTH OF THE RIVER.—This section of the river should receive only such sewage effluents as have been treated to remove most of the suspended solids, and the outfall should be extended into the main body of the stream.

Report of the Bureau of Vital Statistics.

DAVID S. SOUTH, *State Registrar.*

The tables published in the secretary's report of this volume in reference to births, marriages and deaths, and also those which follow, are indicative of improved registration of vital statistics. The mortality tables, showing a gradual but positive diminution in the death-rate from preventable diseases, indicate that the efforts of the State and local boards of health, in the prevention of disease are entirely satisfactory, and bears out the fact that public health is purchasable.

The registration of births which has received serious consideration in New Jersey, and other registration states, shows great improvement, and the recent laws requiring the presentation of certificates of births for various purposes have aided materially in this work. To show the importance of this legislation it is only necessary to state that in the past year this Department has received over 2,000 supplemental reports of births, many of which were used, or will be used, to prove the births of children referred to.

During the past year this Department has received several complaints from local registrars throughout the State that certain physicians in their district have failed to report births, and in each instance instructions have been given that the case be presented to the local board of health with recommendation that prosecution be ordered. However, many local registrars decline to prosecute physicians in their districts for personal reasons, and while these conditions exist there is little hope for complete registration. In order to correct this fault it is suggested that an amendment to the law be made which will compel local registrars to begin prosecution in cases where the law has been violated in regard to the filing of births, marriages and deaths.

A few years ago it was thought desirable to furnish the parents with a copy of the record of birth of each child as the original record was received in the State Bureau of Vital Statistics. This method is employed in some registration states and cities, but to apply the same in New Jersey would entail considerable expense, amounting to several thousand dollars each year, and in view of the necessity for economy this plan has not been recommended in this Department.

During the year communications have been received from various funeral directors throughout the State regarding the laws regulating the

transportation of dead human bodies, and while the present statutes covering this subject are adequate, they are in many instances cumbersome and impracticable. In many states the laws regarding the transportation of the dead are vastly different, and in view of this fact the National Funeral Directors' Association has been making efforts to procure uniform legislation in all of the registration states in reference to transportation of the dead, and uniform transportation blanks and shipping rules have been adopted by the following states: North Dakota, Kentucky, Utah, Virginia, Washington, West Virginia and Wisconsin, with other states reporting favorable progress, but unable to change their forms or rules without legislative action. It is, therefore, recommended that in New Jersey the present laws regarding transportation of the dead be repealed, and a law enacted in conformity with the suggestions of the National Funeral Directors' Association regarding this important matter.

TABLE 1—Births, Marriages and Deaths by Counties, Cities, Boroughs and Townships for the year ending December 31, 1913.

ATLANTIC COUNTY.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Absecon	10	7	11
*Atlantic City	889	584	838
Buena Vista	90	29	27
Brigantine	0	0	1
Egg Harbor City	61	28	37
Egg Harbor Township	19	13	31
Folsom Borough	5	0	5
Galloway	31	11	24
Hamilton Township	38	13	28
Hammonton	178	54	71
Linwood	13	2	4
Longport Borough	1	1	3
Margate City	5	0	3
Mullica	10	2	8
Northfield City	23	0	44
Pleasantville	116	47	81
Port Republic City	15	3	8
Somers Point	8	5	5
Ventnor	18	4	17
Weymouth	17	4	8

BERGEN COUNTY.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Allendale	9	5	10
Alpine Borough	5	1	5
Bergenfield	46	20	22
Bogota	51	8	11
Carlstadt	87	35	55
Cliffside Park	115	35	43
Closter Borough	22	14	11
Cresskill	11	6	7
Delford	17	9	20
Demarest Borough	10	5	14
Dumont	38	5	11
East Rutherford	91	48	42
Edgewater	78	11	41
Emerson	24	1	10

BERGEN COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Englewood City	237	112	177
Englewood Cliffs	14	0	8
Fairview	131	16	34
Fort Lee	81	27	62
Franklin	34	11	24
Garfield	452	118	153
Glen Rock	21	5	15
Hackensack City	387	160	235
Harrington Park Borough	5	2	3
Hasbrouck Heights	32	12	23
Haworth Borough	4	1	5
Hillsdale	24	3	11
Hohokus Borough	2	2	9
Hohokus Township	44	8	30
Leonia	23	17	14
Little Ferry	69	8	24
Lodi Borough	172	41	63
Lodi Township	18	0	12
Maywood	23	11	12
Midland	25	3	40
Midland Park	50	13	13
Montvale	8	2	9
Moonachie	27	8	9
North Arlington	18	0	9
Northvale	25	7	8
Norwood Borough	16	3	6
Oakland	11	6	5
Old Tappan	7	0	1
Orvil Township	14	7	7
Overpeck	117	29	77
Palisade	32	6	9
Palisade Park	61	11	14
Park Ridge	31	13	12
Ramsey	26	3	20
Ridgefield Borough	17	8	9
Ridgefield Township	2	2	0
Ridgewood	82	36	75
Riverside	8	2	13

*The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

BERGEN COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Rivervale Township	4	1	3
Rutherford	110	51	66
Saddle River Borough	2	2	4
Saddle River Township	65	9	25
Teaneck	38	5	29
Tenafly	47	23	23
Union	173	43	59
Upper Saddle River Boro.	0	0	3
Wallington	0	1	0
Washington	2	4	1
Westwood	46	21	21
Woodcliffe	10	0	8
Wood Ridge	30	6	11

BURLINGTON COUNTY.

Bass River	18	2	7
Beverly City	55	26	42
Beverly Township	43	26	22
Bordentown City	86	45	68
Bordentown Township	5	0	2
Burlington City	180	106	144
Burlington Township	13	0	16
Chester	95	32	74
Chesterfield	14	1	19
Cinnaminson	31	4	17
Delran	20	2	24
Easthampton	3	0	3
Evesham	30	5	16
Fieldsboro	5	3	3
Florence	189	24	100
Lumberton	24	12	32
Mansfield	22	10	10
Medford	32	13	21
Mount Laurel	35	5	30
New Hanover	12	5	19
Northampton	132	65	124
North Hanover Township	16	0	15
Palmyra	59	21	35
Pemberton Borough	7	14	16
Pemberton Townhip	2	9	66
Riverside	140	67	65
Riverton Borough	43	12	16
Shamong	10	1	13
Southampton	26	2	22
Springfield	2	5	15

BURLINGTON COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Tabernacle	3	4	7
Washington	14	2	8
Westhampton	4	0	5
Willing Borough	7	3	8
Woodland	19	8	7

CAMDEN COUNTY.

Audubon Borough	44	12	19
Berlin	36	17	19
Camden City	2333	1356	1680
Centre	77	14	55
Chesilhurst	3	2	5
Clementon	42	20	38
Collingswood	96	35	63
Delaware	34	1	14
Gloucester City	223	110	138
Gloucester Township	48	7	103
Haddon	27	11	24
Haddonfield	81	23	52
Haddon Heights Borough	32	13	14
Laurel Springs Borough	4	2	4
Merchantville Borough	24	28	27
Oaklyn Borough	12	7	10
Pensauken	64	25	46
Voorhees	31	2	12
Waterford	34	5	17
Winslow	86	9	33
Wood Lynne Borough	11	7	2

CAPE MAY COUNTY.

Avalon	2	0	3
Cape May City	31	32	26
Cape May Point	3	0	5
Dennis	25	5	30
Holly Beach Borough	0	0	0
Lower	25	9	16
Middle	41	20	23
North Wildwood Borough	19	0	6
Ocean City	68	23	41
Sea Isle City	14	7	15
Upper	15	12	22
West Cape May	10	4	11
Wildwood	68	33	58
Wildwood Crest	12	0	2
Woodbine	59	7	10

CUMBERLAND COUNTY.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Bridgeton	272	124	221
Commercial	45	13	37
Deerfield	38	17	25
Downe	14	14	19
Fairfield	22	2	19
Greenwich	27	8	14
Hopewell	29	7	41
Landis	95	5	74
Lawrence	27	5	26
Maurice River	38	25	25
Millville City	276	108	170
Stow Creek	18	7	7
Vineland	140	103	125

ESSEX COUNTY.

Belleville	317	87	147
Bloomfield City	383	154	167
Caldwell Borough	60	23	34
Caldwell Township	6	5	8
Cedar Grove	13	4	155
East Orange City	589	244	346
Essex Fells	9	3	3
Glen Ridge	52	12	41
Irvington	404	90	189
Livingston	20	5	23
Millburn	86	29	25
Montclair City	527	160	347
Newark City	10539	4052	5597
North Caldwell Boro	1	0	4
Nutley Borough	129	52	63
Orange City	947	299	516
Roseland Borough	13	3	7
South Orange Borough	127	47	57
South Orange Twp	49	13	34
Verona Borough	35	12	19
West Caldwell Borough	13	5	2
West Orange City	268	36	97

GLOUCESTER COUNTY.

Clayton	31	13	23
Deptford	64	6	38
East Greenwich	21	11	24
Elk	15	1	17

GLOUCESTER COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Franklin	52	17	37
Glassboro	71	37	46
Greenwich	20	5	17
Harrison	40	6	23
Logan	29	10	14
Mantua	31	7	20
Monroe	53	26	45
National Park Borough	13	2	6
Paulsboro Borough	63	16	37
Pitman Grove Boro	35	11	33
South Harrison	11	4	7
Swedesboro	28	15	15
Washington	34	3	11
Wenonah	7	4	7
West Deptford	34	18	35
Woodbury	75	50	70
Woolwich	17	3	7

HUDSON COUNTY.

Bayonne	2002	617	803
East Newark	44	21	20
Guttenberg	217	54	73
Harrison	359	148	195
Hoboken	1904	1832	1254
Jersey City	5191	3554	4295
Kearny	478	169	248
North Bergen	450	110	209
Secaucus	46	11	287
Town of Union	371	305	227
Weehawken	153	347	233
West Hoboken	839	358	397
West New York	491	211	209

HUNTERDON COUNTY.

Alexandria	11	3	14
Bethlehem	14	3	20
Bloomsbury Borough	12	4	11
Clinton Borough	7	13	13
Clinton Township	36	13	26
Delaware	31	9	22
East Amwell	20	2	14
Flemington	20	28	40
Franklin	9	8	11

HUNTERDON COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Frenchtown	13	5	18
Hampton	20	8	11
High Bridge	35	14	19
Holland	11	2	18
Kingwood	28	6	17
Lambertville	92	37	65
Lebanon	33	10	46
Milford	10	2	13
Raritan	26	8	24
Readington	36	10	42
Stockton	13	5	7
Tewksbury	18	11	15
Union	12	3	16
West Amwell	12	2	6

MERCER COUNTY.

East Windsor	19	2	18
Ewing	44	5	25
Hamilton	167	27	124
Hightstown	26	30	34
Hopewell Borough	28	9	12
Hopewell Township	20	3	28
Lawrence	52	5	23
Pennington Borough	14	6	12
Princeton Borough	103	80	61
Princeton Township	8	1	10
Trenton	3088	1186	1927
Washington	14	5	24
West Windsor	26	3	14

MIDDLESEX COUNTY.

Cranbury	36	8	31
Dunellen	45	9	25
East Brunswick	15	0	10
Helmetta	31	8	9
Highland Park Borough	37	1	24
Jamesburg	31	22	12
Madison	34	2	19
Metuchen	22	12	39
Middlesex Borough	17	0	7
Milltown	44	3	17
Monroe	19	5	14
New Brunswick	682	386	555
North Brunswick	10	5	8

MIDDLESEX COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Perth Amboy	1255	593	537
Piscataway	61	21	35
Raritan	22	5	35
Roosevelt Borough	242	104	85
Sayreville	224	34	67
South Amboy	167	54	88
South Brunswick	44	12	33
South River	198	157	114
Spotswood Borough	10	4	8
Woodbridge	257	35	156

MONMOUTH COUNTY.

Allenhurst	4	0	3
Allentown	2	14	8
Asbury Park	218	165	168
Atlantic	13	4	15
Atlantic Highlands	35	20	24
Avon	15	12	5
Belmar	33	20	28
Bradley Beach Borough	41	17	21
Deal	1	2	6
Eatontown	20	9	40
Englishtown	11	3	10
Fair Haven	24	6	17
Farmingdale	11	4	9
Freehold Borough	62	44	48
Freehold Township	24	6	32
Highlands Borough	47	28	18
Holmdel	21	3	13
Howell	23	9	31
Keyport Borough	58	41	54
Long Branch	316	132	286
Manalapan	17	1	13
Manasquan	24	12	32
Marlboro	15	6	24
Matawan Borough	35	24	21
Matawan Township	42	1	29
Middletown	81	23	97
Millstone	11	5	20
Monmouth Beach Borough	5	2	1
Neptune Township	133	34	113
Neptune City Borough	7	0	4
Ocean	21	9	26
Raritan	25	6	28
Red Bank City	167	86	103

MONMOUTH COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Rumson Borough	33	7	22
Seabright	24	9	19
Shrewsbury	26	8	21
Spring Lake Borough	46	13	59
Upper Freehold	29	12	30
Wall	48	19	46
West Long Branch	14	4	6

MORRIS COUNTY.

Boonton City	101	36	71
Boonton Township	6	1	7
Butler	68	20	31
Chatham Borough	44	9	25
Chatham Township	8	1	9
Chester	15	6	19
Denville Township	4	8	6
Dover City	167	90	83
Florham Park Borough	7	0	9
Hanover	46	17	242
Jefferson	16	4	16
Madison	118	33	54
Mendham Borough	39	9	9
Mendham Township	6	2	2
Montville	24	5	27
Morris Township	18	3	29
Morristown City	267	107	287
Mount Arlington	8	1	2
Mount Olive	14	4	21
Netcong	50	14	22
Passaic	43	12	20
Pequannock	31	6	27
Randolph	23	6	33
Rockaway Borough	48	22	25
Rockaway Township	34	6	68
Ruxbury	48	24	38
Washington	24	8	24
Wharton Borough	56	19	50

OCEAN COUNTY.

Barnegat City	1	0	1
Bay Head	10	0	6
Beach Haven	4	5	10

OCEAN COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Berkeley	6	4	13
Brick	32	11	34
Dover	46	11	32
Eagleswood	10	3	9
Harvey Cedars	0	1	0
Island Heights	3	0	8
Jackson	6	4	24
Lacey	10	3	9
Lakewood	75	39	72
Lavalette	0	0	1
Little Egg Harbor	9	2	3
Long Beach	0	0	1
Manchester	18	2	20
Mantoloking Borough	0	0	1
Ocean	3	1	3
Plumstead	19	15	20
Point Pleasant Beach Boro	27	11	11
Seaside Heights Borough	2	0	1
Seaside Park Borough	1	0	0
Stafford	5	3	8
Tuckerton	19	6	14
Union	21	8	3

PASSAIC COUNTY.

Acquackanonk	441	78	134
Haledon Borough	26	50	23
Hawthorne	49	19	22
Little Falls	84	22	55
North Haledon	8	0	5
Passaic City	2065	1333	871
Paterson	2331	1180	1779
Pompton	99	45	65
Pompton Lakes Borough	15	10	8
Prospect Park Borough	42	18	35
Totowa	20	29	15
Wayne	14	5	25
West Milford	34	7	32

SALEM COUNTY.

Alloway	17	6	14
Elmer Borough	18	15	23
Elsinboro	7	0	4
Lower Alloway Creek	20	3	20

SALEM COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Lower Penns Neck	18	7	14
Mannington	26	7	22
Oldmans	23	4	16
Penns Grove Borough	59	17	37
Pilesgrove	32	3	21
Pittsgrove	30	4	18
Quinton	22	6	11
Salem City	132	65	115
Upper Penns Neck	14	0	4
Upper Pittsgrove	42	3	25
Woodstown	14	11	29

SOMERSET COUNTY.

Bedminster	22	4	17
Bernards	102	16	57
Bound Brook Borough	148	53	63
Branchburg	13	5	13
Bridgewater	29	2	25
Franklin	33	10	25
Hillsborough	37	7	36
Millstone	5	0	8
Montgomery	14	4	38
North Plainfield City	96	46	82
North Plainfield Township	11	7	8
Peapack-Gladstone	32	16	11
Raritan	126	38	47
Rocky Hill	17	3	10
Somerville	106	54	96
South Bound Brook	18	5	18
Warren	4	9	9

SUSSEX COUNTY.

Andover Borough	9	1	13
Andover Township	6	0	4
Branchville	9	8	10
Byram	6	1	7
Frankford	23	2	19
Franklin Borough	24	9	20

SUSSEX COUNTY.—Continued.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Fredon	8	4	3
Green	7	7	13
Hampton	12	5	13
Hardyston	79	26	50
Hopatcong	4	0	5
Lafayette	10	5	13
Montague	6	2	20
Newton	60	45	66
Sandyston	13	5	8
Sparta	30	17	27
Stanhope Borough	18	14	20
Stillwater	12	9	14
Sussex Borough	22	18	17
Vernon	24	5	15
Walpack	6	1	6
Wantage	21	2	20

UNION COUNTY.

Clark	6	1	2
Cranford	78	28	48
Elizabeth	1912	843	1158
Fanwood Borough	16	1	10
Fanwood Township	30	7	31
Garwood Borough	55	4	11
Hillside Township	22	3	18
Kenilworth Borough	23	3	11
Linden Borough	35	13	12
Linden Township	64	4	30
Mountainside	4	0	3
New Providence Borough	20	3	11
New Providence Township	16	3	50
Plainfield	540	221	309
Rahway	183	61	132
Roselle Borough	67	14	29
Roselle Park	99	30	28
Springfield	27	8	19
Summit City	148	67	120
Union	69	7	22
Westfield	155	45	61

WARREN COUNTY.

NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.	NAME OF PLACE.	Births—1913.	Marriages—1913.	Deaths—1913.
Allamuchy	54	10	7	Independence	11	2	23
Alpha	46	11	30	Knowlton	14	9	18
Belvidere	19	16	29	Lopatcong	6	0	8
Blairstown	14	9	24	Mansfield	18	4	24
Franklin	28	2	19	Oxford	52	28	54
Frelinghuysen	20	1	12	Pahaquarry	6	1	6
Greenwich	17	11	17	Phillipsburg	295	205	172
Hackettstown	64	28	49	Pohatcong	32	16	23
Hardwick	4	3	4	Washington Borough	38	34	56
Harmony	30	6	21	Washington Township	12	4	15
Hope	17	3	14	White Township	1	0	0

SUMMARY BY COUNTIES.

NAME OF COUNTY.	BIRTHS.				MARRIAGES.				DEATHS.			
	1910	1911	1912	1913	1910	1911	1912	1913	1910	1911	1912	1913
Atlantic	1226	1483	1526	1547	822	729	769	807	1228	1213	1170	1254
Bergen	3074	3096	3223	3481	919	888	962	1082	1744	1655	1663	1805
Burlington	1095	1190	1239	1396	448	384	497	534	1101	1042	1031	1091
Camden	2828	3144	2949	3342	2339	1938	1607	1706	2349	2282	2243	2375
Cape May	349	387	456	392	141	175	156	152	295	253	225	268
Cumberland	998	1030	958	1041	400	378	409	438	783	894	798	803
Essex	13438	14255	14529	14587	5309	4800	5378	5335	8072	7681	7658	7881
Gloucester	610	716	727	744	262	231	241	265	496	539	483	532
Hudson	11519	12280	12541	12545	8496	7398	7639	7737	8753	8648	8011	8450
Hunterdon	533	548	554	519	221	196	188	206	489	506	491	488
Mercer	1944	2288	3223	3609	1237	1073	1310	1362	2350	2176	2084	2312
Middlesex	2875	3227	3282	3503	1234	1104	1345	1480	1759	1721	1855	1928
Monmouth	1594	1622	1745	1775	737	677	841	820	1473	1455	1556	1550
Morris	1262	1347	1330	1333	511	413	516	473	1263	1253	1164	1256
Ocean	284	317	298	327	140	142	152	129	328	280	271	304
Passaic	5288	5389	5643	5228	2489	2500	2651	2796	3087	3120	3152	3069
Salem	433	508	510	474	182	152	174	151	357	356	343	373
Somerset	656	732	760	813	264	214	266	279	520	537	545	563
Sussex	433	422	453	409	174	150	163	176	375	370	335	383
Union	2787	3291	3343	3569	1180	1131	1247	1366	2022	2015	2099	2115
Warren	716	841	784	798	398	341	310	403	650	616	597	625
State	53942	58133	60073	61432	27912	25014	26821	27697	39494	38612	37772	39425

TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1913.

		Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
Typhoid fever	1	9	16	11	29	3	5	38	5	49	8	25	12	16	2	5	15	3	....	....	21	4	216
Typhus fever	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Relapsing fever	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Malaria	4	1	....	1	....	....	1	1	....	2	....	....	....	1	2	....	....	....	....	1	1	....	1
Including: Malarial cachexia	4A	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Smallpox	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Measles	6	8	7	5	23	4	7	24	1	58	2	16	6	11	6	....	15	3	2	7	8	3	216
Scarlet fever	7	4	4	4	13	....	1	35	2	68	5	24	10	6	4	3	7	....	1	....	16	1	218
Whooping cough	8	17	27	11	38	2	12	61	5	65	1	12	44	19	8	....	24	7	3	7	14	9	386
Diphtheria and croup	9	10	23	13	37	2	3	118	2	140	4	28	39	12	3	....	33	2	11	....	19	7	506
Including: Croup	9A	....	....	....	14	1	1	14	1	30	....	1	3	1	2	....	1	2	5	....	1	....	77
Influenza	10	5	8	4	3	....	4	14	3	7	5	5	6	12	7	4	5	....	2	6	6	7	113
Miliary fever	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Asiatic cholera	12	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cholera nostras	13	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	2
Dysentery	14	3	2	....	2	1	....	3	2	11	1	1	1	2	2	1	5	2	3	3	3	5	53
Plague	15	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yellow fever	16	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Leprosy	17	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Erysipelas	18	2	1	1	3	....	3	45	....	25	1	8	4	1	4	....	8	1	....	1	2	....	110
Other epidemic diseases	19	....	1	....	1	1	....	1	....	....	....	....	....	1	....	....	....	....	....	1	....	....	6
Purulent infection and septichaemia	20	4	1	....	5	....	2	8	....	11	2	1	5	5	3	1	2	....	1	....	4	....	55
Glanders	21	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Anthrax	22	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rabies	23	....	....	....	....	....	....	3	....	1	....	....	1	....	....	....	1	....	1	....	....	....	7
Tetanus	24	1	....	2	2	....	1	5	....	5	1	6	4	7	2	1	1	1	1	1	....	....	41
Mycoses	25	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	2
Pellagra	26	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	2
Beriberi	27	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tuberculosis of the lungs	28	85	142	70	228	20	65	886	39	910	36	241	120	92	81	18	262	37	29	23	198	40	3622
Acute miliary tuberculosis	29	....	....	....	4	....	1	9	1	22	1	4	2	5	2	1	4	....	....	....	5	....	61
Tuberculous meningitis	30	7	22	4	14	....	1	71	....	55	2	12	6	2	6	....	12	1	3	1	23	1	243
Abdominal tuberculosis	31	4	6	4	6	....	4	25	2	19	1	8	6	7	2	4	9	2	2	2	3	....	116
Pott's disease	32	3	1	....	1	1	1	4	....	2	1	....	1	....	....	....	2	....	....	1	....	1	19
White swellings	33	....	....	....	....	....	1	2	....	4	....	3	....	....	....	....	....	....	....	....	....	....	10
Tuberculosis of other organs	34	4	3	3	3	....	1	14	1	15	2	4	2	5	1	....	10	1	....	....	5	....	74

Disseminated tuberculosis	35	1	1	3	1		1	6	1	3		4	2	1	3		1	1			1		30
Rickets	36	1		2	1		1	11		9		3	3	1	1	2	1		1		1		38
Syphilis	37	5	6	4	8		5	29		17		6	6	6	2		12	1	2	1	5	2	117
Gonococcus infection	38	1						1				2											4
Cancer and other malignant tumors of the buccal cavity	39	2	5	5	11	2	2	25	5	20	1	7	6	7	2	3	7	1		2	4	1	118
Cancer and other malignant tumors of the stomach, liver	40	28	44	19	55	6	25	184	14	161	15	48	47	35	28	3	66	12	14	17	61	19	901
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	6	27	4	14	8	8	69	2	68	4	18	10	11	10	1	25	2	3	4	24	6	324
Cancer and other malignant tumors of the female genital organs	42	11	16	8	21	7	13	65	4	68	6	14	8	15	16	6	20	1	2	4	18	3	326
Cancer and other malignant tumors of the breast	43	3	9	7	12	5	5	38	4	26	1	15	5	9	13	3	9	1	5	1	12	4	187
Cancer and other malignant tumors of the skin	44	2	3	5	2		1	10	1	3		3	2	3	1		3	1	1		1		42
Cancer and other malignant tumors of other organs or of organs not specified	45	11	11	4	10	4	5	56	2	44	5	13	7	6	10	1	18	1	2	2	9	1	222
Other tumors (tumors of the female genital organs excepted)	46			2	3		1	2		2			2				1		1		1	1	16
Acute articular rheumatism	47	1	5	1	10		2	26	4	28	2	3	9	9	4		8	2	1	2	8	2	127
Chronic rheumatism and gout	48	2	4	1	1		1	6		6		1	1	5	1		3	1			1	1	35
Scurvy	49									2			2				2						6
Diabetes	50	12	16	15	13	2	11	101	4	75	5	12	9	16	14	7	25	4	3	1	23	11	379
Exophthalmic goitre	51	1	1		1		2	9		1											1		16
Addison's disease	52	1						2						1							2		6
Leuchæmia	53		5		2			11		6	1	2		3			3		2	2	2	1	40
Anæmia, chlorosis	54	3	5	2	4			38		8	2	5	3	5	7		8		1	1	8	1	101
Other general diseases	55	3	2		1		2	8	1	9		1	4	1	2		3		1	1	2	1	42
Alcoholism (acute or chronic)	56	19	5	10	8		1	120	4	59	2	7	14	20	5	2	14	2	4	3	24	4	327
Chronic lead poisoning	57				2			2		1			3	1	3	2					1		15
Other chronic occupation poisonings	58				1			1															2
Other chronic poisonings	59			1							1			1			1			1	1		6
Encephalitis	60	6	1	2	1			3		7	1	5		2	1		3			2	1		35
Simple meningitis	61	3	13	10	18	2	3	42	2	89	1	14	16	4	5	1	39	2	3	2	9	6	284
Including: Cerebrospinal fever	61A	1	6	2	4	1	1	14	1	34	3	6	2	4	3	1	7			1	3		94
Locomotor ataxia	62	3	4	1	1	1	2	8	3	16		2	3	2	2	1	6	2	1		3	1	62
Other diseases of the spinal cord	63	2	2	5	12		8	23	1	19	3	11	9	2	5	1	9	1	3	4	6	2	128
Cerebral hæmorrhage, apoplexy	64	66	119	86	86	33	55	365	43	278	44	120	96	124	62	29	119	27	36	24	128	50	2090
Softening of the brain	65	1	2	1	2		2	4		4		6	3	3	1		2	1	1	1		1	35
Paralysis without specified cause	66	19	22	20	42	2	25	55	13	59	7	41	10	22	11	5	27	11	5	4	18	21	439
General paralysis of the insane	67	4	3	3	6		1	11		10	1	2			14		1		1		3	2	62
Other forms of mental alienation	68	3	2	3	7		8	30	1	35	1	8		1	49		4		1	1		1	155
Epilepsy	69	2	9	4	7	2	4	31	3	18	2	10	2	5	9		4	1	20	3	3	1	140
Convulsions (nonpuerperal)	70									1													1
Convulsions of infants	71	5	3	8	10	2	6	33	6	59	1	13	21	16	2	1	21	3	2	3	6	10	231
Chorea	72				1			1		4					1		2						9
Neuralgia and neuritis	73		1	1			1	1		8	1						1			1	1		16
Other diseases of the nervous system	74	1	3	1	3	1	4	22		12	1	7	1	6	5	2	6				4	2	81

TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

	Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
(Other) diseases of the eyes and their adnexa.....75	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
Diseases of the ears.....76	1	....	....	1	....	....	7	....	6	....	1	2	2	....	1	3	....	....	....	1	....	25
Pericarditis.....77	3	1	3	3	....	2	4	2	9	2	1	1	1	1	....	2	1	1	....	1	1	39
Acute endocarditis.....78	30	55	23	81	4	17	378	6	246	16	55	39	49	42	9	100	3	26	7	106	14	1406
Organic diseases of the heart.....79	104	160	95	181	32	71	486	39	518	46	179	112	151	88	22	254	43	45	39	123	46	2824
Angina pectoris.....80	18	10	10	9	....	6	33	10	30	9	17	11	4	10	7	11	3	5	4	12	5	224
Diseases of the arteries, atheroma aneurysm, etc.....81	21	43	23	41	7	18	221	18	161	11	62	25	52	36	10	41	6	14	4	53	14	881
Embolism and thrombosis.....82	6	12	2	6	....	2	26	1	28	3	5	3	2	6	....	8	2	2	1	9	3	127
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc).....83	1	....	....	....	....	1	5	....	1	1	1	1	1	....	....	....	....	2	....	1	1	16
Diseases of the lymphatic system (lymphangitis, etc.).....84	1	2	....	....	....	1	6	....	5	1	....	2	....	....	1	2	....	....	....	2	....	23
Hemorrhage; other diseases of the circulatory system.....85	2	....	....	....	....	....	....	....	1	....	....	....	....	....	....	2	....	....	....	....	1	6
Diseases of the nasal fossae.....86	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1
Diseases of the larynx.....87	....	3	1	6	....	2	6	....	7	1	....	2	1	1	....	1	....	2	1	2	....	36
Diseases of the thyreoid body.....88	1	2	....	....	....	....	1	....	3	....	....	....	....	....	1	....	....	....	....	1	....	9
Acute bronchitis.....89	10	13	11	9	2	3	90	5	110	3	26	17	17	11	1	38	3	6	5	20	3	403
Chronic bronchitis.....90	4	11	2	5	2	6	56	1	54	2	2	3	7	4	2	8	3	2	1	8	3	186
Bronchopneumonia.....91	28	84	26	65	....	17	306	13	379	15	81	42	30	32	3	152	8	18	6	47	12	1364
Pneumonia.....92	74	142	68	210	20	48	519	30	714	26	192	142	76	126	15	312	28	37	38	155	37	3009
Plurisy.....93	7	8	3	13	1	6	52	2	40	3	8	12	5	4	....	18	....	2	4	12	3	203
Pulmonary congestion, pulmonary apoplexy.....94	6	1	2	10	2	7	7	2	12	2	6	3	....	7	....	4	1	1	1	4	3	81
Gangrene of the lung.....95	....	....	....	....	....	....	2	....	2	....	1	....	1	....	....	....	....	....	....	....	....	6
Asthma.....96	3	4	3	4	....	2	36	1	30	1	8	3	5	....	1	19	....	2	....	11	....	133
Pulmonary emphysema.....97	....	1	....	....	....	....	3	....	1	....	1	3	1	3	....	....	....	1	....	2	....	16
Other diseases of the respiratory system (tuberculosis excepted).....98	....	2	2	2	1	2	6	1	7	1	5	....	3	....	....	6	....	....	1	3	3	45
Other diseases of the mouth and annexa.....99	1	1	1	....	....	1	1	....	1	1	1	....	....	....	....	1	....	....	....	1	....	10
Diseases of the pharynx.....100	....	2	1	3	1	2	6	....	8	....	5	4	2	2	....	1	1	3	....	5	3	49
Diseases of the œsophagus.....101	....	....	....	1	....	....	2	....	2	....	1	....	....	....	....	....	....	....	....	1	....	7

Ulcer of the stomach	102	5	6	3	2	1	4	32	....	32	3	8	2	5	3	1	9	1	....	....	6	1	124
Other diseases of the stomach (cancer excepted)	103	43	38	31	33	6	11	96	10	85	9	21	35	47	24	9	31	8	13	6	28	15	599
Diarrhœa and enteritis (Under 2 years)	104	45	102	72	135	7	22	372	20	482	15	155	261	55	56	13	223	18	29	19	165	38	2304
Diarrhœa and enteritis (2 years and over)	105	26	18	25	49	7	12	78	4	131	9	25	30	21	25	5	39	4	8	7	24	10	557
Ankylostomiasis	106	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	....	4
Intestinal parasites	107	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	2
Appendicitis and Typhlitis	108	9	20	1	18	....	6	70	2	68	....	12	12	11	3	....	23	1	3	....	17	1	277
Hernias, intestinal obstructions	109	16	13	4	8	1	6	57	....	55	2	19	7	5	3	2	24	1	3	1	16	3	246
Other diseases of the intestines	110	3	4	3	3	....	4	12	1	17	1	9	5	5	6	10	....	....	3	....	4	3	93
Acute yellow atrophy of the liver	111	....	....	....	2	....	1	....	....	3	....	....	....	....	....	....	....	....	....	....	1	....	7
Hydatid tumor of the liver	112	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	2
Cirrhosis of the liver	113	9	14	7	18	4	4	86	5	129	5	16	14	16	12	1	24	2	4	2	20	2	394
Billiary calculi	114	....	3	....	1	....	1	10	1	3	....	1	2	4	....	....	2	....	....	....	2	2	32
Other diseases of the liver	115	6	2	5	8	1	2	22	2	17	1	5	4	1	5	2	15	....	1	....	5	3	107
Diseases of the spleen	116	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	2
Simple peritonitis (nonpuerperal)	117	....	1	....	6	1	1	6	....	8	1	1	....	1	1	....	5	....	....	1	....	1	34
Other diseases of the digestive system (cancer and tuberculosis excepted)	118	....	....	....	1	....	....	1	....	5	....	....	1	....	....	....	....	....	2	....	....	....	10
Acute nephritis	119	9	8	6	17	3	7	70	6	88	4	16	9	16	17	2	39	2	10	2	30	3	364
Bright's disease	120	136	85	79	210	18	54	546	57	560	35	125	97	137	72	26	177	26	42	22	102	45	2651
Chyluria	121	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Other diseases of the kidneys and annexa	122	2	1	....	2	1	1	18	....	6	1	5	2	1	4	....	6	....	1	....	4	1	56
Calculi of the urinary passages	123	1	2	....	6	....	1	10	....	7	....	3	1	2	2	....	4	....	....	....	1	....	40
Diseases of the bladder	124	4	8	3	2	....	6	20	2	15	3	4	2	6	2	....	7	1	....	2	4	3	94
Other diseases of the urethra, urinary abscess, etc	125	2	1	1	1	....	....	2	....	4	....	....	3	....	....	....	....	....	....	....	1	....	15
Diseases of the prostate	126	1	1	3	3	....	2	9	1	6	....	4	1	....	1	....	5	1	2	1	3	2	46
Nonvenereal diseases of the male genital organs	127	....	....	....	....	....	2	....	....	1	....	....	1	....	....	....	....	....	....	....	1	....	2
Uterine hæmorrhage (nonpuerperal)	128	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	....	3
Uterine tumor (noncancerous)	129	....	....	2	1	....	....	8	2	14	....	1	2	2	2	....	5	....	....	....	1	....	42
Other diseases of the uterus	130	....	....	....	1	....	2	6	....	11	1	2	2	2	1	....	4	....	....	....	1	....	33
Cysts and other tumors of the ovary	131	....	4	....	....	....	2	6	1	10	....	1	....	....	1	1	2	1	....	....	1	....	30
Salpingitis and other diseases of the female genital organs	132	....	1	....	....	....	....	6	....	16	....	6	....	1	1	....	4	1	....	....	1	1	38
Nonpuerperal diseases of the breast (cancer excepted)	133	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Accidents of pregnancy	134	....	....	1	6	....	1	11	1	15	2	2	....	3	....	....	4	....	....	....	2	....	48
Puerperal hemorrhage	135	3	4	4	6	....	2	15	....	12	....	6	2	2	1	....	6	....	....	3	3	....	69
Other accidents of labor	136	2	6	3	5	1	....	22	....	18	....	2	8	5	2	2	11	....	....	....	3	....	90
Puerperal septichaemia	137	8	6	3	10	1	1	42	....	38	....	8	4	4	6	1	17	....	....	2	8	3	162
Puerperal albuminuria and convulsions	138	4	4	4	2	1	3	14	2	17	....	3	6	2	3	3	8	1	....	....	6	2	85
Puerperal phlegmasia alba dolens, embolus, sudden death	139	....	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	2

TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

	Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
Following childbirth (not otherwise defined).....140	....	....	1	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	1	....	4
Puerperal diseases of the breast.....141	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gangrene.....142	2	1	2	3	....	....	8	4	5	3	5	1	2	2	1	3	....	1	....	3	1	47
Furuncle.....143	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	2
Acute abscess.....144	....	1	1	1	....	1	9	....	8	....	2	1	1	....	....	2	1	....	....	2	1	31
Other diseases of the skin and annexa 145	2	2	3	1	1	....	9	....	12	....	8	1	2	1	....	2	....	....	....	1	1	46
Diseases of the bones (tuberculosis excepted).....146	1	1	2	1	....	3	17	....	9	....	1	3	4	2	....	7	....	....	....	1	....	52
Diseases of the bones (tuberculosis and rheumatism excepted).....147	....	....	....	....	....	....	3	1	....	....	....	....	....	....	1	....	....	....	....	1	....	6
Amputations.....148	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Other diseases of the organs of locomotion.....149	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Congenital malformations (stillbirths not included).....150	4	9	6	15	1	6	34	2	49	3	11	15	11	7	2	15	3	2	1	12	1	209
Congenital debility, icterus and sclerema.....151	51	83	44	110	8	39	366	20	350	19	122	131	55	58	10	146	20	20	17	104	23	1796
Other diseases peculiar to early infancy152	7	11	10	27	1	5	84	7	71	3	19	21	13	6	4	32	3	3	1	26	5	359
Lack of care.....153	....	4	1	1	....	1	8	1	2	1	1	6	2	1	1	....	....	3	....	3	....	36
Senility.....154	26	12	17	20	6	5	49	10	45	6	18	26	22	26	10	18	6	12	8	8	11	361
Suicide by poison.....155	3	1	....	6	....	1	20	1	21	1	4	1	4	1	2	9	....	....	1	8	2	86
Suicide by asphyxia.....156	6	7	3	4	....	....	34	....	31	1	1	....	1	....	....	10	....	1	....	4	....	103
Suicide by hanging or strangulation...157	2	4	....	3	....	2	10	1	12	....	5	6	5	1	1	7	....	5	....	4	3	71
Suicide by drowning.....158	....	4	1	1	....	....	9	1	8	1	3	2	....	....	....	1	....	....	....	....	....	31
Suicide by firearms.....159	10	10	2	7	1	2	17	4	20	1	7	5	3	2	....	12	2	3	2	4	2	116
Suicide by cutting or piercing instruments.....160	3	1	....	....	2	1	6	....	3	....	3	....	3	....	1	2	....	....	....	1	1	27
Suicide by jumping from a high place.161	1	....	....	....	....	....	3	....	1	....	....	1	1	....	....	....	....	....	....	....	....	7
Suicide by crushing.....162	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Other suicides.....163	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	2
Poisoning by food.....164	....	1	2	....	....	....	2	....	1	....	2	2	4	1	....	3	1	....	....	2	....	21
Other acute poisonings.....165	2	1	2	1	....	....	8	1	11	2	5	1	4	....	....	4	1	2	....	4	1	50
Conflagration.....166	....	1	....	....	....	....	1	....	5	....	1	2	3	....	....	....	....	2	....	4	....	19
Burns (conflagration excepted).....167	8	12	4	13	....	2	61	....	65	1	16	25	6	8	1	14	....	....	2	20	3	261

Absorption of deleterious gases (conflagration excepted)....168	8	7	....	4	....	....	31	....	49	....	....	1	2	1	2	10	....	....	2	8	2	127
Accidental drowning....169	11	19	20	28	5	11	29	16	75	32	27	32	17	8	6	17	8	7	2	13	1	355
Traumatism by firearms....170	....	1	2	5	....	3	....	....	1	2	....	3	....	4	....	3	1	....	1	2	....	28
Traumatism by cutting or piercing instruments....171	....	....	....	1	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	3
Traumatism by fall....172	10	8	11	24	2	6	78	6	86	8	26	26	7	14	3	40	2	5	6	28	5	401
Traumatism in mines and quarries....173	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	2	....	....	2	....	2	8
Traumatism by machines....174	....	4	....	4	....	1	3	....	10	....	4	5	....	....	....	5	2	1	....	....	2	41
Traumatism by other crushing (vehicles, railroads, landslides, etc.)....175	29	39	25	43	4	10	130	8	161	7	46	54	29	32	5	66	2	17	6	54	21	788
Injuries by animals....176	....	....	....	....	....	....	8	....	3	....	....	1	3	1	....	....	1	....	2	1	....	20
Starvation....177	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2
Excessive cold....178	....	....	1	....	....	....	1	....	....	....	....	....	....	....	1	....	....	....	1	....	1	5
Effects of heat....179	....	....	1	6	....	....	11	1	8	....	2	4	....	2	1	1	1	....	2	4	....	44
Lightning....180	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
Electricity (lightning excepted)....181	....	4	....	3	....	....	2	....	9	....	1	6	....	1	....	1	....	2	....	3	....	32
Homicide by firearms....182	2	1	3	3	....	....	16	3	7	1	4	3	6	1	....	9	....	....	1	5	1	66
Homicide by cutting or piercing instruments....183	....	1	....	1	....	....	....	....	....	....	....	....	3	....	....	1	....	....	....	1	....	7
Homicide by other means....184	2	1	2	4	....	1	7	....	9	....	1	1	2	2	....	6	....	....	....	4	....	42
Fractures (cause not specified)....185	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	2
Other external violence....186	....	....	2	....	....	....	7	2	....	7	1	....	1	....	2	....	....	1	....	....	1	26
Ill-defined organic disease....187	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	1	....	....	....	....	....	3
Sudden death....188	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Cause of death not specified or ill-defined....189	12	22	13	19	1	10	47	6	80	3	21	22	18	15	1	33	8	6	3	9	8	357
Total deaths by counties....	1254	1805	1091	2375	268	803	7881	532	8450	488	2312	1928	1550	1256	304	3069	373	563	383	2115	625	39425

TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.

CITIES.	Estimated population of cities.	Agents.	Architects.	Artists.	Bakers.	Bankers, etc.	Barbers.	Bartenders, etc.	Blacksmiths.	Boatmen.	Boiler Makers.	Bookkeepers.	Brass and iron workers.	Brick makers.	Butchers.	Button makers.	Chauffeur.	Chemists.	Cigar makers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen.	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, etc.	Druggists.	Dyers.	Editors and journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES. Male.	FACTORY EMPLOYES. Female.
Asbury Park	13,524					1			1				1									4		1	2			3			1			1		
Atlantic City	51,284	2			2	6	3	7	1	1		1	2		4			1	1	1	1	16	3	14	12	1	1	4	8	1	1		2	2		1		
Bayonne	63,515	2	1				1	6	8	3	4	4	1						3			16	4	8	4	7			8	1			3	5			1	1
Bloomfield	17,111								1			3			1							1		2			1	2	1			1				2	
Bordentown	4,356																					1		2													
Bridgeton	14,560					1						2			1		1				2	3		4			2	1	1	1			1			1	
Burlington	8,515							1	1															3			1	1								2	1
Camden City	101,243	1		1	3	1	3	7	5	11	1	5	15	1	4		2	1	3		1	18	1	19	3	2		5	15	3			3	10			2	4
Dover	8,137								1						2					1		2		2												1	
East Orange	39,889			2	1	1						1	1					1				10	1	5	1		1	1	4				1	5			1	
Elizabeth	81,149				1	1		4	3	5	2	3	5		2		1				2	15	3	10	2	1	1		7	1		1	3	1		1	4	2
Englewood	11,125					2		1		1					1		2	1				4		7	1			1	5	1				2	1			
Garfield	13,286						1	1							1							1		2												1	
Gloucester City	10,306						1	1			2	1	3									1	1	1								1	2			2	1
Guttenberg	6,297							1	1			1	1									1		3					2							1	
Hackensack	15,821				1	1		2	1			1		3	1			1				4	1	2					1								
Hammonton	5,540														1							2		2													
Harrison	15,503				1			3					2		1						1	3		5				1				2					
Hoboken	73,238	2		2	3		3	11	3	56	2	5	7		3	1	1	1	4		3	36	1	23	2	2		2	23	1	1		3	11			4	3
Irvington	14,695				1			12					2									4	1	6		1			3				1	3	1			
Jersey City	288,827	1	2	1	4	5	8	30	21	31	8	14	13		13	1	1	6	8		6	107	10	69	11	9		7	72	4		1	5	33	1	6	7	14
Kearny	21,694							3					3		1				1			1	1	5	1				1				1	2			1	1
Lambertville	4,442								1													1		2				2									
Long Branch	13,967				1		1	1		2					1		2				2	4		11				1	5	1		1					1
Millville	12,791	1			1							1	1		1							1		2													
Montclair	24,658					5			1			1									2	6		2	1			1	7				2				

TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

CITIES.	Farmers.	Firemen.	Fishermen.	Florists, etc.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, etc.	Grocers.	Hatters.	Hotel keepers.	Housekeepers and housewives.	Icemen.	Janitors, etc.	Japanners.	Jewelers.	Laborers.	Laundresses.	Laundrymen.	Lawyers.	Leather workers.	Letter carriers.	Linemen.	Linoleum workers.	Locksmiths.	Machinists.	Managers, etc.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.
Asbury Park								1			4	31					7			1						3	1	1	4			
Atlantic City	1	2	1	3			1		4		11	150		3		1	29	4	2	1	1					3	8	2	17			1
Bayonne		1	1	1	1							139		1			9		2	2					5	9			8			
Bloomfield	1			2						3	1	40		2		1	5			1						2		3				
Bordentown	1	1										26					7								1							
Bridgeton	10				1	1	8				1	58		1			18				1				1	1	1	1	4			
Burlington	4		1	1	3	1			1		3	29		2			7			1					3		2	2	3		1	
Camden City	19	5	5	3	5	2			3	2	6	374	1	15		1	94				9		2	1	15	13	1	12	16			
Dover				1	3							22					3								1	1		1				
East Orange				1						3		62					7			2					1	4	4	1	4			
Elizabeth	5	3	1	4	6			4	4	1	2	194	1	2			107			5		1	1		46	8	1	3	10	2		
Englewood				3					2			42		1			11	3		1						1	1	1	1			
Garfield												20		1			2									1						
Gloucester City	3	1				1					2	35					5									1		1	4			
Guttenberg			1									16					4								2	1			2			
Hackensack	2								1			55					15								1	1	1		2			
Hammonton	8						1					20					1								1							
Harrison	1	1		1	1			1				49		1		1	22				1				2							
Hoboken	1	11							3	1	5	252	1	11		1	100	2		2	2				7	4	3	14	9			
Irvington	2	1		2	2				1	1	1	51		2		3	3		1		2				3	2		1	1			
Jersey City	6	9	1	11	2		1	2	10		7	912		33		3	286	4		3	4	2	1		40	17	6	18	32	2		1
Kearny	1	1		1	1			1		1		28				1	7					1		1	3	4	1	2	2			
Lambertville												16				1	5				1							1	2			
Long Branch	6	1	6	2	1						2	74	1				13	2		1			2			1		2	4			
Millville	6					7	9					51					18		1						1	1			2			
Montclair	3			3								80		2			8	3							2		2	4	3			

TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

CITIES.	Musicians.	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, etc.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubber workers.	Sailors.	Salesmen.	Shipbuilders.	Shoemakers.	Silk workers.	Stone cutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tile workers.	Tinsmiths.	Trunk makers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wire workers.	All other occupations.	All other professions.	All other trades.
Asbury Park			6				1				1	1			1					1						1							7	1	
Atlantic City	2	2	14	1	1	3	4	4		3	5	5		1	5	1				2		1			1		2		17		1			15	4	5
Bayonne			6				9			3	1			1	3	1		2		5					1									11		3
Bloomfield			1												1	1	1												1		1			1	1	
Bordentown			1														1																	1		
Bridgeton			2			2					2								1												2			3		
Burlington						1					1			1	1		8	1																1		
amden City		5	16	1		4	7		2	6	13	6		1	7	5	10		2	6		2			4				3	1	1	1	1	28		14
Dover																		1							1											
East Orange			3			1	2			1	1	2			8					1		1	4		3			1				1	3		2
Elizabeth	1		7	1			3	2		1	10		1	3	5	1	2			1		1			3			1					20	1	6
Englewood	1	1	3		1		1			2		2			1		1		1	1					1									4		
Garfield															1		1		1															2		3
Gloucester City	1						1			1	1				1													1						4	1	
Guttenberg							1																											1		
Hackensack							2				1	5			1		1	1	1			1												3		1
Hammonton					1						1			1	1		1										1							1		
Harrison							1			1	1								1													1		2		2
Hoboken	4		10	1	1		2	5		5	10	2	1	9	17	1		2	2	5		2			1	1	1				2		19	3	8
Irvington												1			2		2			3	1													6		1
Jersey City	6	3	34	1		2	1																													
Kearny			1			4	11	15	1	11	62	9		8	32	3	3	1	2	10	1	8	2		10	1		3	5	1	3	2	1	70	2	21
Lambertville			1								2				1				3	2													2		2
Long Branch		1	6								1	1			1		1		1			1			1				4		1		3		
Millville		1					2				1											2			1			1	1		1		3		1
Montclair	1		2			1	1			1	1	1			2					1		2			1			1	1		1		3		3

TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

CITIES.	Estimated population of cities.	Agents.	Architects.	Artists.	Bakers.	Bankers, etc.	Barbers.	Bartenders, etc.	Blacksmiths.	Boatmen.	Boiler Makers.	Bookkeepers.	Brass and iron workers.	Brick makers.	Butchers.	Button makers.	Chauffeur.	Chemists.	Cigar makers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen.	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, etc.	Druggists.	Dyers.	Editors and journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES. Male.	FACTORY EMPLOYES. Female.
Morristown	12,724				1		1	2			1				2						1	3		5				1	5					1			
Newark	385,977	3	3	3	13	4	14	43	21	4	2	15	43	2	19	7	4	4	7		7	107	12	92	13	2	2	21	91	5	2		14	27	5	5	25	30
New Brunswick	23,541						2			2	1	3	1				1		3	1	1	5	4	5	1		1		3				2	2			6	9
North Plainfield	6,418	1					1															2		4													
Nutley	6,881							1							1				1			4															
Orange	31,747					1	1	2	1			2							1		2	10	1	4	1			1	12			1	1	1		1	3
Passaic City	64,935			1				1	3			4							1			4	1	9				2	3		4		3			24	13
Paterson	134,043	1	1		4	1	4	17	12		8	6	21		6		2		2	1	5	29	3	23	4			4	17		20	1		4		2	5	5
Perth Amboy	35,857				1				1	2			1							1				7					3				1				
Phillipsburg	14,234							1	2	2									2					2											1			
Plainfield	21,799				1	2	1		1			1			1							3	1	8				3	4				1					
Princeton	4,600					1																	1	1	2			1	1									
Rahway	9,750								1				1						1			3		2					1			1		1				
Red Bank	8,079									1				1								1		4	1				1									
Ridgewood	6,278											1			1						1	1		1			1		2					1				
Roosevelt	5,786																					1					1										
Rutherford	8,141								1	1		1							1			1		1												1	
Salem City	6,717								1															1			1										
Somerville	5,227											1					1					3	1	3	1			1	2									
South Amboy	7,456						1			1				1										3	1													
South Orange	6,663					1													1		1	2							1			1						
Summit	7,893			1					1													3		1	1				1	1							
Town of Union	23,434						1	5		1					2		1		1		1	5	1	4	1				4		1		1			1	
Trenton	104,396	3				1	2	7	4	4		4	12	4	4		2		5	2	4	20	1	30	3	1	1	4	15	2	1		5	8	3	5	3	4
Vineland	5,695				1																	1		2							2						1
Westfield	7,113																					1		2							1		1				
West Hoboken	39,196	2				4	5					3	1		2			1	1			3		10	1	1		3	3	1	1		1	1	1	1	1	1
West New York	17,378				1		2	1							2	1					1	2		2					1							1	
West Orange	12,845										1											3		5									1				

TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

CITIES.	Farmers.	Firemen.	Fishermen.	Florists, etc.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, etc.	Grocers.	Hatters.	Hotel keepers.	Housekeepers and housewives.	Icemen.	Janitors, etc.	Japanners.	Jewelers.	Laborers.	Laundresses.	Laundrymen.	Lawyers.	Leather workers.	Letter carriers.	Linemen.	Linoleum workers.	Locksmiths.	Machinists.	Managers, etc.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.
Morristown	2			3							47	1	2			21	1			3			1			1		2	3			2
Newark	15	11		14	13	1	1	22	20	51	6	1234	5	32	10	39	412	11	5	7	49	1	4	1	3	58	19	13	35	65	2	2	
New Brunswick	5	1		1				2			1	85		2			57									7	2	1	1	8			1
North Plainfield	1			2								9				1										1				3			
Nutley	2											9					6																
Orange	2	1		4	1				1	30		115		4		1	24	3		2	2					3	4	1	2	7			
Passaic City	1	2		1					3	1	1	137	1				36		1	2						3	4	3	2	5	1		1
Paterson	10	7		5	8		1	1	1	1	4	431	1	5			93	1		5	3					26	8	8	9	17			1
Perth Amboy	1	1	1	1							2	78		2			68									2	3			2			
Phillipsburg					5						1	45					10										2		1	2			
Plainfield	2			4	1				1			35					10	1		2						10	2		2	3			
Princeton	1											12					5												1	1			
Rahway	2			1					1			26					12	1		1	1						2			5			
Red Bank	2			1								29		2			6									1		1		2			
Ridgewood	1								1		3	17					1										1			2			
Roosevelt											1	5		2			7																
Rutherford	1			1								9														1				3			
Salem City	2		2			5	5		1			28					9													3			
Somerville	4	1										27					8					1					1			2			
South Amboy											1	23		1			6										3		1				
South Orange												6				1				1							1	1					
Summit	1			2							1	20					3			1								3		5			
Town of Union			1						1			69					13									1	3						
Trenton	29	4	2		2				4	1	6	440		10		2	125	1		2	4	1	5			16	10	4	11	17			1
Vineland	6						1				1	29					5				1							3					
Westfield	1											10		1			1										1	2		1			
West Hoboken	1	1		1					2		2	96		2		1	9		1	1						3	3		3	8			
West New York				2	1							63		2		1	7									2	3	1	1	2			1
West Orange	1			3						3		17				1	2									3	1			1			

TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

CITIES.	Musicians.	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, etc.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubber workers.	Sailors.	Salesmen.	Shipbuilders.	Shoemakers.	Silk workers.	Stone cutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tile workers.	Tinsmiths.	Trunk makers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wire workers.	All other occupations.	All other professions.	All other trades.
Morristown		1	1				2				4	2					1			1		2							1				1	2	
Newark	8	5	45	1	1	5	22	12		16	29	11	1	2	51	2	39		9	34	11	8	3		14	5	3		11		2	3	3	68	8	40
New Brunswick		3	1					2		2	5		2	1	2	1	1			1		3		1	1			1	2					2		
North Plainfield			1																			1			1				1					1		
Nutley												1							1															1		
Orange	4	2	7	1		1	1	1	2	1	3	4			2		2			2			1						1					11	1	
Passaic City		1				2	1			1	1	2	4		7			2	2	3		3			2						5		1	12	1	
Paterson		4	10			5	6	2		6	12	4	1		17	1	4	65	1	5		6			4		1		2		54	1		22	4	11
Perth Amboy	2		2				1				7		1	2		4									1						1			6		
Phillipsburg			1								10						1	2																2		1
Plainfield		2	5			1	2			1	1	3			2		2		1			2												6	1	
Princeton									1		1						1											1	1					1		
Rahway			3			1	1				8									1								1						1		1
Red Bank						1	1								1		1					1			1									4		
Ridgewood	1		2								1				1																					
Roosevelt																																				
Rutherford							1								2																				1		
Salem City			1								1			1			1																				
Somerville			2			1	1			1	2														1				1								
South Amboy						1					5			2												1		1								
South Orange		1										1					1					1												1		
Summit		1				1						1			1															1				3		1
Town of Union	1		3				1				1		1		2				1	1				1				2	5	1	5		14	24	1	6
Trenton		1	9	1		4	1		63	2	22	5	13	1	12	1	5	1		3		7	1	2	3									1	3
Vineland	1		1								2			1			2			1															1	
Westfield			1																															1		
West Hoboken		1	6							1	2	1			7		1	11												1	9		1	2	1	1
West New York			1				1				2							1		1				1	1							1	6		2
West Orange		1	1			1					1						1																	1		

TABLE 4.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY COUNTIES, EXCLUSIVE OF CITIES OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.

COUNTIES	Estimated population of counties, inclusive of cities.	Agents.	Architects.	Artists.	Bakers.	Bankers, etc.	Barbers.	Bartenders, etc.	Blacksmiths.	Boatmen.	Boiler Makers.	Bookkeepers.	Brass and iron workers.	Brick makers.	Butchers.	Button makers.	Chauffeur.	Chemists.	Cigar makers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen.	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, etc.	Druggists.	Dyers.	Editors and journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES. Male.	FACTORY EMPLOYES. Female.
Atlantic	22,289					1	2	2		5			1		1					1		4	1	7	1			2			1						2
Bergen	106,150	2		1			4	2	2	5	1	5		1	4		1		3		2	22		28		1	1	1	5	2	1	3	3	4	1	1	5	2
Berlington	56,408						3		4	3		3	3		1							6	1	11	1	1		3	3				5		1		2
Camden	42,764				2		3		3			3			2			2	1		1	10		11	2		1	1	4	1					5	1		1
Cape May	21,158					1		2	1	1											1	2	1	10					2	1		1	1					
Cumberland	23,933	1			1				1	1			2									2		3	1			3		1								
Essex	34,195			1		1		4	3			2	2		1			1	1			13		6	1	1			6			1	2	2		2		2
Gloucester	39,103	1			1		1		3	1		2			2					2		6	1	15				2	4				2		4		
Hudson	40,560	1			5		3	5	2	13	3	3	5		5	1		1	1	1	1	12	3	15	1			1	10			1	2	6	1	3		3
Hunterdon	29,314					1			3			2	1						1			3		7	1				1				2					
Mercer	25,746								4		1		2	1	1							1		3					3	1			1			1		
Middlesex	52,220	1					2		4	5		2	1	4				2	2		1	1		9				2	2	1			1			1		1
Monmouth	63,253	1			1	2	4	2	5	5		3		2	2				1		5	6	2	25	2			1	10	1		1	3			1		2
Morris	57,905		1		2	1		2	3	1	1	3	3		2		1				4	17		15	4		1	4	12	1	1		6	1		2		
Ocean	21,581			1	1	2	3		1	4	1				1				1			1		7	1				3									
Passaic	40,950		1		2	1	1		2			1	1								1	1	1	6					3		1		2			1		
Salem	20,709																				1			6				1	2							1		
Somerset	28,705		1					2	3	1		1	1		1			1				3		9					1			1	2			1		
Sussex	28,855				2	1	1		1			1										1	1	5			1	1										
Union	26,285					1	4		1			1	3		1		1				1	3	1	5	1	1		1	3		1		2			1		
Warren	30,621				3	1		1	6				2								2	3		9	1	1		3					2		2			1

TABLE 4.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY COUNTIES, EXCLUSIVE OF CITIES OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

COUNTIES	Farmers.	Firemen.	Fishermen.	Florists, etc.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, etc.	Grocers.	Hatters.	Hotel keepers.	Housekeepers and housewives.	Icemen.	Janitors, etc.	Japanners.	Jewelers.	Laborers.	Laundresses.	Laundrymen.	Lawyers.	Leather workers.	Letter carriers.	Linemen.	Linoleum workers.	Locksmiths.	Machinists.	Managers, etc.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.
Atlantic	21		1				2		1		3	89	1				20									2	1	1	2	6			
Bergen	42	4	2	1					7		1	233		1		2	50			2	2				1	6	7	3	5	5	1		
Berlington	74		2		5	3			4		2	178		10		2	66		1	1	4					9	2	3	12	3		1	
Camden	29			3	2	1	1				2	135		1		1	37				2					5	3	1	1	9	1	1	
Cape May	11		1						1		3	80		2		1	22								1	2	2	3	2	5			
Cumberland	36		4				3		1			87		2			20			1							1		1	4		1	
Essex	12	1		5			1	2	2	7	1	95		2		5	27			2	3	1				2	3	4	3	2			
Gloucester	45	1	1		3	11	2		2		1	136		5			33	1			1					2	4	2	5	9		1	1
Hudson	2	2		5	1				2	1	1	192	1	5		2	84	.2			1					3	3		1	5			
Hunterdon	70	1			3		1	2				132					22			1	1					4	1			10		2	
Mercer	28	2			1						1	77		1			24							1	1		3	1	2	1	1		
Middlesex	39		1		1		1		3		2	95		1			54									4	2	1	1	4			
Monmouth	87	2	2	1		1				1	7	227		2			57	1		2							1	2	2	17			
Morris	39	2		8							3	214					69					2				6	2		4	12		2	13
Ocean	17	1	4						2		2	77					17			1						2	1		1	4			
Passaic	19			4		1			1	1	2	100					24									2	2	3	3	5	1		2
Salem	43		2						2			75					15					1				2				2			
Somerset	32			2							1	69		2			24				1			1		2	1	1	2	4			
Sussex	42			1	1						2	98		2		1	23			1							2		3	1	2		7
Union	8			4						1		67		2			21			1	1	1				10	5	1	3	6			1
Warren	47			2								104					40									3	1		2	6			3

TABLE 4.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY COUNTIES, EXCLUSIVE OF CITIES OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1913.—Continued.

COUNTIES	Musicians.	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, etc.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubber workers.	Sailors.	Salesmen.	Shipbuilders.	Shoemakers.	Silk workers.	Stone cutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tile workers.	Tinsmiths.	Trunk Makers.	Undertakers.	Upholsters.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wire workers.	All other occupations.	All other professions.	All other trades.
Atlantic			2			2					1	1		6		1				2	1	2			1				2			1		6		
Bergen	5	3	4			1	5	2	1	2	2	11		2	4	1	2	2	1	5		1	1		1		1	1		1			15	1	2
Burlington	1	3	4	2		1					3			1	5		7		1	3		4				2	1	2	1	1	3		8		1
Camden	1		4	1	1	1				2	7			2	4	2	1		1	2		4			1		1	1				1	9		8
Cape May			1			1	1				2			3	2	3	2			2								1					3	1	
Cumberland			3						1			1		1		4			1			2				1				1			4		
Essex	1	1	3				1			1	2	3		1	7		4		3			2			1			1		1		2	8	2	2
Gloucester		1	5		1	4	2			3	1	2			2		2			1		2											5	2	2
Hudson	1	1	10				2	1		1	7		2	1	3		5	3		1		2			1		1			2			16		5
Hunterdon			3			1		1			4				3		2	1	1	1		1	1										5		
Mercer		1	2	1		1	1		6		9		2		1		3		1	1		1							1			2	4		
Middlesex		1	3				1				9		1	1	1				1			1	1	1									8		1
Monmouth	1	4	7				3				9		4		1		1		1	1		3	1						1	1	1		9	1	3
Morris		3	3				3	2		3	11		4	5	1	9			3			4			3					2	1		11		
Ocean		1	5			2			1				1		6	3						2	1						2				4	2	
Passaic	1	1	4		1								1			3			2		1	1								5	1		5	1	1
Salem			2	1		2			1				2							3													4		
Somerset			3			3				2	6		1			1				1		1				1				2			4	1	1
Sussex		1	5			1					3		1		1	1			1			1									1		7		1
Union		1	3			1			1	1	1		4			2					1												9		1
Warren		1	4					2			3								1	1		2	2										4		

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER

		Agents.	Architects.	Artists.	Bakers.	Bankers, etc.	Barbers.	Bartenders, etc.	Blacksmiths.	Boatmen.	Boiler makers.	Bookkeepers.	Brass and iron workers.	Brick makers.	Butchers.	Button makers.
Consumption	10 to 15.	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	1	...	1	2	...	...	3	1	...	...	...
	20 to 30.	2	...	...	5	1	6	8	7	2	3	14	8	1	...	1
	30 to 40.	...	2	1	3	...	3	22	6	6	3	5	14	...	9	...
	40 to 50.	...	...	...	3	2	5	10	3	8	5	4	15	1	4	1
	50 to 60.	2	...	...	...	1	1	4	3	1	1	1	5	...	3	1
	60 to 70.	...	...	...	...	...	1	1	2	...	...	...	1	1	...	...
	70 to 80.	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
	80 to 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.		4	2	1	11	5	17	46	23	17	12	27	44	3	16	3
Cancer.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	20 to 30.	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...
	30 to 40.	...	...	...	1	...	...	...	...	...	...	...	1	1	1	...
	40 to 50.	2	...	...	...	...	1	3	2	...	...	1	1	...	3	...
	50 to 60.	1	...	...	...	...	2	5	2	1	...	1	1	...	3	...
	60 to 70.	1	...	...	1	...	...	4	3	3	...	2	1	...	1	...
	70 to 80.	...	...	...	...	...	...	...	2	3	...	...	3	...	1	...
	80 to 90.	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		4	...	...	2	1	5	12	10	7	1	5	7	1	9	...
Suicide.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	20 to 30.	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...
	30 to 40.	...	...	...	4	...	1	2	...	...	...	...	1	...	2	...
	40 to 50.	...	...	...	...	...	1	1	...	2	...	1	...	...	1	...
	50 to 60.	...	...	...	1	...	1	...	1	2	...	...	1	...	...	1
	60 to 70.	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
	70 to 80.	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...
	80 to 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		...	...	...	5	...	4	5	1	4	1	3	2	...	3	1
Diseases of the nervous system and of the organs of sense.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
	20 to 30.	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...
	30 to 40.	...	...	...	1	...	2	...	1	1	...	4	2	...	...	...
	40 to 50.	1	...	...	...	...	1	3	2	3	...	...	2	...	7	...
	50 to 60.	...	...	1	...	1	3	3	3	4	1	2	2	...	1	...
	60 to 70.	...	...	...	3	1	1	1	4	3	1	2	3	...	5	...
	70 to 80.	...	1	...	...	1	3	1	3	...	...	...	1	...	...	...
	80 to 90.	...	...	1	1	...	...	...	3	1	...	...	1	1	1	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		1	1	2	5	3	11	8	16	12	2	9	13	1	14	...
Diseases of the circulatory system.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
	20 to 30.	...	...	...	...	...	...	3	3	1	...	...	1	...	1	...
	30 to 40.	...	...	1	...	...	3	4	1	2	...	3	5	1	4	...
	40 to 50.	1	...	1	1	...	4	6	7	3	...	4	1	...	3	...
	50 to 60.	1	1	1	3	3	2	6	11	7	...	3	6	2	6	1
	60 to 70.	3	2	1	1	6	2	3	5	12	1	3	5	1	7	...
	70 to 80.	1	1	1	5	5	...	3	14	7	1	4	2	...	...	...
	80 to 90.	...	...	...	...	...	...	...	5	1	...	1	1	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		6	4	5	10	14	12	25	46	33	2	18	21	4	21	1

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 31, 1913.

Chauffeur.	Chemists.	Cigar makers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen.	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, etc.	Druggists.	Dyers.	Editors and journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES. Male.	FACTORY EMPLOYES. Female.
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
..	...	2	...	...	18	...	2	...	...	...	2	6	...	...	...	1	1	...	...	3	10
5	...	5	1	2	72	1	13	3	1	1	6	29	1	...	...	8	3	3	2	11	14
..	1	1	2	2	31	4	22	1	1	1	1	41	1	3	...	4	4	...	...	12	6
..	1	2	1	1	23	1	23	4	3	...	4	28	...	...	2	2	6	...	2	8	1
2	1	2	...	1	4	1	17	1	1	...	3	12	1	1	...	...	4	...	1	2	.....
..	...	1	...	...	2	....	4	1	....	....	2	....	....	....	....	1	....	....	....	1	.....
..	...	...	...	...	...	....	2	...	....	....	...	...	....	....	....	...	1	....	....	1	.....
..	...	...	...	...	...	....	....	...	....	....	...	...	....	....	....	...	...	....	....	.....	.....
..	...	...	...	...	...	....	....	...	....	....	...	...	....	....	....	...	...	....	....	.....	.....
7	3	13	4	6	150	7	83	10	6	2	18	116	3	4	2	16	19	3	5	38	31
..	...	...	...	...	...	....	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	1	....	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	1	....	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	1	...	...	....	...	...	...	...	...	2	...	...	...	1	1	...	...	.....	1
..	...	...	...	...	7	....	5	4	...	...	3	2	...	...	...	1	4	...	2	1	3
..	...	...	...	1	7	1	18	5	...	...	1	4	...	3	2	...	3	...	1	4	2
..	...	...	...	1	9	....	20	1	...	...	6	6	...	...	1	...	2	...	1	3	.....
..	...	...	...	...	2	1	8	1	...	1	...	...	...	...	...	...	1	...	...	.....	.....
..	...	...	...	1	...	1	6	...	...	...	...	1	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	...	....	....	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	...	....	....	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	1	3	27	3	57	11	...	1	10	15	...	3	3	2	11	...	4	8	6
..	...	...	...	...	...	....	....	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	3	....	....	...	...	...	1	1	...	...	...	...	...	...	...	.....	2
1	...	...	...	...	3	....	2	...	...	...	...	...	...	...	...	1	...	...	...	2	1
..	...	...	...	...	5	....	4	...	...	...	1	4	...	...	...	1	...	...	...	.....	.....
..	1	...	...	...	2	....	4	...	...	...	...	3	...	...	...	1	1	...	...	.....	.....
..	1	...	...	...	...	....	5	...	...	...	3	1	...	...	...	1	3	...	...	.....	.....
..	...	...	...	...	...	....	7	1	...	...	...	...	...	...	...	...	1	...	...	.....	.....
..	...	...	...	...	1	....	1	...	...	...	...	...	...	...	...	1	...	...	...	.....	.....
..	...	...	...	...	...	....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	...	....	....	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
1	2	...	...	...	14	....	24	1	...	...	5	9	...	...	...	5	5	...	...	2	3
..	..	...	...	...	..	....	....	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	2	....	....	...	1	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	5	....	1	...	...	...	1	1	...	...	...	1	...	...	...	1	.....
..	...	...	...	...	14	1	3	...	...	...	...	1	...	...	...	...	...	1	...	.....	.....
1	...	1	...	1	6	2	12	1	1	...	1	3	...	1	...	...	4	...	...	.....	1
..	1	...	...	1	11	3	9	1	...	...	...	7	2	1	...	1	6	...	...	.....	1
..	1	4	...	...	8	2	16	2	1	...	1	4	2	...	2	...	1	1	...	1	.....
..	...	2	1	1	6	2	16	3	3	2	2	3	1	1	...	...	3	...	1	1	.....
..	...	1	...	2	3	1	10	2	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	...	....	....	...	...	...	...	...	1	...	...	...	...	...	...	1	.....
1	2	8	1	5	55	11	67	9	6	2	5	19	6	3	2	2	14	2	1	4	2
..	...	...	...	...	...	....	....	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
..	...	...	...	...	5	....	1	...	...	...	1	...	...	...	...	...	...	1	1	2	2
2	...	...	...	...	14	....	3	...	...	1	2	4	...	...	...	...	...	...	...	.....	2
1	...	...	...	...	12	2	3	2	1	...	2	6	1	...	...	3	2	...	1	.....	3
1	1	1	...	3	13	3	12	2	...	...	...	11	1	2	...	3	7	1	...	3	4
1	1	6	2	3	13	3	17	5	...	...	2	6	1	2	1	1	7	1	3	5	.....
..	2	...	2	5	18	5	33	2	3	2	4	10	...	2	2	...	2	1	...	1	2
..	...	3	...	3	10	8	39	3	1	1	3	6	2	1	...	...	9	...	...	3	7
..	...	...	...	3	2	....	13	1	...	1	1	1	1	...	...	...	1	...	1	.....	.....
..	...	...	...	...	...	....	....	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
5	4	10	4	17	87	21	121	15	5	5	15	44	6	7	3	7	28	4	6	14	20

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER 31,

		Farmers.	Firemen.	Fishermen.	Florists, etc.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, etc.	Grocers.	Hatters.	Hotelkeepers.	Housekeepers and housewives.	Icemen.
Consumption	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	1	...	...	1	...	...	...	...	30	...
	20 to 30.	5	3	...	...	3	1	2	3	...	6	...	271	...
	30 to 40.	16	5	...	...	1	2	5	3	3	10	5	275	1
	40 to 50.	8	3	2	6	1	4	2	7	4	7	3	150	1
	50 to 60.	5	6	1	...	4	...	1	...	1	2	4	84	...
	60 to 70.	7	...	...	2	1	1	...	...	...	...	1	55	...
	70 to 80.	5	...	...	1	...	...	...	...	...	...	...	21	...
	80 to 90.	...	...	...	...	...	...	...	...	...	...	...	2	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		46	17	3	10	10	8	11	13	8	25	13	888	2
Cancer.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	...	...	...	...	...	...	...	...
	20 to 30.	...	...	...	...	...	...	2	...	...	1	...	17	...
	30 to 40.	1	1	...	...	...	1	...	...	1	...	...	62	...
	40 to 50.	4	2	...	1	1	...	...	1	...	2	1	192	...
	50 to 60.	13	1	...	4	...	3	...	...	1	6	4	238	...
	60 to 70.	34	2	2	2	...	1	3	...	1	2	3	212	...
	70 to 80.	23	...	1	3	2	1	...	...	2	...	1	125	...
	80 to 90.	6	...	...	...	...	...	...	...	1	1	...	31	...
	Over 90.	1	...	...	...	...	...	...	...	...	...	...	3	...
Totals.		82	6	3	10	3	6	5	1	6	12	9	880	...
Suicide.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	1	...	...	1	...	...	...	...	...	...	...	...	...
	20 to 30.	3	1	...	1	...	...	1	...	1	...	...	13	...
	30 to 40.	...	...	...	2	...	...	...	...	...	...	...	11	...
	40 to 50.	1	1	...	...	1	...	...	...	2	...	1	8	...
	50 to 60.	4	...	...	2	...	...	1	...	...	...	...	7	...
	60 to 70.	3	...	...	...	...	...	...	1	...	...	1	5	...
	70 to 80.	2	...	...	1	...	...	...	...	...	...	...	1	...
	80 to 90.	...	...	...	...	...	...	...	...	...	...	...	1	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.		14	2	...	7	1	...	2	1	3	...	2	46	...
Diseases of the nervous system and of the organs of sense.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	1	...	...	...	...	...	...	...	...	...	...	2	...
	20 to 30.	2	...	1	...	...	...	...	1	1	...	...	23	...
	30 to 40.	1	1	...	...	1	...	1	1	...	1	1	58	...
	40 to 50.	8	3	...	2	...	2	...	2	2	2	1	115	...
	50 to 60.	12	...	1	3	1	1	1	...	3	1	6	212	...
	60 to 70.	34	1	3	4	1	...	...	...	1	...	3	268	...
	70 to 80.	46	2	2	3	...	1	...	...	4	2	5	243	...
	80 to 90.	29	1	2	...	...	...	1	...	1	...	...	97	...
	Over 90.	2	9	...	...	...	...	...	...	...	...	...	11	...
Totals		135	8	9	12	3	4	3	4	12	6	16	1029	...
Diseases of the circulatory system.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	1	1	...	...	...	...	...	...	1	...	...	13	...
	20 to 30.	2	1	...	1	1	...	...	1	2	1	...	68	...
	30 to 40.	...	2	1	...	...	...	...	...	1	1	3	145	...
	40 to 50.	3	3	...	2	3	1	1	...	4	4	4	210	2
	50 to 60.	21	2	...	1	4	1	5	...	4	1	5	266	...
	60 to 70.	32	4	1	8	5	1	1	3	4	6	5	310	...
	70 to 80.	72	...	6	5	3	...	2	...	4	1	...	254	...
	80 to 90.	32	1	1	2	1	1	...	...	2	3	1	51	...
	Over 90.	2	...	...	...	...	...	...	...	...	...	1	16	...
Totals.		165	14	9	19	17	4	9	4	22	17	19	1333	2

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1913—Continued.

Janitors, etc.	Japanners.	Jewelers.	Laborers.	Laundresses.	Laundrymen.	Lawyers.	Leatherworkers.	Letter carriers.	Linemen	Linoleum workers.	Locksmiths.	Machinists.	Managers, etc.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.	Musicians.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	1	12	3	...	...	1	...	...	...	...	4	...	...	...	...	...	...	...	...
2	1	4	86	2	1	3	3	...	...	...	...	19	1	2	7	8	...	...	...	2
7	2	4	134	2	...	2	6	...	2	1	1	16	1	2	6	8	...	1	...	...
2	...	...	121	...	1	1	4	...	1	2	...	12	3	...	13	13	...	...	...	3
4	1	2	71	2	...	2	6	2	...	...	...	9	4	1	6	4	...	...	1	1
2	...	...	31	...	...	...	2	...	...	...	...	2	3	1	2	3	...	...	1	...
...	...	...	8	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	4	11	463	9	2	8	22	2	3	3	1	62	12	6	35	39	...	1	2	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
...	...	1	5	1	...	...	...	...	1	...	...	...	2	...	...	2	...	...	...	1
1	...	...	21	1	...	...	3	...	...	...	...	4	2	...	1	4	...	...	1	...
1	...	3	30	1	...	...	1	...	...	...	...	7	8	2	6	9	...	...	...	1
1	...	2	30	...	...	...	...	1	...	...	...	5	4	3	6	11	1	...	...	1
1	...	...	7	...	...	...	...	...	...	...	...	1	4	1	2	6	...	2	1	...
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	6	97	3	...	...	4	1	1	...	...	17	20	6	17	32	2	3	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
1	...	1	13	...	...	...	...	...	...	...	...	2	...	1	2	1	...	...	...	1
...	...	1	10	...	...	...	...	...	...	...	...	2	...	...	...	2	1	...	...	2
2	...	...	13	...	...	...	1	...	...	...	...	3	1	2	...	1	...	...	...	...
2	...	...	10	...	...	...	...	...	...	...	...	1	...	1	...	3	...	...	...	...
4	...	...	7	...	...	...	...	...	...	...	...	2	...	1	2	2	...	...	...	...
...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	2	57	...	...	...	2	...	...	...	...	10	1	5	4	11	1	...	...	3
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	1	12	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	...	...
...	...	...	15	...	...	1	...	...	...	...	...	4	1	...	3	2	...	...	...	1
3	...	1	38	3	...	...	...	1	...	...	...	6	5	...	...	3	...	...	...	...
3	...	...	46	...	...	3	1	...	...	...	...	3	8	4	6	14	1	...	2	...
9	...	1	62	1	...	3	4	...	...	...	...	12	4	4	7	17	1	...	3	1
3	...	...	31	...	...	1	4	2	...	...	...	7	6	...	5	14	...	...	...	1
...	...	...	5	...	...	...	...	...	...	...	...	1	...	...	2	3	...	...	...	...
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
18	...	3	214	4	...	8	9	3	...	...	...	35	24	8	24	54	2	...	5	3
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	17	...	...	1	...	...	...	...	...	2	1	...	...	...	1	...	...	1
...	1	...	25	...	...	...	1	...	1	...	...	9	4	2	1	5	...	...	...	1
10	2	3	53	1	1	1	3	...	...	...	...	11	12	1	2	7	...	...	...	...
9	1	3	70	3	1	1	4	1	...	...	...	12	9	7	8	16	...	1	...	...
17	1	4	100	1	2	5	5	...	...	...	1	16	6	6	9	27	...	1	1	2
11	...	3	66	1	1	6	6	...	...	...	...	7	10	13	4	33	4	...	...	2
...	...	2	23	...	...	...	...	...	...	...	...	1	2	2	2	13	...	...	1	...
...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
47	5	15	359	6	5	14	20	1	1	...	1	58	44	31	26	101	5	2	2	6

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER 31,

		Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, etc.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubber workers.	Sailors.	Salesmen.
Consumption	10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20	...	...	...	...	...	...	...	1	1	...	...	...	...	2
	20 to 30	...	5	...	...	...	8	...	4	7	15	2	2	2	9
	30 to 40	1	14	...	...	...	10	1	10	4	15	2	3	1	15
	40 to 50	3	23	...	...	...	6	3	5	4	13	3	3	3	9
	50 to 60	1	15	1	...	1	4	4	5	2	6	2	3	...	4
	60 to 70	...	6	...	...	1	...	1	2	1	2	1	...	...	3
	70 to 80	1	...	...	...	1	...	...	...	...	...	...	...	...	1
	80 to 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Over 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		6	63	1	...	3	28	9	27	19	51	10	11	6	43
Cancer	10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	20 to 30	...	...	...	...	...	...	...	...	...	1	...	...	...	...
	30 to 40	1	...	...	...	1	1	...	...	1	1	...	...	...	1
	40 to 50	1	4	...	1	...	1	...	2	...	...	2	...	...	7
	50 to 60	3	4	...	1	...	1	1	1	3	1	1	...	...	10
	60 to 70	...	5	...	...	...	1	...	3	1	3	...	...	3	...
	70 to 80	2	1	...	...	...	1	...	...	...	4	2	...	...	1
	80 to 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Over 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		7	14	...	2	1	5	1	6	5	10	5	...	3	19
Suicide	10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	20 to 30	2	1	...	...	...	...	...	...	1	1	...	...	1	1
	30 to 40	...	...	...	...	...	...	...	1	1	2	2	1	...	...
	40 to 50	...	...	...	...	1	...	1	...	...	...	2	...	...	2
	50 to 60	...	2	...	...	...	...	1	...	...	...	1	...	...	3
	60 to 70	...	...	...	...	...	...	...	...	...	...	2	...	...	4
	70 to 80	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	80 to 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Over 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		2	3	...	...	1	...	2	1	2	3	7	1	1	10
Diseases of the nervous system and of the organs of sense	10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20	...	1	...	...	...	...	...	...	...	...	...	...	...	1
	20 to 30	1	...	...	...	...	2	...	...	...	3	...	...	...	2
	30 to 40	1	1	...	...	...	1	1	...	...	2	...	1	...	4
	40 to 50	1	5	2	...	1	4	2	3	...	4	4	...	1	9
	50 to 60	3	7	...	...	1	1	...	3	3	3	7	...	1	6
	60 to 70	1	10	1	...	4	3	1	1	2	7	1	1	3	7
	70 to 80	1	8	...	...	3	1	1	...	1	4	3	...	2	3
	80 to 90	2	...	...	...	1	...	...	...	...	2	...	...	3	3
	Over 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		10	32	3	...	10	12	5	7	6	25	15	2	10	35
Diseases of the circulatory system	10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20	...	...	...	...	...	...	1	...	...	...	...	...	...	...
	20 to 30	2	2	...	...	1	1	...	1	1	...	...	...	...	1
	30 to 40	2	4	...	...	2	2	2	1	2	2	2	2	...	3
	40 to 50	3	4	1	...	3	2	1	3	1	6	3	1	1	10
	50 to 60	1	14	...	...	2	3	1	3	2	11	6	1	...	14
	60 to 70	...	15	1	...	5	4	...	3	1	12	5	...	5	11
	70 to 80	1	6	...	1	5	2	1	...	2	6	3	1	5	7
	80 to 90	...	1	...	...	1	1	...	...	1	3	3	...	2	1
	Over 90	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Totals		9	46	2	1	19	15	6	11	10	40	22	5	14	47

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1913.—Continued.

Shipbuilders.	Shoemakers.	Silkworkers.	Stonecutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tile workers.	Tinsmiths.	Trunk makers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wire workers.	All other occupations.	All other professions.	All other trades.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	2	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	1	1
1	5	12	1	4	...	4	1	1	5	...	2	...	9	1	4	...	3	39	2	14
1	2	5	2	3	...	4	...	1	5	...	1	...	6	...	8	1	3	17	4	11
2	4	4	5	3	2	4	...	...	1	...	...	3	3	...	5	...	1	18	4	5
...	1	2	5	5	...	...	...	...	2	...	...	1	1	...	...	...	...	7	...	5
...	1	1	1	1	1	1	1	...	1	...	...	...	...	...	...	...	...	5	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	15	29	14	16	3	14	2	2	14	...	3	4	20	1	17	1	7	91	11	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	1	...	1	...	...	...	...	...	...	1	...	...	...	...	1	...	1
1	1	3	...	1	1	...	...	...	1	...	...	...	...	...	1	...	1	4	1	2
1	2	1	1	1	...	2	3	...	1	...	...	...	...	...	2	...	...	9	...	2
...	4	2	1	2	...	2	...	...	1	2	1	...	...	...	1	...	...	11	2	1
2	1	...	1	2	...	...	1	...	...	...	...	...	...	...	1	1	...	6	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	8	6	3	9	1	5	4	...	3	2	1	...	1	...	5	1	1	35	4	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	...	1	...	...	...	3	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	1	...	2
...	...	1	...	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	2
...	3	1	1	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	...
...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	2
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	4	4	1	3	...	...	...	1	4	...	2	...	3	...	3	1	...	4	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	1	1	...	...	1	...	...	2	...	...	...	3	...	2	...	...	6	...	...
...	2	...	1	...	...	2	...	1	1	1	...	...	...	...	...	...	1	11	...	1
1	6	4	...	1	...	1	...	...	3	...	...	1	...	...	1	1	3	8	1	3
2	1	1	2	4	1	3	...	...	3	...	...	...	...	1	2	...	1	17	1	4
4	7	2	3	5	...	1	...	...	1	...	...	2	...	1	3	1	...	11	...	7
2	3	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	8	1	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	21	10	7	12	1	9	...	1	10	1	...	3	3	2	8	2	5	65	3	21
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	1	4	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	4	1	4
...	1	2	...	...	...	1	...	...	1	...	...	...	2	...	1	...	...	10	...	3
1	1	3	1	3	...	4	1	...	...	...	...	...	2	...	4	1	...	20	2	...
1	4	2	...	3	3	3	...	...	2	...	...	1	4	...	6	...	...	20	2	8
3	6	2	3	4	...	2	2	...	...	1	...	2	2	...	2	2	1	29	4	4
1	7	1	2	4	...	6	...	...	2	...	...	1	...	...	5	2	1	16	2	4
1	3	...	...	6	...	1	...	...	...	...	...	...	1	...	1	2	...	7	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
7	23	15	6	20	3	18	4	...	5	1	...	4	11	...	19	7	2	111	11	25

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER 31,

		Agents	Architects.	Artists.	Bakers.	Bankers, etc.	Barkers.	Bartenders, etc.	Blacksmiths.	Boatmen.	Boiler makers.	Bookkeepers.	Brass and iron workers.	Brick makers.	Butchers.	Button makers.
Diseases of the respiratory system (Consumption and pneumonia excepted.)	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
	20 to 30.	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
	30 to 40.	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...
	40 to 50.	...	...	...	...	...	...	...	1	...	1	1	3	...	...	...
	50 to 60.	...	...	...	1	1	1	1	1	...	1	1	2	...	1	...
	60 to 70.	1	...	...	...	...	...	2	2	1	...	...	...	1	...	...
	70 to 80.	...	...	...	...	1	...	1	2	1	...	1	...	...	...	...
	80 to 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.		1	...	...	1	2	1	5	6	2	2	5	7	1	2	...
Diseases of the digestive system.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	20 to 30.	1	...	...	...	...	3	1	...	...	...	2	...	...	...	1
	30 to 40.	...	...	...	...	2	...	4	3	...	1	1	2	...	3	...
	40 to 50.	...	...	1	1	...	...	10	1	1	2	1	6	...	1	...
	50 to 60.	...	...	...	...	1	2	5	...	1	...	...	2	...	...	1
	60 to 70.	2	...	...	3	...	...	2	...	...	...	3	1	1	3	...
	70 to 80.	...	...	1	1	1	1	1	...	...	...	...	...	...	1	...
	80 to 90.	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.		3	...	2	5	4	6	23	4	2	3	7	13	1	8	2
Diseases of the genito-urinary system and adnexa.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	20 to 30.	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...
	30 to 40.	...	...	...	...	1	...	1	1	1	...	2	2	2	3	...
	40 to 50.	1	...	...	1	...	2	7	...	3	...	2	2	...	1	...
	50 to 60.	1	...	...	...	1	5	2	2	4	1	2	3	1	4	1
	60 to 70.	2	1	2	1	6	1	2	6	2	1	3	2	...	2	...
	70 to 80.	...	...	...	2	...	1	1	1	6	1	...	1	...	3	1
	80 to 90.	...	...	...	...	...	...	...	3	...	...	1	...	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.		4	1	2	5	8	9	13	13	16	3	11	11	3	13	2
Pneumonia.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
	20 to 30.	...	...	...	...	...	...	3	1	...	...	1	2	...	...	...
	30 to 40.	...	...	...	2	2	1	6	...	1	...	3	4	...	2	...
	40 to 50.	...	...	...	1	...	1	4	3	6	1	1	4	1	...	2
	50 to 60.	...	...	...	1	1	...	1	1	1	...	2	3	...	2	...
	60 to 70.	...	...	1	...	...	1	4	1	1	3	2	...	...	1	...
	70 to 80.	...	...	...	...	...	...	...	3	1	...	...	1	...	1	...
	80 to 90.	...	...	...	...	...	...	...	1	...	...	...	1	...	2	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.		...	...	1	4	3	3	18	11	10	4	9	15	1	9	2
Violent deaths. (Suicide excepted).	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...
	20 to 30.	...	...	...	2	...	4	2	...	7	1	5	1	2	2	...
	30 to 40.	...	...	...	1	...	3	1	3	14	2	1	7	1	...	...
	40 to 50.	...	...	...	3	1	...	2	2	16	1	1	4	...	1	...
	50 to 60.	1	...	...	...	...	1	1	2	9	1	1	3	...	1	...
	60 to 70.	...	...	...	...	...	...	...	2	8	...	1	2	1	...	...
	70 to 80.	...	...	...	...	...	...	...	1	2	1	...	2	...	...	...
	80 to 90.	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.		1	...	...	6	1	8	7	10	57	6	11	19	4	4	...

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1913—Continued.

Chauffeor.	Chemists.	Cigar makers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, etc.	Druggists.	Dyers.	Editors and journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES. Male.	FACTORY EMPLOYES. Female.
					2																
			1																		
					1		1					1									
		1		2	2		2				1								1		
		1			3		2	1				1					1				
				1		1	1				2						1				1
					4	1	7	1				1					2				
					3		6						1		2		1			1	
				2			6	1	1	1											
				1							1										
	2	1	6	15	2	25	3	1	1	4	3	1		2		5		1	1	1	
				2																	
				5						1	1	1									3
	1			11		1				2	2				1				1	3	
	1			6	1	5	1				4		1		1	4			3	1	
1				9	1	4	2	1		1	6				1	2		1	1		
	3	3		9		7	2				11		1			2			1	1	
				2	1	8	2	1	1	1	5	1				4	1				
				2		8					1	1				1					1
				3		2					2										
1	1	5		9	45	3	35	7	2	1	5	32	3	2		3	13	1	1	6	9
		1			4						2	1					1				4
	1	1			13	1	5				1	2	1	2		2	1				2
				1	12	2	5				3	6		1		4	3		1		5
	1	1		3	12		5	3			2	9	1		1	3	3	1		3	3
1	5		1	1	12	2	18	6	1	1	1	13	2	2	2		8	1	1	2	1
		4		4	13		26	5	1			7	1	1			6		1	1	
	1			2	3	1	15	2	2	1	1	3		1			6			1	
							11		1		1	3					1				
1	8	7	1	11	69	6	85	16	5	2	11	44	5	7	3	9	29	2	3	7	15
																				1	
		1			3															1	3
2					12		1				1	3		1		2				1	3
		1			2		6	1				7				3	1	1	1	3	1
				1	4	1	11				1	11	1	2		1	3		1		1
				1	10		4	2	1		2	8					3			1	
		1		1	3		10	1			2	2	1				3		1		1
		1		3	2		10				1	1		1			3				
					1		4		1	1	1										
		1																			
2		5		6	37	1	46	4	2	1	8	32	2	4		6	15	1	3	7	9
															1						
					16		1					2				1				2	1
3					15		13					13		1		5	3			7	3
	1	1		1	5	2	13	1			1	8	2			1	5			4	1
	1				4	2	11		1		3	19				2	3		1	2	
					5	1	14				1	10	2	1			4			1	
					1		2	2			1	5		1			5		1	2	
		1		1	4		4					1								1	
							2				1								1		
3	2	2		2	50	5	60	3	1		7	58	4	3	1	9	20		3	19	5

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER 31,

		Farmers.	Firemen.	Fishermen.	Florists, etc.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, etc.	Grocers.	Hatters.	Hotel keepers.	Housekeepers and housewives.	Icemen.
Diseases of the respiratory system (Consumption and pneumonia excepted.)	10 to 15.	....	...	...	...	...	...	...	...	...	...	...	.....	...
	15 to 20.	....	...	...	...	...	...	...	...	...	...	...	8	...
	20 to 30.	1	...	...	...	...	...	...	...	...	...	...	41	...
	30 to 40.	1	...	...	...	...	...	...	...	...	...	...	81	...
	40 to 50.	2	...	...	1	1	...	...	...	1	1	...	106	...
	50 to 60.	2	...	1	2	3	...	...	...	1	...	...	129	...
	60 to 70.	12	...	...	...	...	...	1	...	...	...	1	120	...
	70 to 80.	11	...	...	1	1	...	...	...	2	2	...	83	...
	80 to 90.	13	...	...	...	...	...	...	...	2	...	1	40	...
	Over 90.	4	...	...	...	...	...	...	...	...	...	...	6	...
Totals.		46	...	1	4	5	...	1	...	6	3	2	614	...
Diseases of the digestive system.	10 to 15.	....	...	...	...	...	...	...	...	...	...	...	.....	...
	15 to 20.	1	...	...	...	...	...	...	...	...	...	...	8	...
	20 to 30.	3	...	...	...	...	...	...	...	...	...	...	41	...
	30 to 40.	2	...	1	...	...	...	1	1	...	3	...	81	...
	40 to 50.	3	1	...	...	2	...	...	1	2	1	4	106	...
	50 to 60.	11	1	1	3	...	1	...	...	1	4	3	129	...
	60 to 70.	13	...	...	2	...	...	...	1	...	...	1	120	...
	70 to 80.	20	...	1	3	1	...	...	...	1	3	...	83	...
	80 to 90.	11	...	...	...	...	1	...	...	...	...	2	40	...
	Over 90.	1	...	...	...	...	...	...	...	...	...	...	6	...
Totals		65	2	3	8	3	2	1	3	4	11	10	614	...
Diseases of the genito-urinary system and adnexa.	10 to 15.	....	...	...	...	...	...	...	...	...	...	...	3	...
	15 to 20.	....	1	...	...	...	...	...	...	...	...	...	29	...
	20 to 30.	....	2	...	...	1	...	...	...	2	...	...	252	1
	30 to 40.	....	3	...	...	...	...	2	2	2	...	2	296	...
	40 to 50.	4	3	1	4	3	...	...	1	2	1	6	225	...
	50 to 60.	18	3	1	2	2	2	...	1	2	4	5	210	1
	60 to 70.	34	...	2	5	2	...	...	...	2	3	1	212	...
	70 to 80.	45	...	2	3	...	2	1	2	4	...	...	168	...
	80 to 90.	21	...	1	4	...	...	...	...	1	...	...	63	1
	Over 90.	2	...	...	...	...	...	...	...	...	...	...	5	...
Totals.		124	12	7	18	8	4	3	6	15	8	14	1463	3
Pneumonia.	10 to 15.	....	...	...	...	...	...	...	...	...	...	...	.....	...
	15 to 20.	....	...	...	...	1	...	...	...	...	...	...	5	...
	20 to 30.	3	...	...	...	1	...	1	...	...	1	...	50	...
	30 to 40.	1	4	1	1	...	1	...	...	1	1	1	80	...
	40 to 50.	7	...	...	...	...	...	...	...	2	3	3	90	...
	50 to 60.	11	1	...	1	1	...	...	...	2	3	...	111	...
	60 to 70.	17	...	...	9	1	...	...	1	...	1	...	137	...
	70 to 80.	14	...	...	3	...	...	...	...	1	1	2	107	...
	80 to 90.	7	...	...	1	...	...	...	...	...	...	...	34	...
	Over 90.	....	...	...	...	...	...	...	...	...	...	...	5	...
Totals.		60	5	1	15	4	1	1	1	6	10	6	619	...
Violent deaths. (Suicide excepted).	10 to 15.	....	...	...	...	...	...	...	...	...	...	...	1	...
	15 to 20.	5	1	...	2	1	...	...	...	1	...	...	12	...
	20 to 30.	4	8	1	...	4	1	2	...	1	...	1	30	...
	30 to 40.	9	3	3	2	4	...	...	...	...	...	2	38	...
	40 to 50.	26	1	...	1	1	...	...	1	1	4	1	37	3
	50 to 60.	12	...	...	1	...	...	...	...	1	1	...	34	...
	60 to 70.	8	...	1	...	...	...	...	...	...	...	2	30	...
	70 to 80.	9	...	1	...	1	...	...	1	...	...	...	34	...
	80 to 90.	5	...	...	...	...	...	...	...	...	1	...	19	...
	Over 90.	1	...	...	...	...	...	...	...	...	...	...	3	...
Totals.		79	13	6	6	11	1	2	2	4	6	6	238	3

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1913—Continued.

Janitors, etc.	Japanners.	Jewelers.	Laborers.	Laundresses.	Laundrymen.	Lawyers.	Leatherworkers.	Letter carriers.	Linemen.	Linoleum workers.	Locksmiths.	Machinists.	Managers, etc.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.	Musicians.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	20	...	...	...	1	...	...	...	...	4	3	...	1	2	...	...	...	3
...	...	...	23	1	...	1	1	...	...	...	...	3	...	1	1	3	...	...	...	...
1	...	1	36	...	...	2	...	...	...	...	...	4	9	2	2	6	...	...	1	1
2	...	1	29	...	...	7	3	...	...	...	...	3	2	...	6	7	...	...	...	2
4	...	1	23	...	...	...	1	...	...	...	...	4	4	2	...	8	...	...	...	...
1	...	...	16	...	...	...	1	...	...	...	...	4	...	3	2	6	...	...	...	2
...	...	...	3	...	...	...	...	...	...	...	...	3	...	1	...	2	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	3	153	1	...	10	7	...	...	...	...	25	18	9	12	34	...	...	1	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	20	...	...	...	1	...	...	...	...	4	3	...	1	2	...	...	...	3
...	...	...	23	1	...	1	1	...	...	...	...	3	...	1	1	3	...	...	...	...
1	...	1	36	...	...	2	...	...	...	...	...	4	9	2	2	6	...	...	1	1
2	...	1	29	...	...	7	3	...	...	...	...	3	2	...	6	7	...	...	...	2
4	...	1	23	...	...	...	1	...	...	...	...	4	4	2	...	8	...	...	...	...
1	...	...	16	...	...	...	1	...	...	...	...	4	...	3	2	6	...	...	...	2
...	...	...	3	...	...	...	...	...	...	...	...	3	...	1	...	2	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	3	153	1	...	10	7	...	...	...	...	25	18	9	12	34	...	...	1	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
...	...	1	11	1	...	...	2	...	...	...	...	1	...	...	...	2	...	...	1	...
1	...	1	34	4	1	...	...	...	...	...	1	6	2	...	3	8	...	...	...	2
8	...	1	25	1	...	2	1	...	...	...	...	3	6	3	2	15	...	...	...	2
7	...	3	67	1	1	6	2	2	...	...	...	10	4	1	4	15	...	...	2	2
6	...	4	53	...	...	1	4	...	...	...	...	9	9	7	7	10	1	2	2	1
6	...	...	44	...	...	1	1	...	...	...	...	4	1	1	5	6	...	1	...	1
...	...	...	7	...	...	...	...	2	...	...	1	3	1	2	2	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	10	243	7	2	10	10	4	...	...	2	36	23	14	23	58	1	3	5	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	8	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
...	...	1	33	...	...	...	1	...	...	...	...	5	2	1	...	...	...	...	1	...
...	...	1	33	1	1	...	1	...	1	...	...	6	4	...	3	3	...	...	1	1
1	...	1	48	1	...	...	2	2	...	...	...	7	2	2	2	4	...	...	2	4
4	...	1	37	...	...	...	...	...	...	...	...	5	1	1	5	5	...	...	...	...
7	...	2	36	1	...	2	1	...	...	...	2	1	...	2	4	5	...	...	...	...
2	...	...	25	...	...	...	...	...	...	...	...	4	3	1	3	8	...	...	...	...
1	...	...	5	...	...	1	...	...	...	...	...	...	...	...	1	3	...	1	1	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	6	225	3	1	3	5	2	1	...	2	29	12	7	18	28	...	1	5	5
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	1	23	...	...	...	...	...	...	2	...	3	...	...	...	...	...	...	...	...
1	...	...	113	...	1	...	...	...	3	...	...	8	...	...	...	1	1	...	...	...
...	...	1	90	...	...	1	1	...	3	...	...	5	2	1	2	1	...	...	1	...
2	...	...	98	1	...	1	...	...	...	...	...	3	8	...	...	1	1	...	6	...
4	...	...	50	1	1	...	1	...	...	...	...	4	7	1	3	3	...	...	1	...
6	...	2	23	...	...	...	1	...	1	...	...	4	1	...	...	4	...	1	1	...
1	...	...	12	...	...	...	...	...	...	...	...	1	4	1	5	1	...	...	...	...
...	...	...	2	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...
1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...
15	...	4	413	2	2	2	3	...	7	2	...	28	22	4	10	17	2	1	9	...

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER 31,

		Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, etc.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubber workers.	Sailors.	Salesmen.
Diseases of the respiratory system (Consumption and pneumonia excepted.)	10 to 15	...	...	...	...	...	2	...	...	...	...	...	...	1	1
	15 to 20	...	1	...	...	...	...	...	...	...	2	...	...	...	3
	20 to 30	1	2	...	...	...	...	...	...	1	2	...	...	...	2
	30 to 40	...	1	...	...	1	...	...	...	...	2	...	...	1	3
	40 to 50	...	1	...	1	...	1	...	1	4	4	1	1	...	1
	50 to 60	1	5	...	...	...	...	...	1	1	2	...	...	...	2
	60 to 70	2	3	...	...	...	...	1	1	...	6	2	1	...	1
	70 to 80	3	2	...	1	2	...	...	...	...	...	...	...	2	...
	80 to 90	...	...	...	1	...	...	...	...	...	1	...	...	...	...
	Over 90	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Totals		7	15	...	3	3	3	1	3	6	18	3	2	4	13
Diseases of the digestive system.	10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20	...	1	...	...	...	2	...	...	...	...	...	...	1	1
	20 to 30	1	2	...	...	...	...	...	...	1	2	...	...	...	3
	30 to 40	...	1	...	...	1	...	...	...	...	2	...	...	1	2
	40 to 50	...	1	...	1	...	1	...	1	4	4	1	1	...	3
	50 to 60	1	5	...	...	...	...	...	1	1	2	...	...	...	1
	60 to 70	2	3	...	...	...	...	1	1	...	6	2	1	...	2
	70 to 80	3	2	...	1	2	...	...	...	...	...	...	...	2	1
	80 to 90	...	...	...	1	...	...	...	...	...	1	...	...	...	...
	Over 90	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Totals		7	15	...	3	3	3	1	3	6	18	3	2	4	13
Diseases of the genito-urinary system and adnexa.	10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	20 to 30	1	1	...	...	...	1	2	2	...	2	1	...	...	1
	30 to 40	...	2	1	...	...	3	...	...	...	2	1	...	1	6
	40 to 50	...	6	...	...	2	4	5	4	...	4	2	1	1	9
	50 to 60	2	10	...	...	2	...	4	2	2	10	6	2	...	7
	60 to 70	2	11	1	...	3	3	1	...	3	10	8	...	1	5
	70 to 80	...	6	1	1	2	...	1	...	2	2	3	...	3	3
	80 to 90	...	1	...	...	...	...	...	...	1	2	1	...	1	...
	Over 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		5	37	3	1	9	11	13	8	8	32	22	3	7	31
Pneumonia.	10 to 15	...	...	...	...	...	...	...	...	1	...	...	1	...	...
	15 to 20	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	20 to 30	...	...	...	...	...	2	...	...	2	5	...	...	2	...
	30 to 40	...	1	1	...	...	...	1	1	1	3	...	1	3	1
	40 to 50	...	7	...	...	2	4	1	1	1	6	2	...	...	7
	50 to 60	...	8	...	...	2	3	...	1	...	2	1	1	...	3
	60 to 70	...	3	...	...	1	...	...	...	1	2	1	1	1	2
	70 to 80	2	...	...	...	...	...	...	2	...	1	2	...	...	...
	80 to 90	1	1	...	...	1	...	...	...	...	...	...	...	...	1
	Over 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		3	20	1	...	6	9	2	5	6	19	6	4	6	15
Violent deaths. (Suicide excepted).	10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 to 20	...	...	...	1	...	2	...	...	...	3	...	1	1	...
	20 to 30	1	1	...	...	...	7	...	...	4	21	...	...	1	4
	30 to 40	...	6	...	...	...	3	1	1	2	26	2	...	...	3
	40 to 50	...	4	...	...	1	3	1	5	1	19	1	1	...	3
	50 to 60	...	10	...	...	2	...	...	...	1	9	...	...	1	1
	60 to 70	...	6	...	...	1	...	1	1	...	6	...	...	1	3
	70 to 80	...	4	...	...	...	1	...	...	...	...	...	...	...	...
	80 to 90	...	1	...	...	...	...	...	...	...	...	...	...	1	...
	Over 90	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		1	32	...	1	4	16	3	7	8	84	3	2	5	17

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1913—Continued.

Shipbuilders.	Shoemakers.	Silk workers.	Stone cutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tile workers.	Tinsmiths.	Trunk makers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wire workers.	All other occupations.	All other professions.	All other trades.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	1
...	...	4	...	1	...	3	...	...	1	...	...	...	...	...	1	...	...	3	...	...
...	1	...	1	2	...	1	...	...	...	...	...	...	1	...	2	...	...	5	1	3
...	1	2	...	4	...	...	...	...	...	...	...	...	4	1	1	...	1	7	...	5
...	1	1	...	2	1	1	...	...	1	...	1	...	...	...	4	...	1	6	...	2
...	...	1	...	1	...	1	...	...	2	...	...	...	1	...	2	1	1	7	...	3
...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...
...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
...	6	9	1	11	1	7	...	...	4	...	1	...	6	1	11	1	3	33	2	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	1
...	...	4	...	1	...	3	...	...	1	...	...	...	...	...	1	...	...	3	...	...
...	1	...	1	2	...	1	...	...	...	...	...	...	1	...	2	...	...	5	1	3
...	1	2	...	4	...	...	...	...	...	...	...	...	5	1	1	...	1	7	...	5
...	1	1	...	2	1	1	...	...	1	...	1	...	...	...	4	...	1	6	...	2
...	...	1	...	1	...	1	...	...	2	...	...	...	1	...	2	1	1	7	...	3
...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...
...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
...	6	9	1	11	1	7	...	...	4	...	1	...	7	1	11	1	3	33	2	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...
...	1	...	...	1	...	3	...	...	...	...	...	...	2	...	2	...	...	5	1	...
...	1	2	...	1	...	2	1	...	1	...	...	...	2	...	...	...	...	6	...	...
...	2	1	...	1	...	5	1	...	...	...	...	...	...	...	1	...	1	5	1	3
...	2	1	1	4	...	2	...	...	1	1	1	1	2	...	1	...	1	15	1	4
...	2	1	4	2	2	2	...	...	2	1	...	...	...	...	3	1	...	14	1	3
...	3	3	...	4	...	2	...	...	1	...	...	...	1	...	1	2	...	6	...	...
1	4	2	...	1	...	2	...	...	...	...	2	1	...	...	...	...	...	3	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	15	10	5	14	2	19	2	...	5	2	3	2	8	...	8	3	2	54	5	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	2	...	...	4	...	...
1	...	1	...	1	...	...	...	...	1	...	1	...	1	...	...	...	...	4	...	3
...	2	...	...	1	...	...	1	1	1	...	...	...	1	...	...	...	...	1	...	4
...	1	...	1	1	...	1	...	...	...	...	...	...	...	...	1	...	1	7	1	2
...	1	...	...	1	...	1	...	...	1	...	...	...	...	...	4	1	...	4	...	2
...	3	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	5	...	1
1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
2	8	1	1	6	...	3	1	1	5	...	1	...	4	...	8	1	1	28	1	12
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	6	...	...
1	...	...	...	2	...	...	...	...	1	...	...	...	4	2	1	...	...	10	...	5
...	...	...	1	3	...	...	2	...	...	...	...	...	1	...	3	...	3	14	1	2
2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	4	...	2	6	1	1
...	3	...	1	1	...	...	...	...	...	...	...	...	...	...	3	...	1	3	1	1
...	2	2	1	1	...	...	...	...	1	...	...	...	...	...	1	...	...	6	...	2
1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	1
...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	5	4	3	8	1	...	3	...	3	...	...	...	5	2	14	...	6	46	3	12

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER 31,

		Agents.	Architects.	Artists.	Bakers.	Bankers, etc.	Barbers.	Bartenders, etc.	Blacksmiths.	Boatmen.	Boiler makers.	Bookkeepers.	Brass and iron workers.	Brick makers.	Butchers.	Button makers.
All other diseases and causes of death.	10 to 15.	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
	15 to 20.	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...
	20 to 30.	1	...	...	...	1	2	3	1	1	...	3	2	...	1	...
	30 to 40.	1	...	1	1	...	2	10	2	2	...	1	1	...	3	...
	40 to 50.	...	...	...	2	1	4	6	4	3	...	3	4	...	1	...
	50 to 60.	...	1	...	3	1	...	2	1	1	1	...	3	1	2	...
	60 to 70.	...	...	...	...	2	3	2	2	...	...	3	1	...	1	...
	70 to 80.	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...
	80 to 90.	...	...	...	1	...	...	1	...	1	...	1	...	...	...	...
	Over 90.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals		2	2	1	8	6	11	24	11	9	1	12	11	1	8	...

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1913—Continued.

Chauffeur.	Chemists.	Cigar makers.	Civil engineers.	Clergymen	Clerks.	Constables and policemen.	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, etc.	Druggists.	Dyers.	Editors and journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES. Male.	FACTORY EMPLOYES. Female.
..	...	..	...	...	...	....	...	...	...	...	..	...	...	...	....	...	...	...	...	.....	1
..	...	1	1	...	4	....	2	...	...	...	1	...	...	...	....	...	...	...	...	2	8
2	1	...	...	...	13	1	4	...	...	...	2	...	...	...	....	3	1	1	...	6	5
1	...	...	...	...	11	....	6	2	...	...	...	4	...	1	1	1	3	...	...	2	.....
..	...	1	...	1	13	1	8	3	1	...	...	14	1	...	...	2	4	1	...	1	1
..	..	1	...	...	8	....	8	...	2	...	1	16	...	1	...	...	5	...	...	3	.....
..	...	1	1	...	3	1	9	1	...	...	1	11	...	...	...	...	3	1	1	.....	.....
..	1	...	...	...	1	2	4	1	...	...	1	1	...	...	...	...	1	...	...	.....	.....
..	...	...	...	...	...	....	9	...	1	...	1	1	1	...	...	...	1	...	...	.....	.....
..	...	...	...	...	...	....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....
3	2	4	2	1	53	5	51	7	4	...	7	47	2	2	1	6	18	3	1	14	15

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER 31,

		Farmers.	Firemen.	Fishermen.	Florists, etc.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, etc.	Grocers.	Hatters.	Hotel keepers.	Housekeepers and housewives.	Icemen.
All other diseases and causes of death.	10 to 15.	...	...	...	...	...	...	...	...	...	...	...	3	...
	15 to 20.	2	...	...	...	...	...	...	...	...	...	...	18	...
	20 to 30.	3	1	1	2	1	...	...	...	1	1	...	70	1
	30 to 40.	4	...	1	...	1	1	...	1	1	2	3	99	1
	40 to 50.	8	...	...	3	4	...	1	2	1	2	2	96	...
	50 to 60.	13	...	...	4	...	1	...	...	1	2	6	104	1
	60 to 70.	9	...	...	1	1	2	...	...	3	2	...	110	...
	70 to 80.	25	1	...	2	...	...	1	1	...	...	...	109	...
	80 to 90.	17	...	...	1	...	...	...	...	...	...	...	66	...
	Over 90.	3	...	...	1	...	...	...	...	...	...	...	15	...
Totals.		84	2	2	14	7	4	2	4	7	9	11	690	3

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1913—Continued.

Janitors, etc.	Japanners.	Jewelers.	Laborers.	Laundresses.	Laundrymen.	Lawyers.	Leatherworkers.	Letter carriers.	Linemen.	Linoleum workers.	Locksmiths.	Machinists.	Managers, etc.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.	Musicians.
...	...	...	13	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	2	41	2	...	...	1	...	...	...	...	7	...	1	...	1	1	...	1	1
2	1	2	43	2	1	...	2	...	2	...	...	11	4	...	2	6	1	...	1	1
2	...	...	49	...	...	...	3	...	1	...	...	3	4	1	3	7	...	...	...	...
4	...	1	43	...	...	...	3	...	...	...	...	7	1	1	1	4	1	...	1	...
3	...	1	32	1	...	2	...	...	...	...	...	1	4	1	2	8	...	...	...	...
...	...	1	16	...	...	1	2	...	...	...	...	...	...	1	1	8	...	...	1	...
...	...	1	10	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
11	1	8	248	5	1	3	12	...	3	...	...	30	13	6	9	36	3	...	4	3

TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER 31,

	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, etc.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubber workers.	Soilors.	Salesmen.
All other diseases and causes of death. 10 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15 to 20	...	1	...	...	...	...	...	...	...	...	...	2	1	1
20 to 30	2	2	...	...	...	2	...	...	1	5	...	1	...	...
30 to 40	2	4	...	...	...	...	...	1	1	8	3	...	...	4
40 to 50	2	7	...	...	2	3	4	3	2	2	2	1	1	2
50 to 60	2	7	...	...	...	2	1	1	1	2	4	...	...	5
60 to 70	1	1	...	...	...	...	1	...	...	4	2	1	1	2
70 to 80	2	...	1	...	2	1	...	...	...	1	1	1	...	1
80 to 90	...	...	...	...	1	...	...	...	...	1	1	...	...	...
Over 90	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Totals	11	22	1	...	5	11	6	5	5	23	13	6	3	16

NEW JERSEY, FROM CERTAIN SELECTED DISEASES, FOR THE YEAR ENDING 1913.—Continued.

Shipbuilders.	Shoemakers.	Silk workers.	Stone cutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tile workers.	Tinsmiths.	Trunk makers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wire workers.	All other occupations.	All other professions.	All other trades.
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	4	...	...	4	1	2
...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	4	1	3
...	...	...	...	1	...	1	1	...	3	...	1	...	3	...	4	...	...	4	1	4
1	1	1	...	4	...	5	...	...	2	...	...	...	...	...	1	...	1	7	...	2
..	4	1	...	...	...	2	1	...	...	...	1	...	1	...	...	1	...	10	...	1
...	...	...	1	...	2	...	1	...	1	1	...	...	...	...	1	...	...	7	...	3
...	1	2	...	2	...	1	...	...	...	...	...	...	...	...	2	...	...	5	...	1
...	1	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...
...	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	1
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	11	6	2	10	2	9	4	...	6	1	2	....	4	....	12	1	1	47	2	17

TABLE 6.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ASBURY PARK.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Measles	6	...	...	...	...	1	...	...
Scarlet fever	7	...	...	1	...	...	...	...
Influenza	10	...	...	...	...	1	...	...
Tuberculosis of the lungs	28	...	...	1	...	...	...	5
Acute miliary tuberculosis	29	...	...	...	...	...	...	...
Abdominal tuberculosis	31	...	...	1	...	...	...	...
Tuberculosis of other organs	34	...	...	...	...	...	...	...
Syphilis	37	...	...	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	...	...	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	...	...	...	...	...	...	...
Cancer and other malignant tumors of the breast	43	...	...	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	...	...	...	...	...	...	...
Chronic rheumatism and gout	48	...	...	...	...	1	...	...
Diabetes	50	...	...	...	...	...	...	...
Anæmia, chlorosis	54	...	...	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	1	...	...	...	...	...	...
Paralysis without specified cause	66	...	...	...	...	...	...	...
Pericarditis	77	...	...	...	...	...	...	...
Acute endocarditis	78	...	...	...	...	...	1	...
Organic diseases of the heart	79	...	1	...	...	...	...	...
Diseases of the arteries, atheroma, aneurysm, etc	81	...	...	...	...	...	...	...
Acute bronchitis	89	...	...	...	...	...	...	...
Bronchopneumonia	91	...	1	2	...	...	...	...
Pneumonia	92	...	1	...	...	...	...	...
Asthma	96	...	...	...	...	...	...	...
Other diseases of the respiratory system (tuberculosis excepted)	98	...	...					
Other diseases of the stomach (cancer excepted)	103	1	4	...	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	1	1	1	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	...	...	...	...	...	...	...
Appendicitis and typhlitis	108	...	...	...	...	...	...	...
Cirrhosis of the liver	113	...	...	...	...	...	...	...
Other diseases of the liver	115	...	...	...	...	...	...	...
Acute nephritis	119	...	1	...	...	...	...	...
Bright's disease	120	...	...	...	...	...	...	1
Puerperal hæmorrhage	135	...	...	...	...	...	...	...
Gangrene	142	...	...	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	1	...	...	...	...	...	...
Congenital debility, icterus and sclerema	151	3	4	...	...	...	...	...
Suicide by poison	155	...	...	...	...	...	...	...
Suicide by asphyxia	156	...	...	...	...	...	...	1
Suicide by hanging or strangulation	157	...	...	...	...	...	...	...
Suicide by jumping from a high place	161	...	...	...	...	...	...	...
Absorption of deleterious gases (conflagration excepted)	168	...	...	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	...	...	...	...	...	...	...
Homicide by firearms	182	...	...	...	...	...	...	...
Homicide by other means	184	...	...	...	...	...	...	...
Cause of death not specified or ill-defined	189	...	2	...	...	...	...	...

Total deaths 168. Death-rate 12.42.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	2	...	1	2	1	...	...	...	...	...	...	7	5	11	1	5	5	2	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	1	1	....	....
...	...	...	1	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	1	1	...	...	2	....	1	1	....	....	2	....
...	...	...	...	...	...	1	...	...	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	1	...	...	1	...	...	...	....	2	2	.....	....	1	1	....
...	...	...	...	...	1	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	2	1	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	1	...	...	...	...	...	3	....	3	.....	2	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	2	1	2	1	3	4	1	...	...	7	8	12	3	8	2	5	....
...	...	...	...	...	1	...	...	1	...	...	...	1	1	2	.....	1	....	1	....
...	...	...	...	...	...	...	...	1	...	...	...	....	1	1	.....	....	1	....	....
...	...	1	...	...	...	2	2	3	...	...	...	3	6	8	1	4	3	2	....
...	...	...	1	1	...	2	5	6	3	2	...	12	9	17	4	7	2	12	....
...	...	...	...	...	1	...	...	...	6	...	...	3	4	5	2	2	....	5	....
...	...	...	...	...	...	...	...	1	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	...	...	...	1	...	...	...	1	3	4	.....	3	3	1	....
...	...	...	...	3	1	1	2	1	...	...	...	4	5	9	.....	....	3	2	....
1	...	1	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	....	2	....
...	...	...	...	...	...	...	...	1	...	...	...	....	1	1	.....	....	....	1	....
...	1	1	1	...	1	2	2	1	...	...	...	9	5	10	4	6	6	1	1
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	.....	....	3	....	....
...	1	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	...	...	1	...	...	...	...	1	....	1	.....	1	....	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	1	1	....	....
...	1	2	...	1	2	...	5	7	2	...	...	9	12	19	2	8	2	11	....
...	...	1	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	5	7	.....	....	7	....	....
...	1	...	...	...	1	...	...	...	...	...	...	1	1	2	.....	1	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	...	1	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	1	...	...	...	...	...	...	...	...	....	1	.....	1	1	....	....	....
...	...	...	...	...	1	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	1	...	1	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....

TABLE 7.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES,

THE YEAR ENDING

DEATHS IN ATLANTIC CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	...	1	1	1
Malaria	4	....	....	...	...	...	1	...
Measles	6	....	1	2	...	...	...	...
Scarlet fever	7	....	1	2	1	...	...	...
Whooping cough	8	....	4	1	1	...	...	...
Diphtheria and croup	9	....	1	4	2	1	...	...
Influenza	10	....	....	...	...	...	...	...
Dysentery	14	....	....	...	...	...	...	...
Erysipelas	18	....	....	...	1	...	...	...
Purulent infection and septicæmia	20	....	....	...	...	...	1	...
Tuberculosis of the lungs	28	....	....	...	...	1	1	5
Tuberculous meningitis	30	....	1	1	1	1	...	1
Abdominal tuberculosis	31	....	1	...	...	...	...	...
Pott's disease	32	....	....	...	...	1	1	...
Tuberculosis of other organs	34	....	....	...	...	...	...	...
Rickets	36	....	1	...	...	...	...	...
Syphilis	37	2	1	...	...	...	...	...
Gonococcus infection	38	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	...
Cancer and other malignant tumors of the skin	44	....	....	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	...	...	1	...	...
Acute articular rheumatism	47	....	....	...	...	...	1	...
Chronic rheumatism and gout	48	....	....	...	...	...	...	...
Diabetes	50	....	....	...	...	1	...	...
Exophthalmic goitre	51	....	....	...	...	...	1	...
Anæmia, chlorosis	54	....	....	...	...	...	1	...
Other general diseases	55	1	....	...	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Encephalitis	60	....	1	2	...	1	...	...
Simple meningitis	61	....	1	...	...	...	...	...
Including: Cerebrospinal fever	61A	....	....	...	1	...	...	...
Locomotor ataxia	62	....	....	...	...	...	...	...
Other diseases of the spinal cord	63	....	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	....	...	...	...	...	...
General paralysis of the insane	67	....	....	...	...	...	...	...
Other forms of mental alienation	68	....	....	...	...	...	...	...
Epilepsy	69	....	....	...	...	...	...	...
Other diseases of the nervous system	74	....	....	...	...	...	...	...
Pericarditis	77	....	....	...	...	...	...	...
Acute endocarditis	78	....	....	1	2	...	...	...
Organic diseases of the heart	79	....	....	2	3	1	1	...
Angina pectoris	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc.	81	....	....	...	...	...	...	...
Embolism and thrombosis	82	....	1	...	...	...	...	...
Diseases of the veins (varices hæmorrhoids, phlebitis, etc.)	83	....	....	...	...	...	...	...
Hæmorrhage; other diseases of the circulatory system	85	....	....	...	...	...	...	...
Acute bronchitis	89	....	2	1	1	...	...	...
Chronic bronchitis	90	....	....	...	...	...	...	...
Bronchopneumonia	91	....	7	4	1	1	...	...
Pneumonia	92	1	9	4	3	1	1	3
Pleurisy	93	....	....	...	1	...	...	...
Pulmonary congestion, pulmonary apoplexy	94	....	....	...	...	...	...	...
Asthma	96	....	....	...	...	...	...	...

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	1	1	...	...	...	...	1	...	...	...	2	4	5	1	4	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	.....	....	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	...	3	.....	....	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	5	9	.....	....	9	....	....
...	...	...	...	...	...	...	...	...	...	...	...	7	1	8	.....	....	8	....	....
1	...	...	...	...	...	...	...	1	...	...	...	1	1	2	.....	....	1	1	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	.....	....	1	....	....
...	...	...	...	...	...	1	...	...	...	...	...	2	...	2	.....	1	1	....	....
1	...	...	1	1	...	...	...	...	...	...	...	3	1	4	.....	1	2	1	....
7	8	5	5	8	4	1	3	2	1	...	...	34	17	43	7	27	17	7	....
...	...	...	...	...	...	...	...	...	...	...	...	4	1	3	2	....	5	....	....
...	...	...	...	...	...	...	...	1	...	...	...	1	1	2	.....	1	1	....	....
...	...	...	1	...	...	...	...	...	...	...	...	...	3	3	.....	....	3	....	....
...	...	1	...	...	1	...	...	...	...	...	...	1	1	2	.....	....	1	1	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	3	4	.....	1	3	....	....
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	....	1	....
...	...	...	1	1	2	5	4	7	1	...	...	11	10	15	6	10	1	10	....
...	...	...	1	...	...	...	3	1	...	...	...	....	5	4	1	3	....	2	....
...	...	...	1	2	3	1	...	1	...	...	...	....	8	7	1	5	....	3	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	1	.....	1	...	....	....
...	2	1	...	...	...	...	4	...	2	...	...	4	6	7	3	4	2	4	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	2	...	...	...	...	...	2	1	1	1	1	....	....
...	...	...	...	1	2	1	3	1	...	...	...	3	6	8	1	2	4	3	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	...	....	....
...	1	...	...	...	1	...	...	...	...	...	...	...	3	1	2	1	2	....	....
...	...	...	...	...	...	...	...	1	...	...	...	2	...	2	.....	1	1	....	....
3	...	2	2	1	4	...	...	1	...	...	...	10	3	11	2	5	5	3	....
...	...	...	...	1	...	...	...	...	...	...	...	2	3	5	.....	...	5	....	....
1	...	...	1	...	...	...	...	...	...	...	...	2	1	2	1	1	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	....	....
...	...	...	...	...	...	...	2	...	...	...	...	2	...	2	.....	2	....	....	....
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	.....	...	....	1	....
...	...	...	1	3	5	3	9	8	4	...	...	18	15	30	3	15	6	12	....
...	...	1	...	...	...	1	...	2	1	...	...	2	3	4	1	3	....	2	....
1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	....	....
...	...	1	...	...	...	...	1	...	...	...	...	1	1	2	.....	1	1	....	....
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	....	....
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	...	1	....	....
...	1	2	1	...	2	2	6	4	...	...	...	9	12	19	2	12	6	3	....
...	1	4	7	9	5	4	14	13	2	1	...	32	35	54	13	40	10	17	....
...	...	1	1	1	1	1	7	1	1	...	...	8	6	11	3	8	1	5	....
...	...	...	...	...	1	1	4	6	2	...	...	3	11	12	2	3	...	11	....
...	...	...	1	...	...	...	1	...	...	...	...	2	1	2	1	1	1	1	....
...	...	...	...	1	...	...	...	...	...	...	...	1	...	.....	1	1	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	.....	1	1	....	....	....
...	...	...	1	...	...	1	1	...	...	...	...	2	5	6	1	2	4	1	....
...	...	...	1	...	...	...	1	1	1	...	...	2	2	3	1	3	1	....	....
...	...	1	...	...	1	...	2	1	1	...	...	12	7	18	1	4	14	1	....
1	5	1	3	5	3	2	5	3	1	...	...	25	26	42	9	18	26	7	....
...	...	...	1	1	...	1	...	...	2	...	...	2	4	4	2	2	2	2	....
...	...	...	...	...	1	...	...	1	...	...	...	2	....	2	.....	2	....	....	....
...	...	...	...	...	...	...	1	1	...	...	...	....	2	2	.....	1	1	....	....

TABLE 7.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ATLANTIC CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Ulcer of the stomach	102	...	...	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	7	9	1	...	...	1	...
Diarrhœa and enteritis (Under 2 years)	104	5	20	8	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	...	...	1	2	...	...	2
Appendicitis and typhlitis	108	...	...	...	1	1	1	2
Hernias, intestinal obstructions	109	...	2	...	...	...	1	...
Other diseases of the intestines	110	...	...	...	...	...	...	...
Cirrhosis of the liver	113	...	...	...	...	...	...	...
Other diseases of the liver	115	...	...	...	...	...	...	...
Acute nephritis	119	...	...	...	...	...	1	...
Bright's disease	120	...	2	...	2	1	2	1
Other diseases of the kidneys and annexa	122	...	...	...	...	...	...	...
Calculi of the urinary passages	123	...	...	...	...	...	...	...
Diseases of the bladder	124	...	...	...	...	...	...	...
Other diseases of the urethra, urinary abscess, etc	125	...	...	...	...	...	...	...
Diseases of the prostate	126	...	...	...	...	...	...	...
Puerperal hæmorrhage	135	...	...	...	...	...	...	1
Other accidents of labor	136	...	...	...	...	...	1	1
Puerperal septicæmia	137	...	...	...	...	...	1	3
Puerperal albuminuria and convulsions	138	...	...	...	...	...	2	...
Gangrene	142	...	...	...	...	...	...	...
Other diseases of the skin and annexa	145	...	...	...	...	...	...	...
Diseases of the bones (tuberculosis excepted)	146	...	...	...	...	...	...	...
Congenital debility, icterus and sclerema	151	35	3	...	...	...	...	...
Other diseases peculiar to early infancy	152	3	1	...	...	...	...	...
Senility	154	...	...	...	...	...	...	...
Suicide by poison	155	...	...	...	...	...	...	1
Suicide by asphyxia	156	...	...	...	...	...	...	1
Suicide by hanging or strangulation	157	...	...	...	...	...	...	...
Suicide by firearms	159	...	...	...	...	...	1	...
Suicide by cutting or piercing instruments	160	...	...	...	...	...	...	...
Other acute poisonings	165	...	...	...	...	...	...	...
Burns (conflagration excepted)	167	...	...	2	...	...	...	...
Absorption of deleterious gases (conflagration excepted)	168	1	1	...	...	...	...	...
Accidental drowning	169	...	...	...	...	...	1	4
Traumatism by fall	172	...	...	1	...	...	...	1
Traumatism by other crushing (vehicles, railroad, landslides) etc.)	175	...	...	1	2	1	...	3
Homicide by firearms	182	...	...	...	...	...	...	...
Homicide by other means	184	...	...	...	...	...	1	1
Cause of death not specified or ill-defined	189	1	7	...	1	...	...	...

Total deaths, 838. Death-rate, 16.34.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
2					1		1					2	2	2	2	2	2		
	2		2		1	3	1	2	4			16	17	30	3	6	17	10	
												18	15	33			33		
												8	9	14	3	9	5	3	
	1	3		2	1		2	2	1			7	2	8	1	4	5		
		2	1	1								7	6	12	1	5	6	2	
2	1			1	1	1	1	3				1	2	1	2	2	1		
		1		1			1					3	2	3	2	4		1	
		2	1	1		1						1	2	2	1	3			
				1		1						3	3	5	1	3	3		
	1	1	1	1	1							67	43	95	15	53	23	34	
1	3	7	3	6	14	19	20	23	6			1	1	1	1	1	1		
		1						1					1	1		1			
						1							1	2		2			
				1			1					2		2		1		1	
					1		1					1		1			1		
									1				2	2		2			
	1												2	1	1	1	1		
													7	4	3	6		1	
1	1			1									2	2		1	1		
														1		1			
								1				1	1		2	2			
1		1											1	1		1			
		1											1	1					
												22	16	38			38		
												2	2	4			4		
								3	4	4		5	6	7	4	2	1	8	
													1	1		1			
												2	3	5		3	2		
			1	1	1	1						1		1				1	
									1			1		1					
		1	2	1			1					5	1	5	1	3		3	
1					1							2		1	1	2			
1													1	1		1			
1					2							2	3	5		2	2	1	
						1	2	1	1			4	3	6	1		3	4	
	1			1								6	1	5	2	2	5		
			2			1			2			6	1	6	1	2	2	3	
3	1	1		1			3					10	6	15	1	8	8		
			1			1						1	1	1	1			2	
												1	1	2		1		1	
												5	4	9			9		

TABLE 8.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BAYONNE.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	....	....	2	....	....
Malaria	4	....	....	....	....	....	....	....
Measles	6	....	....	4	....	....	....	....
Scarlet fever	7	....	....	10	2	....	....	....
Whooping cough	8	....	1	....	....	....	....	....
Diphtheria and croup	9	....	2	10	5	1	....	....
Including: Croup	9A	....	....	1	....	....	....	....
Dysentery	14	....	1	....	....	....	....	....
Erysipelas	18	1	1	....	....	....	....	....
Tuberculosis of the lungs	28	....	....	1	....	....	13	14
Tuberculous meningitis	30	....	2	2	1	....	....	....
Pott's disease	32	....	....	....	....	....	....	....
Syphilis	37	1	1	....	....	....	....	....
Cancer and other malignant tumors of the buccal cavity	39	....	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of the breast	43	....	....	....	....	....	....	....
Cancer and other malignant tumors of the skin	44	....	....	....	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	....	....	....	....	....
Other tumors (tumors of the female genital organs excepted)	46	....	....	....	....	....	....	....
Acute articular rheumatism	47	....	1	....	....	1	....	....
Diabetes	50	....	....	....	....	....	1	....
Leuchæmia	53	....	....	....	....	1	....	....
Other general diseases	55	....	....	....	....	....	....	....
Alcoholism (acute or chronic)	56	....	....	....	....	....	....	....
Encephalitis	60	....	1	....	....	....	....	....
Simple meningitis	61	....	6	5	1	....	....	....
Including: Cerebrospinal fever	61A	....	....	....	2	....	....	....
Other diseases of the spinal cord	63	....	....	....	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	1	....
Paralysis without specified cause	66	....	....	1	....	....	....	....
General paralysis of the insane	67	....	....	....	....	....	....	....
Epilepsy	69	....	....	....	....	....	....	....
Convulsions of infants	71	2	2	....	....	....	....	....
Chorea	72	....	....	....	....	1	....	....
Neuralgia and neuritis	73	....	....	....	....	....	....	....
Diseases of the ears	76	....	1	....	....	....	....	....
Acute endocarditis	78	....	1	....	2	1	....	....
Organic diseases of the heart	79	....	1	1	1	2	....	1
Angina pectoris	80	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Embolism and thrombosis	82	1	....	....	....	....	....	1
Diseases of the lymphatic system (lymphangitis, etc)	84	....	1	....	....	....	....	....
Diseases of the larynx	87	....	....	....	1	....	....	....
Acute bronchitis	89	1	6	....	....	....	....	....
Chronic bronchitis	90	....	....	1	....	....	....	....
Bronchopneumonia	91	4	11	8	....	....	....	....
Pneumonia	92	5	8	12	2	....	2	1
Pleurisy	93	....	1	5	....	....	....	1
Pulmonary congestion, pulmonary apoplexy	94	2	....	....	....	....	....	....
Asthma	96	....	....	....	1	....	....	....
Other diseases of the respiratory system (tuberculosis excepted)	98	....	....	....	....	....	....	....
Diseases of the pharynx	100	....	1	....	....	....	....	....
Ulcer of the stomach	102	....	....	....	....	....	....	....

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1												2	1	2	1		3		
	1											1			1				1
												3	1	4			4		
	1											7	6	11	2	1	12		
													1	1			1		
												10	8	18			18		
												1		1			1		
													1	1			1		
												2		2			2		
8	6	7	9	9	9	2	1					56	23	45	34	41	36	2	
												5		5			5		
							1					1			1	1			
							1						3	3		1	2		
			1		1							2			2	2			
		1	1	2	3	1	2	1	1			8	4	6	6	8	1	3	
	2		1		1	1							5	2	3	4	1		
			2	2	1		1	1					7	4	3	3	1	3	
		3											3	2	1	2	1		
			1									1				1			
				1			1					2		1	1	1	1	1	
							1						1		1			1	
				1	1		2	1	1			1	1	2			2		
												4	3	2	5	3	1	3	
													1	1			1		
		1		1									2	1	1	2			
		1	2	1	1	1						6		3	3	3	3		
													1	1			1		
			1				1					9	5	12	2	1	13		
												2		2			2		
							1					1		1		1			
				3	2	9	13	8	2			20	18	13	25	23	2	13	
												1		1			1		
	1											1		1		1			
		1					1						2	1	1	1		1	
												3	1	4			4		
												1		1			1		
	1												1		1	1			
													1	1			1		
			3	2	3	4	9	7	2			20	14	18	16	17	6	11	
1	2	4	2	2	1	1	5	5	2			16	15	14	17	15	10	6	
			1					1				2			2	2			
				1		1	1	3				4	2	2	4	4		2	
1					1							2	2	3	1	2		2	
												1		1			1		
													1	1			1		
								2		1		5	5	8	2		7	3	
				1			2					4		1	3	3	1		
												11	12	22	1		23		
2	6	6	1	4	2	3	8	5	3			43	27	51	19	23	33	13	1
												3	4	6	1		7		
				1									3	3		1	2		
						1	1		1			2	2	1	3	2	1	1	
1							1					2		1	1	1		1	
			1									1	1	1	1		2		
	1		1	1			1					2	2	2	2	4			

TABLE 8.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BAYONNE.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases of the stomach (cancer excepted)	103	4	4		1			
Diarrhœa and enteritis (Under 2 years)	104	8	53	12				
Diarrhœa and enteritis (2 years and over)	105			3				
Appendicitis and typhlitis	108				2		1	
Hernias, intestinal obstructions	109		2	1				
Cirrhosis of the liver	113							
Other diseases of the liver	115							
Other diseases of the digestive system (cancer and tuberculosis excepted)	118							
Acute nephritis	119		1	3	1	2	1	2
Bright's disease	120				1		2	2
Calculi of the urinary passages	123							
Diseases of the bladder	124							
Uterine tumor (noncancerous)	129							
Accidents of pregnancy	134							1
Puerperal hæmorrhage	135							1
Other accidents of labor	136						1	
Puerperal septicæmia	137							3
Puerperal albuminuria and convulsions	138							
Gangrene	142				1			
Acute abscess	144							
Congenital malformations (stillbirths not included)	150	6	1					
Congenital debility, icterus and sclerema	151	44						
Other diseases peculiar to early infancy	152	10	1					
Senility	154							
Suicide by poison	155							1
Poisoning by food	164							
Other acute poisonings	165			2				
Conflagration	166							
Burns (conflagration excepted)	167		1	3	1			2
Absorption of deleterious gases (conflagration excepted)	168							1
Accidental drowning	169							1
Traumatism by fall	172						1	1
Traumatism by machines	174							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175			2	5		1	2
Electricity (lightning excepted)	181							
Homicide by other means	184							
Cause of death not specified or ill defined	189	2	5	1				

Total deaths, 893. Death-rate, 12.61.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	..	1	...	...	...	...	...	...	...	...	7	3	8	2	1	9	....	....
...	...	...	..	...	...	...	...	...	...	...	...	42	31	73	.....	...	73	....	....
1	...	...	.	3	1	2	2	5	3	...	...	8	12	9	11	9	3	8	....
2	2	1	...	...	...	...	...	1	...	...	...	6	3	3	6	3	5	1	....
...	...	...	...	...	...	2	...	...	...	...	...	1	4	3	2	1	3	1	....
1	2	...	1	1	1	2	1	...	...	...	...	7	2	4	5	8	....	1	....
...	...	...	...	...	1	...	...	...	...	...	....	....	1	1	.....	1	....	....	....
1	...	1	...	...	...	...	...	...	...	...	...	2	...	.....	2	1	1	....	....
...	...	2	1	...	2	...	...	1	...	...	...	9	7	11	5	5	9	2	....
3	4	4	3	4	6	4	8	7	...	...	...	28	20	23	25	29	11	8	....
...	...	...	...	...	...	1	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	.....	1	1	....	....	....
1	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	1	...	1	...	...	...	...	...	...	...	...	....	3	2	1	3	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	....	2	.....	2	2	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	....	2	2	.....	2	....	....	....
...	...	...	...	1	...	...	...	...	...	...	...	....	4	2	2	3	1	....	....
...	1	...	1	...	...	...	...	...	...	...	...	....	2	2	.....	2	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	1	...	...	...	...	...	...	...	...	...	1	...	.....	1	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	3	7	.....	....	7	....	....
...	...	...	...	...	...	...	...	...	...	...	...	20	24	44	.....	....	44	....	....
...	...	...	...	...	...	...	...	...	...	...	...	5	6	11	.....	....	11	....	....
...	...	...	...	...	...	...	1	...	1	...	...	1	1	1	1	1	....	1	....
1	1	1	...	...	...	...	...	...	...	...	...	4	....	3	1	....	4	....	....
...	...	...	...	...	...	1	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	....	2	.....	....	2	....	....
...	...	...	2	...	...	...	...	...	...	...	...	2	....	2	.....	....	2	....	....
...	...	1	...	...	1	...	...	...	...	...	...	1	8	6	3	4	5	....	....
2	...	...	1	...	...	...	...	...	...	...	...	1	3	1	3	1	3	....	....
...	2	1	1	...	2	...	...	...	...	...	...	7	....	3	4	3	4	....	....
...	1	1	...	...	...	3	...	...	...	...	...	5	2	2	5	3	3	1	....
...	...	...	1	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
1	5	1	1	3	...	...	1	...	...	...	...	19	3	11	11	8	11	1	2
1	...	...	1	...	...	...	...	...	...	...	...	2	....	2	.....	2	....	....	....
...	...	...	...	...	1	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
..	...	...	...	...	...	...	...	...	...	...	...	5	3	8	.....	....	8	....	....

TABLE 9.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BLOOMFIELD.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Whooping cough	8		2	1				
Erysipelas	18	1						
Tuberculosis of the lungs	28			1				
Tuberculous meningitis	30			1				
Abdominal tuberculosis	31				1			
Syphilis	37	1						
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of other organs [or of] organs not specified	45							
Diabetes	50							
Anæmia, chlorosis	54				1	1		
Other general diseases	55							
Alcoholism (acute orchronic)	56							
Other chronic occupation poisonings	58							
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Convulsions of infants	71		2	1				
Chorea	72				1			
Diseases of the ears	76		1					
Acute endocarditis	78					1		
Organic diseases of the heart	79							
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82							
Acute bronchitis	89		1					
Chronic bronchitis	90							
Bronchopneumonia	91		1	2				
Pneumonia	92	2	3	2	1			
Pleurisy	93							
Asthma	96							
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103	1	1	1				
Diarrhœa and enteritis (Under 2 years)	104		7					
Diarrhœa and enteritis (2 years and over)	105			1				
Acute nephritis	119							
Bright's disease	120							
Congenital malformations (stillbirths not included)	150	2						
Congenital debility, icterus and sclerema	151	13						
Other diseases peculiar to early infancy	152	1						
Senility	154							
Suicide by poison	155							
Burns (conflagration excepted)	167				1			
Accidental drowning	169			1				
Traumatism by fall	172				1			
Homicide by other means	184						1	

Total deaths, 167. Death-rate, 9.76.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												2	1	3			3		
												1		1			1		
1	4	1	4	1	1	2	1	2				10	10	13	6	8	8	4	
												1		1			1		
												1		1			1		
												1		1			1		
						1	3	2				5	1		6	4	1	1	
	1												1	1		1			
			1			1			1			1	2	1	2	2		1	
			1	1	1							2	1	2	1	2	1		
							1		1				2	2				2	
	1												3	2	1		3		
							1						1	1				1	
			1									1		1		1			
			1									1			1	1			
			2	1		2	2	2	1			5	5	7	3	7	2	1	
							2	2				1	3	4		1	1	2	
												1	2	3			3		
													1	1			1		
												1		1			1		
1					1		1	3	1			4	4	6	2	2	3	3	
	1				2		2	3		1		3	6	4	5	4	3	2	
								1				1		1		1			
						1	2	2	1			2	4	2	4	3		3	
		1											1	1		1			
								1				1	1	2			1	1	
								1	1			1	1	1	1			2	
												1	2	2	1		3		
1					1	1	3	3	2			9	10	16	3	5	10	4	
		1						1					2		2	1		1	
							1					1			1	1			
							1						1	1				1	
												1	2	3			3		
												5	2	7			7		
								1					2	2			1	1	
					1				1			2		2				2	
1		2	1			1	1	2				3	5	5	3	6	1	1	
													2	2			2		
												8	5	13			13		
													1	1			1		
										1			1		1			1	
							1					1		1				1	
												1		1			1		
				1								2		1	1		2		
												1		1			1		
													1		1	1			

TABLE 10.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BORDENTOWN		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	
Tuberculosis of the lungs	28	....	....	...	...	...	1	3	
Tuberculous meningitis	30	....	....	1	...	...	...	...	
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...	
Cancer and other malignant tumors of the breast	43	....	....	...	...	...	...	...	
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	...	...	...	...	...	
Other tumors (tumors of the female genital organs excepted)	46	....	....	...	...	...	...	...	
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...	
Simple meningitis	61	....	....	1	...	...	...	...	
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...	
Paralysis without specified cause	66	....	....	...	...	...	...	...	
Convulsions of infants	71	....	1	...	...	...	...	...	
Organic diseases of the heart	79	....	....	...	...	...	...	...	
Angina pectoris	80	....	....	...	...	...	...	...	
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...	
Pneumonia	92	....	....	1	...	...	...	...	
Pleurisy	93	....	....	...	...	...	...	...	
Other diseases of the stomach (cancer excepted)	103	1	1	...	1	...	...	...	
Diarrhœa and enteritis (Under 2 years)	104	....	1	...	...	...	...	...	
Diarrhœa and enteritis (2 years and over)	105	....	....	...	...	...	...	...	
Hernias, intestinal obstructions	109	....	....	...	...	...	...	...	
Bright's disease	120	....	....	...	...	...	...	...	
Other accidents of labor	136	....	....	...	...	...	...	1	
Gangrene	142	....	....	...	...	...	...	...	
Congenital malformations (stillbirths not included)	150	1	....	...	...	...	...	...	
Congenital debility, icterus and sclerema	151	1	....	...	...	...	...	...	
Senility	154	....	....	...	...	...	...	...	
Burns (conflagration excepted)	167	....	....	...	...	...	...	...	
Accidental drowning	169	....	....	...	...	...	...	1	
Homicide by other means	184	1	....	...	...	...	...	...	

Total deaths, 68. Death-rate, 15.61.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	3	...	...	...	...	...	...	1	6	7	.....	4	2	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	....	1	...	....
...	...	...	...	...	...	...	...	1	1	...	..	....	2	1	1	....	....	2	....
...	...	...	...	...	...	1	...	...	...	...	...	....	1	1	.....	1	....	...	....
...	...	...	...	...	1	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	1	.....	1	....	....	....
1	...	...	1	...	...	...	...	...	...	...	...	2	....	2	.....	1	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	3	3	...	...	2	4	5	1	....	....	6	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	2	4	1	2	...	...	2	7	6	3	3	....	6	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	...	1	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	1	...	...	...	...	...	...	1	...	...	...	3	....	1	2	1	2	....	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	1	...	...	...	...	...	1	...	...	4	1	5	.....	2	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	1	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	1	...	...	....	1	1	.....	....	....	1	....
...	...	...	1	...	2	...	1	1	2	...	...	5	2	6	1	5	1	1	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	1	1	2	...	1	3	4	.....	....	2	2	....
...	...	...	...	...	1	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	1	...	...	2	...	...	...	...	...	...	3	1	2	2	2	1	....	1
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....

TABLE 11.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BRIDGETON.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1							
Measles	6		2	3	2			2
Scarlet fever	7			1				
Whooping cough	8	1	2					
Influenza	10							
Tuberculosis of the lungs	28						1	4
Tuberculous miningitis	30				1			
Abdominal tuberculosis	31			2				
Pott's disease	32						1	
White swellings	33							1
Tuberculosis of other organs	34		1					
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							1
Cancer and other malignant tumors of other organs or of organs not specified	45					1		
Chronic rheumatism and gout	48							
Diabetes	50							
Exophthalmic goitre	51							1
Alcoholism (acute or chronic)	56							
Simple meningitis	61				1			
Other diseases of the spinal cord	63							
Cerebral haemorrhage, apoplexy	64							
Paralysis without specified cause	66							
Other forms of mental alienation	68							
Convulsions of infants	71	1	2					
Neuralgia and neuritis	73							
Other diseases of the nervous system	74							1
Pericarditis	77							
Acute endocarditis	78						1	
Organic diseases of the heart	79							
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Diseases of the larynx	87		1					
Chronic bronchitis	90							
Bronchopneumonia	91				1			
Pneumonia	92		1	2	2	1		
Pleurisy	93							
Pulmonary congestion, pulmonary appoiexy	94		1		1			
Asthma	96							
Other diseases of the respiratory system (tuberculosis excepted)	98							
Other diseases of the mouth and annexa	99							
Diseases of the pharynx	100				1			
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103							
Diarrhœa and enteritis (Under 2 years)	104		4	1				
Diarrhœa and enteritis (2 years and over.)	105							
Appendicitis and Typhlitis	108							
Hernias, intestinal obstructions	109							
Other diseases of the intestines	110			1				
Acute yellow atrophy of the liver	111				1			
Cirrhosis of the liver	113							
Biliary calculi	114							
Other diseases of the liver	115							
Acute nephritis	119							

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												2		2		1	1		
												5	2	7			7		
													1	1			1		
													3	3			3		
								1					1	1				1	
	2	2	1	2		1	1					11	3	14		9	5		
												1		1			1		
												2		2			2		
													1	1			1		
													1	1			1		
												1		1			1		
						2	2	1				3	2	5		4		1	
						1	1					1	1	2		2			
			1				1						3	3		2	1		
			1										1	1		1			
							2					3		3		2	1		
							1						1	1		1			
						1							1	1				1	
						1							2	2			2		
1												1		1			1		
													1	1				1	
				1	1		1	1				4		4		3		1	
						2	4	3	3	2		9	5	12	2	7		6	1
					1			4	3			3	5	8			2	6	
								1				1		1				1	
												3		3			3		
									1				1	1			1		
												1		1			1		
1												1		1		1			
			1					3				1	5	5		3		2	
	1		1	1		4	3	7	1			11	7	16	2	12	1	5	
							2						2	2		1		1	
							1	1				2		2		1		1	
													1	1			1		
							1						1	1				1	
				1				1					3	3		2	1		
				2			1	1				3	7	10		3	6	1	
							1		1			2		2		1		1	
												2		1	1		2		
							1					1		1		1			
						1	1						2	2		2			
				1								1		1		1			
													1	1			1		
							1					1		1		1			
								2					2	2				2	
												3	2	5			5		
	1		1		1				2			2	1	2	1	1		2	
												1	1	2		2			
2							1					1	2	3		2	1		
							1	1	1			2	2	4		1	1	2	
												1		1			1		
						1	1					1	1	2				2	
	1											1		1		1			
					1								1	1		1			
										1		1		1		1		1	

TABLE 11.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BRIDGETON.		AGE PERIODS.						
		Under one month.	Under 1 year "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Bright's disease	120	....	....	....	....	....	....	....
Other diseases of the kidneys and annexa	122	....	....	....	....	....	....	....
Diseases of the bladder	124	....	....	....	....	....	....	....
Other diseases of the uterus	130	....	....	....	....	....	....	....
Cysts and other tumors of the ovary	131	....	....	....	....	....	....	....
Accidents of pregnancy	134	....	....	....	....	....	....	....
Puerperal hæmorrhage	135	....	....	....	....	....	....	....
Puerperal septicæmia	137	....	....	....	....	....	....	....
Puerperal albuminuria and convulsions	138	....	....	....	....	....	....	....
Diseases of the bones (tuberculosis excepted)	146	....	....	....	....	....	....	....
Congenital malformations (stillbirths not included)	150	1	1	1	....	....	....	....
Congenital debility, icterus and sclerema	151	13	1	....	....	....	....	....
Other diseases peculiar to early infancy	152	....	1	....	....	....	....	....
Senility	154	....	....	....	....	....	....	....
Suicide by cutting or piercing instruments	160	....	....	....	....	....	....	....
Burns (conflagration excepted)	167	....	....	....	....	....	....	....
Accidental drowning	169	....	....	....	....	1	....	....
Traumatism by firearms	170	....	....	....	....	....	....	....
Traumatism by fall	172	....	....	....	....	....	....	....
Traumatism by machines	174	....	....	....	....	....	....	....
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	....	....	....	....
Homicide by other means	184	....	....	....	....	....	....	....
Cause of death not specified or ill-defined	189	....	....	....	....	....	....	....

Total deaths, 221. Death-rate, 15.18.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
	1			1		2	3	4	2			6	7	11	2	5	1	7	
						1						1		1		1			
						1	1					1	1	2		1		1	
							1						1	1		1			
								1					1		1			1	
1													1		1	1			
													1	1		1			
	1												1	1		1			
1	1												2	2		2			
							1					1		1		1			
												2	1	3			3		
												8	6	14			14		
												1		1			1		
									2				2	1	1			2	
							1						1		1	1			
							1						1		1	1			
												1		1			1		
			1									1			1	1			
1												1		1		1			
				1								1		1		1			
							1	1	1			3	1	4		1	1	2	
												1			1		1		
												2		2			2		

TABLE 12.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BURLINGTON CITY.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	...	...	1	...
Whooping cough	8	....	1	1	...	...	...	...
Diphtheria and croup	9	....	....	1	...	...	...	1
Tuberculosis of the lungs	28	....	....	1	...	...	1	...
Rickets	36	....	1	...	...	...	...	...
Cancer and other malignant tumors of the buccal cavity	39	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	...
Cancer and other malignant tumors of the breast	43	....	....	...	...	...	...	...
Cancer and other malignant tumors of the skin	44	....	....	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	...	...	...	...	...
Acute articular rheumatism	47	....	....	...	...	...	...	...
Chronic rheumatism and gout	48	....	....	...	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Locomotor ataxia	62	....	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	....	...	...	...	...	...
Epilepsy	69	....	....	...	...	...	1	...
Acute endocarditis	78	....	....	...	...	...	...	...
Organic diseases of the heart	79	....	....	...	...	...	...	...
Angina pectoris	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Acute bronchitis	89	....	....	...	...	...	...	...
Chronic bronchitis	90	....	....	...	...	...	...	...
Bronchopneumonia	91	1	2	...	...	...	...	...
Pneumonia	92	2	2	2	...	...	2	...
Pleurisy	93	....	....	...	...	...	...	...
Pulmonary congestion, pulmonary apoplexy	94	....	....	...	...	...	...	...
Asthma	96	....	....	...	...	...	...	...
Other diseases of the respiratory system (tuberculosis excepted)	98	....	....	...	...	...	...	...
Ulcer of the stomach	102	....	....	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	....	1	1	1	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	....	13	...	2	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	...	...	...	...	...
Hernias, intestinal obstructions	109	....	....	...	...	...	...	...
Cirrhosis of the liver	113	....	....	...	...	...	...	...
Other diseases of the liver	115	....	....	...	...	...	...	...
Bright's disease	120	....	....	...	...	...	1	...
Diseases of the prostate	126	....	....	...	...	...	...	...
Gangrene	142	....	....	...	...	...	...	...
Congenital debility, icterus and sclerema	151	5	....	...	...	...	...	...
Suicide by firearms	159	....	....	...	...	...	...	...
Poisoning by food	164	....	....	...	...	...	1	...
Accidental drowning	169	....	....	...	1	1	...	2
Traumatism by fall	172	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc)	175	....	....	...	...	...	1	...

Total deaths, 144. Death-rate, 16.91.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30.	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere	Married.	Single.	Widowed.	Not stated.
													1	1			1		
												2		2			2		
													1	1			1		
1		2		1	1							6	2	8		1	5	2	
												1		1			1		
								2				2		2		2			
						1		1				2		2		2			
								1					1	1				1	
				1									1	1		1			
								1				1		1		1			
								1					1	1				1	
									1			1		1				1	
	1											1		1			1		
							1						1	1					
		1		1	2	1	1	5	4	1		9	7	13	3	9	3	4	
								1					1	1				1	
												1		1			1		
							1	2				1	2	2	1	1		2	
		2			2			6	3			7	6	10	3	6		7	
			1										1	1		1			
						1	1					2		2		2			
		1							2			1	2	3			2	1	
								1					1		1			1	
			1			1	2					1	2	3			3		
												9	3	9	3	4	8		
				1								1		1		1			
								1		1			2	2		1		1	
						1						1		1		1			
								1				1		1		1			
							1						1		1	1			
								1				3	1	4		1	3		
												8	7	15			15		
1			1		1				1				4	2	2	1	2	1	
					1							1		1		1			
								1				1		1				1	
	1											1		1		1			
		2		2			1	2		1		3	6	8	1	5	2	2	
								1				1		1			1		
										1			1	1				1	
												3	2	5			5		
			1			1						2		1	1	2			
													1	1			1		
2												6		1	5	1	4	1	
						1			1				2	2		1	1		
2							1					4		2	2	1	3		

TABLE 13.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN CAMDEN CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	1	...	3	5
Measles	6	....	7	12	...	...	...	...
Scarlet fever	7	....	....	2	6	1	1	1
Whooping cough	8	....	16	12	1	...	...	...
Diphtheria and croup	9	....	3	16	9	...	...	...
Including: Croup	9A	....	....	9	3	...	...	...
Influenza	10	....	....	...	...	...	...	...
Erysipelas	18	....	....	...	...	...	...	...
Other epidemic diseases	19	....	1	...	...	...	...	...
Purulent infection and septicæmia	20	....	....	...	...	...	...	...
Tetanus	24	1	....	...	...	...	...	...
Tuberculosis of the lungs	28	1	....	1	...	3	11	26
Acute miliary tuberculosis	29	....	....	...	...	...	1	...
Tuberculous meningitis	30	1	1	2	2	1	...	...
Abdominal tuberculosis	31	....	1	...	1	1	...	...
Pott's disease	32	....	....	...	...	...	...	...
Tuberculosis of other organs	34	....	....	...	...	...	...	...
Syphilis	37	1	3	1	...	...	...	...
Cancer and other malignant tumors of the buccal cavity	39	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	..
Cancer and other malignant tumors of the breast	43	....	....	...	...	...	...	...
Cancer and other malignant tumors of the skin	44	....	....	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	1	1	...	...	...
Other tumors (tumors of the female genital organs excepted)	46	....	....	...	...	...	...	...
Acute articular rheumatism	47	....	....	...	...	...	1	1
Chronic rheumatism and gout	48	....	....	...	...	...	...	...
Diabetes	50	....	....	...	...	...	1	...
Leuchæmia	53	....	....	...	...	...	...	...
Anæmia, chlorosis	54	....	....	...	...	...	...	1
Other general diseases	55	1	....	...	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Chronic lead poisoning	57	....	....	...	...	...	...	...
Simple meningitis	61	2	3	2	4	1	...	...
Including: Cerebrospinal fever	61A	....	1	...	...	1	1	...
Locomotor ataxia	62	....	....	...	...	...	...	...
Other diseases of the spinal cord	63	....	1	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Softening of the brain	65	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	....	...	...	...	...	...
General paralysis of the insane	67	....	....	...	...	...	...	...
Other forms of mental alienation	68	....	....	...	...	...	...	...
Epilepsy	69	....	....	...	...	...	1	...
Convulsions of infants	71	1	6	...	...	...	...	...
Chorea	72	....	....	...	...	...	1	...
Other diseases of the nervous system	74	....	1	...	...	...	...	...
Pericarditis	77	....	....	...	...	...	...	...
Acute endocarditis	78	....	1	1	...	...	1	1
Organic diseases of the heart	79	2	3	3	1	2	2	1
Angina pectoris	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Embolism and thrombosis	82	....	....	...	...	...	...	...
Diseases of the larynx	87	....	1	...	1	...	...	...
Acute bronchitis	89	....	....	2	1	...	...	...
Chronic bronchitis	90	....	1	...	...	...	...	...
Bronchopneumonia	91	3	19	12	...	...	1	...
Pneumonia	92	5	33	41	6	1	2	3
Pleurisy	93	....	2	1	1	...	...	3
Pulmonary congestion, pulmonary apoplexy	94	2	1	2	...	1	...	...
Asthma	96	....	....	...	...	...	...	...

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
4	...	5	...	1	...	...	...	...	...	...	...	14	5	11	8	6	11	2	....
...	...	...	...	...	...	...	...	...	...	...	...	9	10	18	1	....	19	....	....
...	...	...	...	...	...	...	...	...	...	...	...	6	5	11	.....	....	11	....	....
...	...	...	...	...	...	...	...	...	...	...	...	12	17	29	.....	....	29	....	....
...	...	...	...	...	...	...	...	...	...	...	...	14	14	28	.....	....	28	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	8	12	.....	....	12	....	....
...	...	...	...	...	...	...	2	...	...	...	...	....	2	2	.....	....	1	1	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	.....	1	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	....	1	....	....
...	...	...	...	...	1	1	1	1	...	...	...	3	1	3	1	3	...	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
20	18	19	17	8	8	4	11	3	...	...	...	86	64	128	122	76	58	16	....
...	...	...	1	...	...	...	...	...	...	...	...	1	1	1	1	....	2	....	....
1	1	...	1	...	...	...	...	...	...	...	...	7	3	10	.....	1	6	3	....
...	...	...	1	...	...	...	...	1	...	...	...	2	3	5	.....	2	3	....	....
...	...	1	...	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	1	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	3	3	6	.....	1	5	....	..
...	...	...	...	...	...	...	2	3	...	...	...	3	2	3	2	3	....	2	....
...	1	1	5	4	4	8	5	9	1	...	...	22	16	25	13	27	1	9	..
...	...	...	1	3	1	...	1	3	1	...	...	1	9	9	1	3	5	2	..
...	...	1	3	3	2	2	2	1	...	...	...	....	14	10	4	11	1	2	....
...	...	1	...	1	1	2	2	1	...	...	...	1	7	5	3	6	....	2	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	1	...	...	1	...	3	2	...	...	4	5	6	3	2	2	5	....
...	...	...	1	...	...	...	1	1	...	...	...	....	3	3	.....	1	1	1	....
...	...	1	...	...	1	...	...	2	1	...	...	4	3	6	1	2	2	3	....
...	...	...	1	...	...	...	...	...	...	...	...	....	1	.....	1	....	....	1	.. 1
...	...	...	...	1	...	...	6	1	...	...	...	5	4	4	5	6	1	1	..
...	...	...	...	...	...	1	...	...	...	...	...	1	...	.....	1	1	....	....	....
...	...	1	...	1	...	...	1	...	...	...	...	2	2	3	1	3	...	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	3	...	1	1	1	1	...	...	...	...	...	6	1	5	2	3	1	2	..
...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	1	....	....	....
...	...	1	...	...	1	...	...	...	...	...	...	12	2	14	.....	1	12	1	.. 1
...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	.....	....	3	....	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	1	...	...	...	...	1	4	...	...	...	3	4	5	2	1	1	5	..
1	...	2	2	...	6	6	13	18	5	2	...	25	30	39	16	27	2	25	1
...	...	...	...	...	...	...	...	1	1	...	...	1	1	1	1	....	....	2	....
...	...	...	1	2	...	3	2	9	3	...	...	6	14	14	6	10	1	9	....
...	...	...	...	1	...	1	...	...	...	...	...	1	1	2	.....	2	....	....	....
1	...	...	...	...	1	...	...	...	...	...	...	1	1	1	1	2	....	....	....
...	2	1	...	...	...	...	...	...	...	...	...	1	3	3	1	1	2	1	....
...	...	...	...	...	...	...	...	...	...	...	...	4	3	7	.....	....	7	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	....	2	....	....
...	...	...	...	...	...	1	2	...	...	...	...	2	1	2	1	3	...	....	....
...	4	2	3	4	4	3	16	9	4	1	...	17	37	32	22	32	8	14	....
2	8	8	8	9	7	5	24	23	4	...	...	60	52	88	24	54	22	36	....
...	...	...	...	...	...	...	1	1	...	1	...	3	...	2	1	2	...	1	....
...	...	...	1	...	1	1	9	13	5	...	...	17	13	26	4	18	2	10	....
...	...	...	2	...	...	1	...	1	...	...	...	1	3	3	1	3	...	1	....
1	...	...	...	1	...	...	...	...	...	...	...	2	2	4	.....	1	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	.....	....	3	....	....
...	...	...	...	...	...	1	...	...	...	...	...	1	1	2	.....	1	1	....	....
1	...	2	2	1	1	...	4	4	1	1	...	30	22	45	17	8	37	7	....
3	6	5	10	3	5	8	15	7	7	1	...	89	72	141	20	42	100	18	1
...	...	...	...	...	...	...	3	2	...	...	...	6	6	8	4	4	6	2	....
...	...	...	...	...	...	...	...	...	1	...	...	5	2	7	.....	1	6	....	....
...	...	...	1	...	...	...	1	1	1	...	...	3	1	1	.....	3	4	....	....

TABLE 13.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN CAMDEN CITY.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases of the respiratory system (tuberculosis excepted)	98				1			
Diseases of the pharynx	100						1	1
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103	1	12	2				
Diarrhœa and enteritis (Under 2 years)	104	7	91	15				
Diarrhœa and enteritis (2 years and over)	105			8	1	2		
Appendicitis and typhlitis	108			1	1	1	4	1
Hernias, intestinal obstructions	109		2	1				
Other diseases of the intestines	110							
Acute yellow atrophy of the liver	111							1
Cirrhosis of the liver	113							
Biliary calculi	114							
Other diseases of the liver	115	1						
Simple peritonitis (nonpuerperal)	117							
Other diseases of the digestive system (cancer and tuberculosis excepted)	118							
Acute nephritis	119							
Bright's disease	120		2	4	2	1	2	2
Other diseases of the kidneys and annexa	122	1						1
Calculi of the urinary passages	123							
Other diseases of the urethra, urinary abscess, etc.	125							
Diseases of the prostate	126							
Uterine tumor (noncancerous)	129							
Other diseases of the uterus	130							
Accidents of pregnancy	134						1	
Puerperal hæmorrhage	135						1	
Other accidents of labor	136							1
Puerperal septicaemia	137							3
Puerperal albuminuria and convulsions	138						1	1
Gangrene	142							
Acute abscess	144							
Other diseases of the skin and annexa	145							
Diseases of the bones (tuberculosis excepted)	146					1		
Congenital malformations (stillbirths not included)	150	5	1	1				
Congenital debility, icterus and sclerema	151	71	13	1				
Other diseases peculiar to early infancy	152	11	7	1				
Senility	154							
Suicide by poison	155						1	1
Suicide by asphyxia	156							
Suicide by hanging or strangulation	157							
Suicide by drowning	158							1
Suicide by firearms	159						1	
Suicide by cutting or piercing instruments	160							
Other acute poisonings	165							
Burns (conflagration excepted)	167			5	1	1		1
Absorption of deleterious gases (conflagration excepted)	168			1				
Accidental drowning	169				1	2	3	3
Traumatism by firearms	170			1	1	1	1	1
Traumatism by cutting or piercing instruments	171							
Traumatism by fall	172				2	1		1
Traumatism in mines and quarries	173							
Traumatism by machines	174				1			1
Traumatism by other crushing (vehicles, railroad, landslides, etc.	175			1	2	1		3
Effects of heat	179	1	1					
Electricity (lightning excepted)	181							
Homicide by firearms	182							
Homicide by cutting or piercing instruments	183							
Homicide by other means	184						1	
Cause of death not specified or ill-defined	189	1	9	3				

Total deaths, 1,680. Death-rate, 16.59.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												1		1			1		
												1	1	2		1	1		
1												1			1	1			
				1	1	1	2	2		1		17	6	23		5	15	3	
												60	53	113			113		
1	1			1	3	1	6	4	4	1		19	14	27	6	11	13	9	
2	1	3	2		1		1					9	9	17	1	9	9		
	1						3		1			6	2	7	1	3	3	2	
1		1							1				3	1	2	2		1	
													1	1		1			
		1	3	1	4	1	2	1				8	5	11	2	8	3	2	
								1					1		1			1	
			1	1		2	2					3	4	5	2	6	1		
	1				1		1	1				1	3	3	1	3		1	
		1										1		1			1		
		1	2	2	2			2	1	1		5	6	9	2	5	2	4	
1	5	7	5	6	17	14	33	31	5	1		76	62	108	30	73	29	40	
													2	2		1	1		
				1	1	2	1						5	2	3	3		2	
		1										1		1		1			
								3				3		3		2		1	
	1												1	1		1			
								1					1	1				1	
1	2	1		1									6	6		5	1		
1		2	1										5	4	1	4	1		
2	1	1											5	2	3	5			
3	3		1										10	9	1	10			
													2	2		1	1		
							1	1				1	1		2			2	
						1						1		1		1			
				1									1	1		1			
												1		1			1		
												3	4	7			7		
												40	45	85			85		
												13	6	19			16		
							1	3	6			2	8	5	5			10	
2			1									2	3	2	3		4	1	
1	1						1	1				2	2	4		3		1	
			1									1			1	1			
												1			1	1			
	1	1				1	3					7		3	4	4	2	1	
1					1							2		1	1	1	1		
1													1	1		1			
		1	1				1					3	8	9	2	3	8		
1									1			1	2	2	1	1	1	1	
2		1	2	1			1					16		10	6	5	8		3
												5		5			5		
							1					1			1		1		
		2	1	2			4	3	1	1		11	7	8	10	7	6	5	
			1									1				1			
	2											4		3	1	2	2		
5	1	2	5	3	2	3	6	1				29	6	22	13	20	11	3	1
					1				1			1	3	2	2	1	2	1	
	1	1	1									3		3		3			
1	1		1									2	1	3		1	1	1	
			1										1	1		1			
	1	1				1						3	1	2	2	2	2		
												3	10	12	1		13		

TABLE 14.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN DOVER.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Measles	6	....	....	1	....	....	....	....
Scarlet fever	7	....	....	....	....	1	....	....
Diphtheria and croup	9	....	....	....	1	....	....	....
Dysentery	14	....	....	....	....	....	....	....
Purulent infection and septicæmia	20	....	....	1	....	....	....	....
Tuberculosis of the lungs	28	....	....	....	....	....	....	2
Syphilis	37	1	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Anæmia, chlorosis	54	....	....	....	....	....	....	....
Simple meningitis	61	....	....	1	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	....	....
Acute endocarditis	78	....	....	1	....	....	1	....
Organic Diseases of the heart	79	....	....	....	....	....	....	....
Angina pectoris	80	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Diseases of the larynx	87	....	....	1	....	....	....	....
Acute bronchitis	89	....	....	3	....	....	....	....
Chronic bronchitis	90	....	....	....	....	....	....	....
Bronchopneumonia	91	1	1	1	....	....	....	....
Pneumonia	92	....	1	1	....	....	....	....
Pulmonary congestion, pulmonary apoplexy	94	1	....	....	....	....	....	....
Other diseases of the stomach (cancer excepted)	103	....	2	....	....	....	....	....
Diarrhæa and teritis (Under 2 years	104	1	1	....	....	....	....	....
Diarrhæa and enteritis 2 years and over)	105	....	....	1	....	....	....	....
Other diseases of the intestines	110	....	....	....	....	....	....	....
Other diseases of the liver	115	....	....	....	....	....	....	....
Acute nephritis	119	....	....	1	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	....
Calculi of the urinary passages	123	....	....	....	....	....	....	....
Diseases of the bladder	124	....	....	....	....	....	....	....
Other accidents of labor	136	....	....	....	....	....	....	....
Puerperal septicæmia	137	....	....	....	....	....	....	....
Congenital debility, icterus and sclerema	151	10	....	....	....	....	....	....
Suicide by hanging or strangulation	157	....	....	....	....	....	....	....
Accidental drowning	169	....	....	....	....	....	....	....
Traumatism by other crushing (vehicles, railroad, landslides, etc.	175	....	....	....	....	....	....	....

Total deaths, 83. Death-rate, 10.20.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90	Not stated	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												1		1			1		
												1		1			1		
													1	1			1		
							1						1		1			1	
												1		1			1		
1	1	1			1							2	4	6		3	3		
													1	1			1		
								2					2	2		1		1	
								1					1		1	1			
					1			1					1		1	1			
								1				1		1		1			
							2	2				2	2	4		3		1	
								1				2	1	2	1	1	2		
1		1						1	1			2	2	3	1	2	1	1	
								1					1		1			1	
						2	1	1	2			5	1	3	3	2		4	
													1	1			1		
												2	1	3			3		
								1				1		1		1			
												3		3			3		
1								2				3	2	3	2	2	2	1	
												1		1			1		
								1	1			2	2	4		1	2	1	
												1	1	2			2		
								1				2		2			2		
1												1		1			1		
								1					1		1	1			
					1							2		1	1		1	1	
							1	1				1	1	2		1		1	
	1												1	1			1		
									1			1			1			1	
1														1		1			
1													1	1		1			
												7	3	10			10		
				1								1			1				1
				1								1			1		1		
1						1	1					2	1	3		2		1	

TABLE 15.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN EAST ORANGE.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Diphtheria and croup	9	....	....	4	6	1	...	...
Including: Croup	9A	....	....	...	1	...	...	...
Influenza	10	....	1	1	...	...	...	...
Erysipelas	18	1	....	...	...	...	...	...
Tuberculosis of the lungs	28	....	....	...	...	...	4	2
Tuberculous meningitis	30	....	1	1	3	...	...	...
Abdominal tuberculosis	31	....	....	1	1	...	...	...
Pott's disease	32	....	....	1	...	1	...	...
Syphilis	37	....	....	...	...	...	...	...
Cancer and other malignant tumors of the buccal cavity	39	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	...
Cancer and other malignant tumors of the breast	43	....	....	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	...	...	...	...	...
Acute articular rheumatism	47	....	....	...	...	...	...	...
Chronic rheumatism and gout	48	....	....	...	...	...	...	...
Diabetes	50	....	....	...	...	...	...	...
Addison's disease	52	....	....	...	...	...	...	...
Leuchæmia	53	....	....	...	...	...	...	...
Anæmia, chlorosis	54	....	....	...	...	...	...	...
Encephalitis	60	....	....	...	...	...	...	...
Simple meningitis	61	....	1	...	...	...	...	...
Locomotor ataxia	62	....	....	...	...	...	...	...
Other diseases of the spinal cord	63	....	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Epilepsy	69	....	....	...	...	1	...	...
Convulsions of infants	71	....	1	...	...	...	...	...
Other diseases of the nervous system	74	....	....	...	...	...	...	...
Acute endocarditis	78	....	....	...	1	1	...	...
Organic diseases of the heart	79	....	....	...	...	...	...	...
Angina pectoris	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Embolism and thrombosis	82	....	....	...	...	...	1	...
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)	83	....	....	...	...	...	...	...
Acute bronchitis	89	....	2	...	...	...	...	...
Chronic bronchitis	90	....	....	...	...	...	...	...
Bronchopneumonia	91	1	1	3	2	...	...	1
Pneumonia	92	....	3	5	...	...	...	...
Pleurisy	93	....	....	...	...	...	...	...
Pulmonary congestion, pulmonary apoplexy	94	....	....	...	...	...	...	...
Asthma	96	....	....	...	...	...	...	...
Other diseases of the mouth and annexa	99	....	....	...	...	...	...	...
Ulcer of the stomach	102	....	....	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	....	1	1	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	1	3	...	1	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	...	...	...	...	...
Appendicitis and typhlitis	108	....	....	...	...	...	...	...
Hernias, intestinal obstructions	109	....	....	...	...	...	...	...
Other diseases of the intestines	110	1	....	...	...	...	...	...
Cirrhosis of the liver	113	....	....	...	...	...	...	...
Acute nephritis	119	....	....	...	...	...	...	...
Bright's disease	120	....	....	...	...	...	...	...
Other diseases of the kidneys and annexa	122	....	....	...	...	...	...	...
Diseases of the prostate	126	....	....	...	...	...	...	...
Other accidents of labor	136	....	....	...	...	...	...	...

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
					1							4	8	12		1	11		
													1	1			1		
								2				4		3	1	1	2	1	
													1	1			1		
4	5	6	5	4	2	2	1					19	16	29	5	20	13	2	
												2	3	5			5		
												1	1	2			2		
												1	1	2			2		
		1										1		1		1			
							1					1		1		1			
		1	2	1	2	3	1	2				5	7	11	1	9	1	2	
						1	3	1				1	4	4	1	3	1	1	
			1				1		1				3	1	2	1		2	
		1				1	1						3	2	1	2		1	
								1					1	1				1	
							1						1	1				1	
									1				1	1				1	
						1		2					3	1	2			3	
1												1		1		1			
1													1	1		1			
						1		1					2	1	1	1		1	
							1						1	1				1	
													1	1			1		
									1				1	1				1	
								2				2		1	1	2			
					1	1	4	4	10			7	13	16	4	6	6	8	
													1	1			1		
												1		1			1		
1					1		1					1	2	3		2	1		
		1	1	1	1	3	4	5	1			4	15	14	5	9	3	7	
	1		1	2	1		10	9	3			13	14	23	4	14	3	10	
							2	1				2	1	2	1	2		1	
					1	1	3	5	5	1		6	10	10	6	7	1	8	
													1	1		1			
									1				1		1			1	
									1			2	1	2	1		2	1	
								2	1			1	2	2	1			3	
							1	3	1			7	8	15			10	5	
	1	1	1	3	1	1	7	2	1			15	11	22	4	11	12	3	
						1						1			1	1			
								1					1	1				1	
						1	1						2		2	1		1	
							1					1			1	1			
						1						1		1		1			
								1				3		3		1	2		
												3	2	5			5		
				1				1	3			1	4		5	1		4	
1													1	1			1		
					1							1		1		1			
												1		1			1		
			1				2	1				4		1	3	4			
	1			1								1	1	2		2			
	1		1	3	2	3	7	7	8	1		18	15	23	10	14	3	16	
1					1			1	1			3	1	4		3	1		
									1			1			1	1			
1	1												2	2		2			

TABLE 15.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN EAST ORANGE.		AGE PERIODS.						
		Under one month.	Under 1 year "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases of the skin and annexa	145	....	....	....	....	....	....	....
Diseases of the bones (tuberculosis excepted)	146	....	....	....	....	....	....	....
Congenital malformations (stillbirths not included)	150	....	....	1	....	....	....	....
Congenital debility, icterus and sclerema	151	7	1	....	....	....	....	....
Other diseases peculiar to early infancy	152	5	1	....	....	....	....	....
Senility	154	....	....	....	....	....	....	....
Sucide by poison	155	....	....	....	....	....	....	....
Suicide by asphyxia	156	....	....	....	....	....	....	....
Suicide by hanging or strangulation	157	....	....	....	....	....	....	....
Suic'de by firearms	159	....	....	....	....	....	....	....
Suicide by cutting or piercing instruments	160	....	....	....	....	....	....	....
Absorption of deleterious gases (conflagration excepted)	168	....	....	....	....	....	....	....
Traumatism by fall	172	....	....	....	....	....	....	....
Traumatism by other crushing (vehicles, railroad, landslides, etc.	175	....	....	....	....	....	....	....
Cause of death not specified or ill-defined	189	....	1	....	....	....	....	....

Total deaths, 346. Death-rate, 8.67.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	...	1	...	...	1	....	1	.....	....	....	1	....
...	...	...	1	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	5	8	.....	....	8	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	2	6	.....	....	6	....	....
...	...	...	...	...	...	...	...	...	4	1	...	...	5	5	.....	....	2	3	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	1	1	...	...	...	...	1	1	1	1	....	2	....	....
...	...	...	...	...	1	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	...	1	...	...	...	...	...	...	...	...	...	1	....	1	....	1	....	....	....
...	...	1	2	...	...	...	...	...	...	...	...	3	....	1	2	2	1	....	....
...	...	...	...	...	...	...	2	1	1	...	...	2	2	3	1	2	....	2	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....

TABLE 16.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ELIZABETH.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	2	1	....	1	1
Malaria	4	....	....	....	....	....	....	....
Measles	6	....	2	4	....	....	....	....
Scarlet fever	7	....	....	2	....	....	....	....
Whooping cough	8	....	5	1	....	....	....	....
Diphtheria and croup	9	....	1	8	1	....	1	....
Influenza	10	....	....	....	....	....	....	....
Purulent infection and septicæmia	20	....	....	1	....	....	....	....
Tuberculosis of the lungs	28	....	2	5	....	....	6	8
Acute miliary tuberculosis	29	....	....	....	....	....	....	....
Tuberculous meningitis	30	....	4	11	1	1	2	....
Abdominal tuberculosis	31	....	....	1	....	....	....	....
Tuberculosis of other organs	34	....	1	....	....	1	1	....
Rickets	36	....	....	1	....	....	....	....
Syphilis	37	....	....	1	....	....	....	....
Cancer and other malignant tumors of the buccal cavity	39	....	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the peritonæum intestines, rectum	41	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of the breast	43	....	....	....	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	....	....	....	....	....
Acute articular rheumatism	47	....	....	....	1	....	....	....
Diabetes	50	....	....	1	1	....	....	....
Exophthalmic gotire	51	....	....	....	....	....	....	....
Addison's disease	52	....	....	....	....	....	....	....
Leuchæmia	53	....	....	....	....	....	....	....
Anæmia, chlorosis	54	....	....	....	....	....	....	....
Other general diseases	55	1	....	....	....	....	....	....
Alcoholism (acute or chronic)	56	....	....	....	....	....	....	....
Chronic lead poisoning	57	....	....	....	....	....	....	....
Simple meningitis	61	....	....	1	....	....	....	....
Including: Cerebrospinal fever	61A	....	1	....	1	....	....	....
Locomotor ataxia	62	....	....	....	....	....	....	....
Other diseases of the spinal cord	63	....	....	....	1	....	....	....
Cerebral hæmorrhage, apoplexy	64	2	....	....	....	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	....	....
General paralysis of the insane	67	....	....	....	....	....	....	....
Convulsions of infants	71	1	1	....	....	....	....	....
Other diseases of the nervous system	74	....	....	....	1	....	....	....
Pericarditis	77	....	....	....	1	....	....	....
Acute endocarditis	78	....	1	3	2	2	1	1
Organic diseases of the heart	79	....	....	1	1	1	1	3
Angina pectoris	80	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Embolism and thrombosis	82	....	1	....	....	....	....	....
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)	83	....	....	....	....	....	....	....
Diseases of the thyreoid body	88	....	....	....	....	1	....	....
Acute bronchitis	89	....	4	....	....	....	....	....
Chronic bronchitis	90	....	....	....	....	....	....	....
Bronchopneumonia	91	....	13	13	....	1	....	....
Pneumonia	92	2	5	12	2	....	1	2
Pleurisy	93	....	....	2	1	....	....	....
Pulmonary congestion, pulmonary apoplexy	94	....	....	1	....	....	....	....
Asthma	96	....	2	2	....	....	....	....
Pulmonary emphysema	97	....	....	....	....	....	....	....

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
3	1			2			1					8	4	5	7	6	5	1	
							1					1			1		1		
												4	2	5	1		6		
												1	1	2			2		
												4	2	6			6		
												8	3	11			11		
1							1					1	1	1	1	1		1	
2													3	2	1		1	2	
20	10	8	9	4	7	3	3	1				50	36	57	29	43	39	4	
1				1								2		1	1	1	1		
		1	1									10	11	20	1	2	19		
													1	1			1		
													3	3			3		
												1		1			1		
1												1	1	2			2		
				1								1			1	1			
			2	2	3	2	6	8	2			15	10	7	18	15	1	9	
				1		3	7		3			6	8	8	6	4	2	8	
		1	1		2	1	2	1					8	6	2	4	1	3	
		1	1		1	1	2						6	4	2	3		3	
			1					2				2	1	1	2		1	2	
					1	1						1	2	2	1	1	1	1	
1					1	3	3	1	1			7	6	8	5	8	1	4	
	1												1	1		1			
			1									1			1	1			
			1										1	1		1			
						1							1	1		1			
1												2		2			2		
3	1	3	5	2	1	1	1		1			18	1	11	8	6	12	1	
						1						1			1			1	
1	2											3	1	2	2	2	2		
												2		2			2		
		2			1							3		3		2	1		
												1		1			1		
	1		3	4	3	13	14	14	4			29	29	25	33	23	10	15	
1			1		1	1	5	2	1	1		10	3	5	8	6	1	6	
								1					1		1			1	
												1	1	2			2		
				1								2		1	1	1	1		
												1		1			1		
4		4	4	4	8	4	10	16	4			26	42	40	28	21	23	24	
2	4	1	5	8	6	6	12	12	5			39	29	41	27	44	11	13	
					2		1					3		1	2	2		1	
				2	2		6	7	5	3		13	12	9	16	8	1	16	
1	2		1	1				1	1			4	4	7	1	2	4	2	
	1												1		1	1			
													1	1			1		
			1				1	1	2	1		6	4	7	3	4	4	2	
				1			1	2	1			3	2	4	1	2	2	1	
		1					1	2				16	15	27	4	3	27	1	
4	4	7	11	5	6	2	12	9	7	1		46	46	54	38	34	36	22	
				1		1	1					3	3	3	3	1	3	2	
			1						1			2	1	2	1	1	2		
						1	1	2				2	6	4	4	3	4	1	
							1	1				1	1		2	2			

TABLE 16.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ELIZABETH.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases of the respiratory system (tuberculosis excepted)	98	...	...	...	...	...	...	...
Diseases of the pharynx	100	...	2	1	...	...	...	...
Ulcer of the stomach	102	...	...	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	1	14	...	1	...	1	...
Diarrhœa and enteritis (Under 2 years)	104	8	113	17	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	...	...	5	...	1	...	...
Appendicitis and typhlitis	108	...	...	...	2	1	2	...
Hernias, intestinal obstructions	109	...	...	...	...	...	...	...
Other diseases of the intestines	110	...	...	...	1	...	...	...
Acute yellow atrophy of the liver	111	...	...	...	...	...	...	...
Cirrhosis of the liver	113	...	...	...	...	...	...	...
Other diseases of the liver	115	...	...	...	...	...	...	...
Acute nephritis	119	1	...	...	1	...	...	...
Bright's disease	120	...	...	...	...	...	...	...
Other diseases of the kidneys and annexa	122	...	...	...	...	...	...	...
Calculi of the urinary passages	123	...	...	...	...	...	...	...
Diseases of the bladder	124	...	...	...	...	...	...	...
Diseases of the prostate	126	...	...	...	...	...	...	...
Uterine tumor (noncancerous)	129	...	...	...	...	...	...	...
Other diseases of the uterus	130	...	...	...	...	...	...	...
Cysts and other tumors of the ovary	131	...	...	...	...	...	1	...
Accidents of pregnancy	134	...	...	...	...	...	...	...
Puerperal hæmorrhage	135	...	...	...	...	...	...	...
Other accidents of labor	136	...	...	...	...	...	...	1
Puerperal septicæmia	137	...	...	...	...	...	...	...
Puerperal albuminuria and convulsions	138	...	...	...	...	...	...	...
Gangrene	142	...	1	...	...	...	...	...
Acute abscess	144	...	2	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	2	2	1	...	...	...	...
Congenital debility, icterus and sclerema	151	42	5	...	...	...	...	...
Other diseases peculiar to early infancy	152	13	2	...	...	...	...	...
Lack of care	153	1	...	...	...	...	...	...
Senility	154	...	...	...	...	...	...	...
Suicide by poison	155	...	...	...	...	...	...	1
Suicide by asphyxia	156	...	...	...	...	...	...	...
Suicide by hanging or strangulation	157	...	...	...	...	...	...	...
Suicide by firearms	159	...	...	...	...	...	...	...
Poisoning by food	164	...	...	1	...	...	...	...
Other acute poisonings	165	...	1	...	...	...	...	...
Conflagration	166	...	1	1	...	...	...	...
Burns (conflagration excepted)	167	...	1	9	...	...	1	2
Absorption of deleterious gases (conflagration excepted)	168	1	...	1	...	...	1	...
Accidental drowning	169	...	...	...	2	...	...	2
Traumatism by fall	172	...	...	1	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	...	...	...	1	1	3	3
Effects of heat	179	...	1	...	1	...	...	...
Electricity (lightning excepted)	181	...	...	...	...	...	...	2
Homicide by firearms	182	...	...	...	...	...	...	...
Homicide by other means	184	...	...	...	...	...	...	...
Cause of death not specified or ill-defined	189	...	5	...	1	...	...	...

Total deaths, 1,158. Death-rate, 14.27.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	.....	...	3	....	....
1	...	...	...	1	...	...	...	...	...	...	...	1	1	3	.....	1	1	....	....
...	...	...	...	...	1	...	...	...	...	...	...	14	4	11	1	....	17	1	....
...	...	...	...	...	...	...	...	...	...	...	...	76	62	138	.....	....	138	....	....
...	...	...	...	1	...	1	2	...	...	...	...	7	3	8	2	1	6	3	....
...	1	1	1	1	1	...	...	...	...	...	...	5	5	10	.....	4	6	....	....
1	...	1	1	1	...	1	2	...	1	...	...	3	5	3	5	8	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	1	2	.....	1	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	...	.....	1	1	.....	....	....
1	...	3	3	4	3	2	1	1	...	...	...	11	7	8	10	13	4	1	....
...	...	...	...	...	...	1	...	1	...	...	...	1	1	2	.....	....	1	1	....
1	3	1	2	2	1	3	...	...	1	...	...	8	8	9	7	9	5	2	....
6	2	1	2	2	4	7	8	12	3	1	...	27	21	25	23	25	9	14	....
...	...	1	...	...	...	...	...	1	...	...	...	1	1	1	1	...	1	1	....
...	...	...	...	...	1	...	...	...	...	...	...	...	1	.....	1	1	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	.....	1	...	....	1	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	.....	1	....	....	....
...	...	...	...	...	1	...	...	...	...	...	...	...	1	.....	1	1	....	....	....
...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	.....	...	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	.....	1	1	....	....	....
...	2	...	...	...	...	...	...	...	...	...	...	...	2	1	1	2	....	....	....
1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	1	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	...	2	.....	2	2	....	....	....
1	3	1	...	...	...	...	...	...	...	...	...	...	5	2	3	5	....	....	....
1	1	1	...	...	...	...	...	...	...	...	...	...	3	2	1	3	....	....	....
...	...	...	...	...	...	...	...	1	...	...	...	2	...	.....	2	1	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	4	5	.....	....	5	....	....
...	...	...	...	...	...	...	...	...	...	...	...	31	16	47	.....	....	47	....	....
...	...	...	...	...	...	...	...	...	...	...	...	8	7	15	.....	....	15	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	1	...	1	...	...	2	....	.....	2	....	....	2	....
...	1	2	...	...	...	...	1	...	...	...	...	3	2	1	4	4	1	....	....
...	...	...	1	...	...	1	1	...	...	...	...	1	2	1	2	3	....	....	....
...	1	...	...	...	1	...	...	...	...	...	...	2	....	1	1	2	....	....	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	2	....	1	1	1	1	....	....
1	...	...	...	1	...	...	...	...	...	...	...	3	....	2	1	2	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	...	3	1	2	1	2	....	....
1	1	...	1	...	...	...	1	...	...	...	...	8	9	12	6	5	12	....	....
1	...	...	1	...	1	...	1	...	...	...	...	5	2	2	5	....	5	1	1
...	1	2	1	...	...	...	...	...	...	...	...	7	1	7	1	2	4	1	1
3	1	1	3	2	1	2	...	1	2	...	...	13	4	7	10	5	6	5	1
3	3	1	...	3	...	2	4	...	...	...	...	21	3	9	15	7	11	3	3
...	...	...	1	1	...	...	...	...	...	...	...	4	....	2	2	2	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	....	1	1	2	....	....	....
1	...	...	...	...	1	...	...	...	...	...	...	1	1	1	1	....	1	1	....
1	...	1	...	1	...	...	1	...	...	...	...	3	1	2	2	4	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	6	....	6	.....	....	6	....	....

TABLE 17.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ENGLEWOOD.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1							
Measles	6		1					
Diphtheria and croup	9			2	1			2
Purulent infection and septicæmia	20		1					
Tuberculosis of the lungs	28							3
Tuberculous meningitis	30					1		
Abdominal tuberculosis	31				2		1	
Pott's disease	32							
Syphilis	37	1						
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum intestines, rectum	41							
Cancer and other malignant tumors of other organs or of organs not specified	45							
Diabetes	50							
Leuchæmia	53				1			
Anæmia, chlorosis	54							
Alcoholism (acute or chronic)	56							
Encephalitis	60					1		
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Epilepsy	69							
Other diseases of the nervous system	74							
Pericarditis	77							
Acute endocarditis	78							
Organic diseases of the heart	79							
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82							
Acute bronchitis	89							
Bronchopneumonia	91		1	1				
Pneumonia	92		1	1				2
Pleurisy	93							
Asthma	96	1						
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103		2	1				
Diarrhœa and enteritis (Under 2 years)	104	1	5					
Diarrhœa and enteritis (2 years and over)	105							
Appendicitis and typhlitis	108				1	1		
Hernias, intestinal obstructions	109							
Other diseases of the intestines	110							
Cirrhosis of the liver	113							
Biliary calculi	114							
Bright's disease	120							
Calculi of the urinary passages	123							
Diseases of the bladder	124							
Diseases of the prostate	126							
Salpingitis and other diseases of the female genital organs	132							
Puerperal hæmorrhage	135							
Other accidents of labor	136							1
Puerperal septicæmia	137							
Puerperal albuminuria and convulsions	138							
Acute abscess	144						1	
Congenital debility, icterus and sclerema	151	7	2					
Senility	154							
Poisoning by food	164							
Burns (conflagration excepted)	167			2			1	
Absorption of deleterious gases (conflagration excepted)	168					1		
Traumatism by firearms	170							
Traumatism by fall	172							
Traumatism by other crushing (vehicles, railroad, landslides, etc)	175						1	
Electricity (lightning excepted)	181							

Total deaths, 177. Death-rate, 15.91.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1	...	1	1	...	...	...	...	...	...	...	...	2	1	2	1	2	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	.....	1	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	4	5	.....	1	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	3	1	1	...	...	1	1	...	...	...	...	8	2	7	3	6	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	.....	....	3	....	....
...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	.....	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	3	...	1	1	...	...	...	...	...	4	1	1	4	3	....	2	....
...	1	...	...	...	2	...	...	...	2	...	...	3	2	2	3	4	....	1	....
...	...	...	1	...	...	...	1	...	...	...	...	1	1	.....	2	1	....	1	....
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	.....	....	....	1	....
...	...	...	...	...	...	1	...	...	...	...	...	2	....	2	.....	1	1	....	....
...	...	1	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	1	...	...	1	...	...	...	...	...	...	...	1	1	2	.....	1	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	2	5	1	1	...	...	3	6	8	1	2	....	7	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	1	.....	1	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	1	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	1	1	1	2	1	2	...	4	4	5	3	4	....	4	....
...	2	1	2	...	...	1	4	2	...	...	...	7	5	6	6	8	1	3	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	...	1	...	...	2	...	3	1	...	3	4	4	3	2	1	4	....
...	...	...	...	...	1	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	1	...	...	...	....	1	1	.....	1	....	....	....
...	...	1	...	...	...	...	...	1	...	...	...	2	2	4	.....	2	2	....	....
...	2	1	...	...	1	1	2	3	1	...	...	7	8	9	6	6	6	3	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	....	....	1	....
...	...	...	...	...	1	...	...	...	...	...	...	1	1	2	.....	....	1	1	....
...	...	...	...	...	...	...	...	2	...	...	...	1	1	1	1	....	....	2	....
...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	.....	....	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	3	6	.....	....	6	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	....	.....	1	1	....	....	....
...	1	...	...	1	...	1	1	...	...	...	...	5	1	4	2	4	2	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	...	...	1	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	1	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	1	...	1	...	...	...	...	1	1	.....	2	1	....	1	....
...	1	2	...	...	...	2	1	2	...	...	...	3	6	8	1	6	1	2	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	...	...	1	...	...	...	...	...	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	...	...	...	...	1	...	...	1	....	1	.....	....	....	1	....
...	...	...	1	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
1	...	1	...	...	...	...	...	...	...	...	...	....	2	1	1	2	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	....	2	2	.....	2	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	1	...	...	...	...	...	...	...	...	....	1	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	6	3	9	.....	....	9	....	....
...	...	...	...	...	...	...	...	...	1	...	...	1	....	.....	1	....	....	1	....
...	...	...	...	...	...	...	1	...	...	...	...	1	....	.....	1	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	2	2	1	1	2	....	....
...	...	...	1	...	...	...	1	...	...	...	...	1	1	1	1	....	1	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	2	1	...	...	...	...	1	...	...	....	1	1	.....	....	....	1	....
1	...	...	...	...	...	...	...	...	...	...	...	4	1	.....	5	3	2	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....

TABLE 18.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN GARFIELD.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Measles	6	....	....	1	....	....	....	....
Whooping cough	8	....	2	2	....	....	....	....
Diphtheria and croup	9	....	....	1	1	....	....	....
Influenza	10	....	....	....	....	1	....	....
Tuberculosis of the lungs	28	....	....	1	....	....	1	2
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	....	....	....	....	....
Simple meningitis	61	....	....	1	....	....	....	....
Including: Cerebrospinal fever	61A	....	....	1	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	1	....	....	....	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	....	....
Convulsions of infants	71	....	1	....	....	....	....	....
Other diseases of the nervous system	74	....	....	....	....	....	....	....
Acute endocarditis	78	....	....	1	....	....	....	....
Organic diseases of the heart	79	....	....	....	....	1	....	1
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Acute bronchitis	89	....	1	....	....	....	....	....
Chronic bronchitis	90	....	....	....	....	....	....	....
Bronchopneumonia	91	1	14	6	....	....	....	....
Pneumonia	92	3	7	1	1	1	....	....
Pleurisy	93	....	....	1	....	....	....	....
Other diseases of the mouth and annexa	99	1	....	....	....	....	....	....
Other diseases of the stomach (cancer excepted)	103	....	3	....	....	....	....	....
Diarrhœa and enteritis (under 2 years)	104	2	19	4	....	....	....	....
Diarrhœa and enteritis (2 years and over)	105	....	....	1	....	....	....	....
Appendicitis and typhlitis	108	....	....	1	....	....	....	....
Hernias, intestinal obstructions	109	....	1	....	....	....	....	....
Bright's disease	120	....	....	....	1	....	....	....
Diseases of the bladder	124	....	....	....	....	....	....	....
Other diseases of the urethra, urinary abscess, etc	125	....	....	....	....	....	....	....
Puerperal septicæmia	137	....	....	....	....	....	....	....
Diseases of the bones (tuberculosis excepted)	146	....	....	....	....	....	....	....
Congenital malformations (stillbirths not included)	150	1	....	....	....	....	....	....
Congenital debility, icterus and sclerema	151	13	....	....	....	....	....	....
Other diseases peculiar to early infancy	152	2	1	....	....	....	....	....
Lack of care	153	1	....	....	....	....	....	....
Suicide by asphyxia	156	....	....	....	....	....	....	....
Burns (conflagration excepted)	167	....	2	....	3	....	....	....
Absorption of deleterious gases (conflagration excepted)	168	....	....	....	....	....	....	....
Accidental drowning	169	....	....	....	....	....	....	....
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	....	....	....	....

Total deaths, 153. Death-rate, 11.52.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 00.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													1	1			1		
												1	3	4			4		
												2		2			2		
													1	1			1		
1	2	1	2									6	4	5	5	7	3		
			1		1	1		1				1	3		4	1		3	
		1		1									2		2	2			
				1	1							1	1		2	2			
												1		1			1		
												1		1			1		
							1					1	1	2		1	1		
								1					1		1				
													1	1			1		
1													1		1	1			
				1		1						2	1	1	2	1	2		
					1	1						2	2	2	2	2	2		
								1				1			1			1	
								1					2	1	1		1	1	
							1	1					2		2			2	
												11	10	20	1		21		
2			1						1			9	8	13	4	1	14	2	
												1		1			1		
													1	1			1		
												1	2	3			3		
												13	12	24	1		25		
													1	1			1		
		1		1								3		1	2	2	1		
									1			1	1	1	1	2			
									1			2		1	1	1	1		
									1				1		1			1	
1													1		1	1			
1													1		1	1			
		1											1		1	1			
													1	1			1		
												4	9	13			13		
												2	1	3			3		
													1	1			1		
				1								1			1	1			
												4	1	5			5		
					1	1						1	1		2	2			
					1								1		1	1			
												1			1		1		

TABLE 19.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN GLOUCESTER CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	3	1	....	....	....
Measles	6	....	1	2	....	....	....	....
Scarlet fever	7	....	....	1	....	....	....	....
Whooping cough	8	....	1	....	....	....	....	....
Diphtheria and croup	9	....	....	2	....	....	....	....
Dysentery	14	....	....	....	....	....	....	....
Tetanus	24	....	....	....	....	....	....	....
Tuberculosis of the lungs	28	....	....	1	....	1	2	2
Tuberculosis of other organs	34	....	....	....	....	....	1	....
Disseminated tuberculosis	35	....	....	....	....	....	....	1
Cancer and other malignant tumors of the buccal cavity	39	....	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of the breast	43	....	....	....	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	....	....
Convulsions of infants	71	....	2	....	....	....	....	....
Diseases of the ears	76	....	1	....	....	....	....	....
Acute endocarditis	78	....	1	....	1	....	....	....
Organic diseases of the heart	79	....	....	....	....	....	....	....
Angina pectoris	80	....	....	....	....	....	....	....
Diseases of the larynx	87	....	....	1	....	....	....	....
Acute bronchitis	89	....	....	....	....	....	....	....
Bronchopneumonia	91	....	2	1	....	....	....	....
Pneumonia	92	....	1	1	1	....	....	....
Pleurisy	93	....	....	....	....	....	....	....
Pulmonary congestion, pulmonary apoplexy	94	....	1	....	....	....	....	....
Diseases of the œsophagus	101	....	....	....	....	....	....	....
Other diseases of the stomach (cancer excepted)	103	....	....	....	....	....	....	....
Diarrhœa and enteritis (Under 2 years)	104	....	1	....	....	....	....	....
Diarrhœa and enteritis (2 years and over)	105	....	....	....	1	....	....	....
Cirrhosis of the liver	113	....	....	....	....	....	....	....
Other diseases of the liver	115	....	....	....	....	....	....	....
Simple peritonitis (nonpuerperal)	117	....	....	....	....	....	....	....
Acute nephritis	119	....	....	....	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	....
Calculi of the urinary passages	123	....	....	....	....	....	....	....
Congenital malformations (stillbirths not included)	150	2	....	....	....	....	....	....
Congenital debility, icterus and sclerema	151	7	....	1	....	....	....	....
Other diseases peculiar to early infancy	152	1	....	....	....	....	....	....
Suicide by poison	155	....	....	....	....	....	....	....
Accidental drowning	169	....	....	....	....	....	....	3
Traumatism by other crushing (vehicles, railroad, landslides, etc)	175	....	....	....	....	....	....	....
Cause of death not specified or ill-defined	189	....	....	....	....	....	....	....

Total deaths, 138. Death-rate, 13.39.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
				1									5	5		1	4		
												1	2	1	2		3		
												1		1			1		
													1	1			1		
												1	1	2			2		
							1					1		1				1	
					1							1			1	1			
1	1	3	3	2								11	5	13	3	7	7	2	
													1	1			1		
													1	1		1			
						1							1		1			1	
					1		1						2		2	2			
		1		1			1						3	3		2		1	
			1				1						2	1	1	2			
	1				1		7	1	1			6	5	9	2	6	2	3	
							1						1	1				1	
												2		1	1		2		
												1		1			1		
			1						1			2	2	4		1	3		
			1	3	1		3	1	1			5	5	6	4	6	2	2	
						1						1			1	1			
												1		1			1		
								1					1		1			1	
							1	1	1			2	4	5	1	1	3	2	
	1	1	1			1	1	1				5	4	7	2	3	3	3	
				1								1			1	1			
													1	1			1		
					1							1			1	1			
	1										1		2	1	1	2			
									1		1	3	1	4			4		
												3		2	1	1	1	1	
		1											1	1				1	
						1							1		1	1			
					1							1			1	1			
		1										1			1	1			
	2		2			1	4	1	4			4	10	8	6	9		5	
				1								1		1		1			
												1	1	2			1		
												3	5	8			8		
													1	1			1		
								1				1		1				1	
					1							4		2	2	1	2		1
								1				1			1		1		
												2	1	3			3		

TABLE 20.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN GUTTENBERG.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Scarlet fever	7	....	....	1	....	....	....	....
Whooping cough	8	....	2	....	....	....	....	....
Diphtheria and croup	9	....	....	1	....	....	....	....
Including: Croup	9A	....	....	2	....	....	....	....
Influenza	10	....	....	....	....	....	....	....
Erysipelas	18	1	....	....	....	....	....	....
Tuberculosis of the lungs	28	....	....	....	....	1	1	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	....	....	....	....	....
Simple meningitis	61	....	....	1	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	....	....
Other diseases of the nervous system	74	....	....	....	1	....	....	....
Acute endocarditis	78	....	....	....	....	....	....	....
Organic diseases of the heart	79	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Diseases of the thyreoid body	88	....	....	....	....	....	....	....
Bronchopneumonia	91	1	2	....	1	....	....	....
Pneumonia	92	....	1	2	....	....	....	....
Diseases of the pharynx	100	....	1	....	....	....	....	....
Other diseases of the stomach (cancer excepted)	103	....	1	....	....	....	....	....
Diarrhœa and enteritis (Under 2 years)	104	1	3	1	....	....	....	....
Diarrhœa and enteritis 2 years and over)	105	....	....	2	....	....	....	....
Acute nephritis	119	....	....	....	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	....
Congenital debility, icterus and sclerema	151	3	....	....	....	....	....	....
Suicide by hanging or strangulation	157	....	....	....	....	....	....	....
Suicide by drowning	158	....	....	....	....	....	....	....
Other acute poisonings	165	....	....	....	....	....	....	....
Traumatism by fall	172	....	....	....	....	....	....	....
Cause of death not specified or ill-defined	189	1	1	....	....	....	....	....

Total deaths, 73. Death-rate, 11.59.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	.....	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	....	2	2	.....	....	2	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	....	....	.....	.....	....	....	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	2	3	.....	...	...	...	...	...	...	...	...	5	2	4	3	3	3	1	....
...	...	...	...	1	1	...	1	...	1	...	...	2	2	2	2	3	....	1	....
...	1	...	.....	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	1	...	.....	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	1	...	...	2	1	...	1	...	....	5	1	4	3	....	2	....
...	...	...	.....	...	...	...	...	1	...	...	...	2	....	2	.....	1	1	....	....
...	1	...	.....	...	...	...	1	...	...	1	...	1	2	1	2	1	....	2	....
...	...	...	.....	...	1	1	3	...	1	...	...	4	2	2	4	4	1	1	....
...	...	...	.....	...	...	...	1	1	...	...	...	1	1	1	1	2	....	....	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	.....	...	...	...	...	1	...	...	...	2	3	4	1	....	5	....	....
...	...	1	.....	1	...	...	...	...	1	...	...	4	2	4	2	2	3	1	....
...	...	...	.....	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	.....	...	...	1	...	...	...	...	...	1	1	1	1	....	1	1	....
...	...	...	.....	...	...	...	...	...	...	...	...	2	3	5	.....	....	5	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	.....	1	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	1	.....	...	...	1	...	...	...	...	...	1	1	.....	2	2	....	....	....
...	...	...	.....	...	1	...	...	...	...	...	...	3	....	3	.....	....	3	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	1	.....	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	1	...	.....	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	1	...	.....	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	.....	...	...	...	...	...	...	...	...	....	2	2	.....	....	2	....	....

TABLE 21.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HACKENSACK.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1							
Whooping cough	8	2	6	4	1			
Diphtheria and croup	9			1	1			
Glanders	21							
Tuberculosis of the lungs	28			1	1		1	3
Tuberculous meningitis	30		2	3	2			
Abdominal tuberculosis	31							
Tuberculosis of other organs	34							
Syphilis	37			1				
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Acute articular rheumatism	47							
Chronic rheumatism and gout	48							
Diabetes	50							
Simple meningitis	61							
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Epilepsy	69							
Neuralgia and neuritis	73						1	
Acute endocarditis	78							1
Organic diseases of the heart	79							
Diseases of the arteries, atheroma aneurysm, etc	81							
Diseases of the larynx	87		1					
Diseases of the thyreoid body	88							
Acute bronchitis	89							
Bronchopneumonia	91	2	2	2				
Pneumonia	92		2	2				
Pleurisy	93							
Asthma	96							
Pulmonary emphysema	97							
Diseases of the pharynx	100							
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103	1	5					
Diarrhœa and enteritis (Under 2 years)	104		13	2				
Diarrhœa and enteritis (2 years and over)	105			1				1
Appendicitis and typhlitis	108				1			2
Hernias, intestinal obstructions	109							
Other diseases of the intestines	110							
Cirrhosis of the liver	113							
Biliary calculi	114							
Acute nephritis	119						1	
Bright's disease	120							
Diseases of the bladder	124							
Cysts and other tumors of the ovary	131							
Congenital malformations (stillbirths not included)	150	2						
Congenital debility, icterus and sclerema	151	12	2					
Other diseases peculiar to early infancy	152	1	1					
Senility	154							
Suicide by firearms	159							
Suicide by cutting or piercing instruments	160							
Burns (conflagration excepted)	167							
Traumatism by fall	172							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175			1	2	1		
Homicide by cutting or piercing instruments	183							1
Cause of death not specified or ill-defined	189	1	1					

Total deaths, 235. Death-rate, 14.85.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	1	1	...	...	...	...	...	...	...	...	...	1	1	1	1	2	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	6	7	13	.....	....	13	...	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	...	....
...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	.....	....	...	1	....
3	1	1	...	1	1	1	1	1	...	...	...	7	9	16	.....	8	7	1	....
...	1	...	...	...	...	...	...	...	...	...	...	3	5	8	.....	1	7	...	....
...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	.....	1	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	1	...	...	....
...	...	...	...	...	1	...	...	...	...	...	...	...	2	2	.....	1	1	...	....
...	...	...	...	...	...	...	...	1	...	...	...	1	...	.....	1	1	...	...	....
...	...	...	1	...	1	2	2	...	...	...	...	2	4	2	4	4	1	1	....
...	1	...	...	...	1	1	1	2	...	...	...	3	3	3	3	3	....	2	1
...	1	...	...	...	...	1	2	...	1	1	...	...	6	6	.....	2	1	3	....
...	...	...	...	...	...	1	1	...	...	...	...	1	1	1	1	2	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	...	1	...	....
...	...	...	...	...	...	1	...	1	...	...	...	1	1	.....	2	1	...	1	....
...	...	1	...	...	...	...	...	...	...	...	...	1	...	.....	1	1	...	...	....
...	...	...	...	2	2	...	3	2	5	...	...	5	9	9	5	7	1	6	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	.....	...	...	1	....
1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	...	....
...	...	...	...	...	...	...	...	1	...	...	...	1	...	.....	1	1	...	...	....
...	...	...	...	...	1	2	...	3	...	...	...	5	2	3	4	3	1	3	....
...	...	1	3	1	2	2	3	1	2	...	...	6	10	10	6	8	2	6	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	.....	1	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	...	....
...	...	...	...	1	...	...	...	...	...	...	...	...	1	.....	1	1	...	...	....
...	...	...	...	...	...	...	...	1	...	...	...	...	1	.....	1	1	...	...	....
...	...	...	...	...	1	...	...	1	...	...	...	6	3	9	.....	...	7	2	....
...	1	...	2	2	...	...	1	1	1	...	...	8	4	7	5	4	6	1	1
...	...	1	...	...	...	...	...	...	...	...	...	...	1	.....	.....	1	...	...	....
...	...	...	...	...	...	...	...	2	...	...	...	1	1	2	.....	1	...	1	....
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	.....	...	...	1	....
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	.....	1	...	...	....
...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	.....	...	1	...	....
...	...	...	...	...	1	1	...	...	...	...	...	5	3	8	.....	1	6	1	....
...	...	...	...	...	...	...	...	...	...	...	...	9	6	15	.....	...	15	...	....
...	...	1	...	...	...	...	...	1	1	...	...	4	1	3	2	2	1	2	....
...	...	...	...	...	...	...	1	...	...	...	...	2	2	4	.....	1	2	1	....
...	...	...	...	...	...	1	...	...	...	...	...	...	1	.....	1	1	...	...	....
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	.....	...	...	1	....
...	...	1	...	...	...	...	1	...	...	...	...	2	...	.....	2	1	1	...	....
...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	.....	1	...	...	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	...	1	...	....
...	1	...	1	2	3	1	3	2	...	...	...	5	8	12	1	10	1	2	....
...	...	...	...	...	...	...	...	1	...	...	...	1	...	.....	1	1	...	...	....
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	.....	...	...	1	....
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	.....	...	2	...	....
...	...	...	...	...	...	...	...	...	...	...	...	6	8	14	.....	...	14	...	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	...	2	...	....
...	...	...	...	...	...	...	...	...	2	1	...	1	2	2	1	...	...	3	....
...	...	...	...	...	...	...	1	...	...	...	...	...	1	.....	1	1	...	...	....
...	...	1	...	...	...	...	...	...	...	...	...	1	...	.....	1	1	...	...	....
...	1	...	...	...	...	...	...	...	...	...	...	...	1	.....	1	1	...	...	....
...	...	...	...	...	1	...	1	...	...	...	...	2	...	2	.....	1	...	...	1
2	2	...	...	...	...	2	1	...	...	...	...	10	1	8	3	5	6	...	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	...	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	...	2	...	....

TABLE 22.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HAMMONTON.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	....	....	....	....	....
Measles	6	....	1	3	....	....	....	....
Whooping cough	8	....	2	1	....	....	....	....
Influenza	10	....	....	....	....	....	....	....
Tuberculosis of the lungs	28	....	....	....	....	....	....	....
Tuberculosis of other organs	34	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Diabetes	50	....	....	....	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	....	....
Epilepsy	69	....	....	....	....	....	....	....
Acute endocarditis	78	....	1	....	....	....	....	....
Organic diseases of the heart	79	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Embolism and thrombosis	82	....	....	....	....	....	....	....
Acute bronchitis	89	....	1	....	....	....	....	....
Bronchopneumonia	91	....	1	2	....	....	1	....
Pneumonia	92	....	1	1	....	....	....	....
Asthma	96	....	....	....	....	....	....	....
Other diseases of the stomach (cancer excepted)	103	2	....	....	....	....	....	....
Diarrhœa and enteritis (Under 2 years)	104	....	1	....	....	....	....	....
Diarrhœa and enteritis (2 years and over)	105	....	....	....	....	....	....	....
Cirrhosis of the liver	113	....	....	....	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	....
Puerperal hæmorrhage	135	....	....	....	....	....	....	....
Other diseases peculiar to early infancy	152	....	1	....	....	....	....	....
Senility	154	....	....	....	....	....	....	....
Suicide by poison	155	....	....	....	....	....	....	....
Suicide by firearms	159	....	....	....	....	....	....	....
Traumatism by fall	172	....	....	....	....	1	....	....
Traumatism by other crushing (vehicles, railroad, landslides, etc)	175	....	....	....	....	2	1	....

Total deaths, 71. Death-rate, 12.82.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Felmale.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
							1					1			1	1			
												3	1	4			4		
												1	2	3			3		
								1					1		1	1			
2			1									2	1	2	1	1	2		
	1											1		1		1			
					1		1						2	1	1	2			
							1						1	1		1			
1				1	1		3	1	1			4	4	4	4	5	1	2	
													1		1		1		
							2					1	2	2	1	1	1	1	
							3	3				3	3	5	1	1	1	4	
										1			1		1		1		
							1						1		1	1			
													1	1			1		
												2	2	4		1	3		
		1					1	1				2	3	4	1	1	2	2	
							1					1			1	1			
												1	1	2			2		
													1	1			1		
						1			1	1		1	2	2	1	2		1	
									1			1		1		1			
		1			2			1				3	1	3	1	3		1	
		1											1		1	1			
													1	1			1		
								1	2			2	1	3		1		2	
1												1		1		1			
				1								1			1	1			
												1		1			1		
		1						1				5		3	2	2	3		

TABLE 23.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HARRISON.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Whooping cough	8	1	1	...	...	...	...	...
Diphtheria and croup	9	...	...	1	...	...	...	...
Dysentery	14	...	...	1	...	...	...	...
Tuberculosis of the lungs	28	...	...	...	...	...	...	4
Abdominal tuberculosis	31	...	...	...	...	...	1	1
Cancer and other malignant tumors of the buccal cavity	39	...	...	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	...	...	...	...	...	...	1
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	...	...	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	...	...	...	...	...	...	...
Cancer and other malignant tumors of the breast	43	...	...	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	...	...	...	...	...	...	...
Acute articular rheumatism	47	...	...	...	...	1	...	...
Diabetes	50	...	...	...	...	...	...	...
Other general diseases	55	...	...	1	...	...	...	...
Simple meningitis	61	...	...	...	1	...	...	...
Cerebral hæmorrhage, apoplexy	64	...	...	...	...	...	...	...
Convulsions of infants	71	3	...	...	...	...	...	...
Acute endocarditis	78	...	...	...	...	1	...	...
Organic diseases of the heart	79	...	...	1	1	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	...	...	...	...	...	...	...
Embolism and thrombosis	82	...	...	...	...	...	...	...
Acute bronchitis	89	...	...	...	...	...	...	...
Chronic bronchitis	90	...	...	...	...	...	...	...
Bronchopneumonia	91	3	4	2	1	...	...	...
Pneumonia	92	1	1	2	...	...	...	2
Pleurisy	93	...	...	...	...	...	...	...
Asthma	96	...	...	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	2	1	...	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	1	17	3	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	...	...	1	...	...	...	...
Other diseases of the intestines	110	1	...	...	...	...	...	...
Cirrhosis of the liver	113	...	...	...	...	...	...	...
Acute nephritis	119	...	...	...	...	1	...	...
Bright's disease	120	...	...	...	...	...	...	...
Other diseases of the uterus	130	...	...	...	...	...	...	...
Cysts and other tumors of the ovary	131	...	...	...	...	...	...	...
Other accidents of labor	136	...	...	...	...	...	...	...
Puerperal septicæmia	137	...	...	...	...	...	...	...
Acute abscess	144	...	...	...	...	...	...	...
Other diseases of the skin and annexa	145	...	...	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	1	1	...	...	...	...	...
Congenital debility, icterus and sclerema	151	11	3	...	...	...	...	...
Other diseases peculiar to early infancy	152	2	1	...	...	...	...	...
Suicide by poison	155	...	...	...	...	...	1	...
Suicide by asphyxia	156	...	...	...	...	...	...	...
Suicide by drowning	158	...	...	...	...	...	1	...
Suicide by firearms	159	...	...	...	...	...	...	...
Accidental drowning	169	...	...	...	2	...	...	...
Traumatism by fall	172	...	...	...	...	...	...	...
Traumatism by machines	174	...	...	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	...	...	...	...	...	1	...
Electricity (lightning excepted)	181	...	...	...	...	...	1	...
Cause of death not specified or ill-defined	189	...	1	...	...	...	...	...

Total deaths, 195. Death-rate, 12.58.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													2	2			2		
												1		1			1		
													1	1			1		
4	4	3	1	2	2	1	1					14	8	14	8	11	9	2	
												1	1	1	1	2			
			1				1					1	1	1	1	1		1	
							1						2	1	1	1	1		
			1				3					1	3		4	2		2	
			1		1								2	1	1	1	1		
						1							1	1				1	
		1				1	1					2	1		3	2	1		
							1					2		2		1	1		
							1					1		1				1	
												1		1			1		
													1	1			1		
						1	2	3				3	3		6	4		2	
												2	1	3			3		
			1	1	1			1				3	2		5	3	1	1	
		1			1		2					3	3	3	3	2	2	2	
							3						3		3	2		1	
						1							1		1			1	
				1		1		1	1			1	3	1	3	1		3	
							2	1					3		3	1		2	
							1	1				7	5	9	3	1	10	1	
	1	1	2		1		1	1				9	4	10	3	6	6	1	
			1		1		1					3			3	2		1	
						1						1		1		1			
												3		3			3		
		1		1		1		2				14	7	20	1		21		
												3	3	2	4	4	2		
												1		1			1		
			1										1		1			1	
	1												2	2			2		
	1		2	1	1		4	1	1			3	8	5	6	5	1	5	
1													1	1		1			
							1						1	1	1				
			1										1		1	1			
	1												1	1		1			
			1									1			1		1		
								1					1		1			1	
												2		2			2		
												7	7	14			14		
													3	3			3		
													1		1		1		
				2								1	1	1	1		1	1	
													1		1		1		
					1							1			1	1			
												1	1	2			2		
1												1		1			1		
	1											1		1			1		
3	1			1			1					6	1	2	5	2	4	1	
												1			1		1		
												1		1			1		

TABLE 24.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HOBOKEN.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1						1	2
Measles	6		2	7	1			
Scarlet fever	7		1		2		1	
Whooping cough	8		2	1				
Diphtheria and croup	9		4	13	5			1
Including: Croup	9A		1	1	1			
Dysentery	14							
Erysipelas	18	1	3			1		
Purulent infection and septicæmia	20							
Tetanus	24							
Tuberculosis of the lungs	28		2	1			8	23
Acute miliary tuberculosis	29						1	
Tuberculous meningitis	30		3	5			1	1
Abdominal tuberculosis	31		1					
White swellings	33							
Tuberculosis of other organs	34		1		2			
Syphilis	37	2	3					
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of other organs or of organs not specified	45							
Other tumors (tumors of the female genital organs excepted)	46							
Acute articular rheumatism	47						1	1
Diabetes	50			1				1
Leuchæmia	53							
Alcoholism (acute or chronic)	56							
Encephalitis	60							
Simple meningitis	61	2	6	8				1
Including: Cerebrospinal fever	61A		3	3	2	1		1
Locomotor ataxia	62							
Other diseases of the spinal cord	63			1				
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Other forms of mental alienation	68							
Convulsions of infants	71	3	7	2				
Chorea	72	1	1	1				
Neuralgia and neuritis	73							
Other diseases of the nervous system	74	1						
Pericarditis	77						1	
Acute endocarditis	78				2	3	2	
Organic diseases of the heart	79	1		1	3	3	3	4
Angina pectoris	80			1			1	
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82							
Diseases of the larynx	87							
Diseases of the thyreoid body	88							
Acute bronchitis	89	4	13	3				
Chronic bronchitis	90							
Bronchopneumonia	91	1	16	27	1			
Pneumonia	92	2	19	26	2			1
Pleurisy	93			2				
Asthma	96							
Other diseases of the respiratory system (tuberculosis excepted)	98							
Ulcer of the stomach	102							1

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1	4	1	...	...	...	...	...	...	...	...	...	5	4	6	3	4	5	....	....
...	...	...	...	...	...	...	...	...	...	...	...	5	5	8	2	....	10	....	....
...	1	...	...	...	...	...	...	...	...	...	...	4	1	2	3	1	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	.....	....	3	....	....
1	...	...	...	...	..	...	...	...	...	...	...	15	9	19	5	1	23	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	....	3	.....	....	3	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	....	.....	1	....	....	1	....
...	...	1	...	...	...	...	...	...	...	...	...	3	3	5	1	....	6	....	....
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	1	....	....	....
...	2	...	...	...	...	...	...	...	...	...	...	2	...	1	1	2	....	....	....
19	17	14	16	15	7	8	6	...	...	...	...	91	45	84	52	45	77	14	....
...	1	2	1	...	1	...	...	...	...	...	...	6	....	5	1	2	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	8	2	9	1	....	10	....	....
...	3	...	...	...	1	...	...	...	...	...	...	2	3	2	3	3	1	1	....
1	...	1	...	...	...	...	...	...	...	...	...	2	....	2	.....	2	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	2	2	4	.....	2	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	5	....	5	.....	....	5	....	....
...	...	...	...	...	...	...	1	1	...	...	...	1	1	.....	2	2	....	....	....
...	...	1	2	1	4	3	9	2	...	...	...	12	11	4	19	13	4	6	....
...	...	...	1	...	...	1	3	2	...	...	...	3	4	1	6	3	....	4	....
...	...	...	2	...	1	1	2	...	...	...	...	....	6	3	3	3	....	3	....
1	...	...	...	...	1	...	1	...	...	...	...	....	3	1	2	2	....	1	....
...	1	...	1	3	...	...	2	...	...	...	...	5	2	1	6	6	....	1	....
...	...	...	...	...	...	...	...	1	...	...	...	1	....	.....	1	....	....	1	....
...	1	...	...	...	...	...	...	...	...	...	...	2	1	2	1	....	3	....	....
...	...	...	...	1	...	2	3	3	...	...	...	4	7	3	8	6	3	2	....
...	...	...	...	...	1	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
3	...	2	1	2	1	...	2	...	...	...	...	9	2	5	6	9	1	1	....
...	1	1	...	...	...	...	...	...	...	...	...	2	....	2	.....	1	....	1	....
...	...	...	...	1	...	...	...	...	...	...	...	9	9	16	2	2	16	....	....
...	...	...	...	...	...	...	...	...	...	...	...	9	1	9	1	....	10	....	....
...	1	...	1	...	...	...	...	1	...	...	...	2	1	2	1	2	....	1	....
...	...	...	...	...	...	1	...	...	...	...	...	2	....	2	.....	....	2	....	....
...	...	1	...	6	3	6	9	15	6	...	...	24	22	18	28	19	3	23	1
...	...	...	...	1	...	1	4	1	...	...	...	3	4	1	6	1	1	4	1
...	...	1	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	5	7	12	.....	....	12	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	.....	....	3	....	....
...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	.....	1	....	....	....
...	...	...	...	1	...	...	...	...	...	...	...	2	....	1	1	1	1	....	....
...	...	...	...	...	1	...	...	...	...	...	...	1	1	1	1	...	2	....	....
3	6	5	6	5	9	8	21	15	3	...	...	48	40	27	61	43	23	22	....
4	1	11	6	14	5	5	12	16	3	...	...	61	31	40	52	40	24	25	3
...	...	1	...	...	1	2	3	1	...	...	...	8	2	1	9	3	4	3	....
...	...	...	1	2	2	2	3	4	...	...	...	8	6	3	11	6	2	6	....
...	...	...	2	...	...	...	1	1	...	...	...	3	1	1	3	2	....	1	1
...	...	...	...	...	...	...	...	1	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	1	1	1	...	...	10	13	21	2	3	20	....	....
...	...	...	...	...	...	...	...	2	...	...	...	1	1	.....	2	1	....	1	....
...	...	...	...	1	1	...	...	...	...	...	...	25	22	45	2	2	45	....	....
3	7	4	12	12	8	7	15	11	1	...	...	88	42	75	55	47	63	20	....
...	...	...	1	...	...	...	...	...	...	...	...	....	3	2	1	1	2	....	....
...	...	1	...	1	...	...	1	...	...	...	...	....	3	.....	3	1	1	1	....
...	...	...	...	...	...	1	...	...	...	...	...	1	....	1	.....	....	....	1	....
1	1	2	1	...	1	...	...	1	...	...	...	5	3	3	5	4	2	2	....

TABLE 24.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HOBOKEN.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases of the stomach (cancer excepted)	103	3	5	...	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	7	47	8	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	...	...	3	...	...	...	...
Appendicitis and typhlitis	108	...	...	1	2	...	2	1
Hernias, intestinal obstructions	109	...	...	...	...	...	...	...
Other diseases of the intestines	110	...	1	...	...	...	...	...
Acute yellow atrophy of the liver	111	...	...	...	...	...	...	1
Cirrhosis of the liver	113	...	...	...	...	...	...	1
Simple peritonitis (nonpuerperal)	117	...	...	...	...	...	...	...
Acute nephritis	119	1	...	3	2	...	...	1
Bright's disease	120	...	...	...	...	1	2	1
Other diseases of the kidneys and annexa	122	...	...	...	...	...	1	...
Calculi of the urinary passages	123	...	...	...	...	...	...	...
Uterine tumor (noncancerous)	129	...	...	...	...	...	...	...
Other diseases of the uterus	130	...	...	...	1	...	...	1
Cysts and other tumors of the ovary	131	...	...	...	...	...	...	...
Salpingitis and other diseases of the female genital organs	132	...	...	...	...	...	...	...
Accidents of pregnancy	134	...	...	...	...	...	...	...
Puerperal hæmorrhage	135	...	...	...	...	...	...	1
Other accidents of labor	136	...	...	...	...	...	...	1
Puerperal septicæmia	137	...	...	...	...	...	1	1
Puerperal albuminuria and convulsions	138	...	...	...	...	...	...	...
Puerperal phlegmasia alba dolens, embolus, sudden death	139	...	...	...	...	...	...	...
Following childbirth (not otherwise defined)	140	...	...	...	...	...	...	...
Gangrene	142	...	...	...	...	...	...	...
Other diseases of the skin and annexa	145	...	...	...	...	...	...	...
Diseases of the bones (tuberculosis excepted)	146	...	1	1	...	...	...	...
Congenital malformations (stillbirths not included)	150	3	2	...	...	...	...	...
Congenital debilty, icterus and sclerema	151	18	5	...	...	...	...	...
Other diseases peculiar to early infancy	152	4	...	...	...	...	...	...
Senility	154	...	...	...	...	...	...	...
Suicide by poison	155	...	...	...	...	...	...	1
Suicide by asphyxia	156	...	...	...	...	...	1	1
Suicide by hanging or strangulation	157	...	...	...	...	...	...	...
Suicide by drowning	158	...	...	...	...	...	...	1
Suicide by firearms	159	...	...	...	...	...	...	1
Suicide by cutting or piercing instruments	160	...	...	...	...	...	...	...
Other acute poisonings	165	...	...	...	...	...	1	...
Conflagration	166	...	...	...	...	...	...	...
Burns (conflagration excepted)	167	...	...	6	...	...	...	1
Absorption of deleterious gases (conflagration excepted)	168	...	...	...	...	...	1	...
Accidental drowning	169	...	...	...	...	1	1	...
Traumatism by fall	172	...	...	...	1	...	1	1
Traumatism by machines	174	...	...	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	...	...	1	3	1	1	5
Injuries by animals	176	...	...	...	...	...	1	...
Effects of heat	179	1	...	...	...	...	...	...
Electricity (lightning excepted)	181	...	...	...	...	...	1	...
Homicide by firearms	182	...	...	...	...	...	1	...
Cause of death not specified or ill-defined	189	4	...	1	...	...	...	...

Total deaths, 1,254. Death-rate, 17.12.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	2	1	1	...	...	...	...	7	5	8	4	3	8	1	....
...	...	...	...	...	...	...	...	...	...	...	...	38	24	59	3	....	62	....	....
...	...	1	...	...	...	...	1	1	...	...	...	2	4	6	.....	1	5	....	....
...	1	1	...	...	...	...	2	...	...	...	...	6	4	7	3	4	6	....	....
...	...	...	1	1	1	2	2	...	1	1	...	3	6	1	8	3	1	5	....
...	...	...	...	1	...	...	1	...	...	...	...	2	1	1	2	1	1	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
2	1	5	6	4	3	3	3	1	...	...	...	21	8	12	17	16	8	5	....
1	...	1	1	...	...	...	...	...	...	...	...	2	1	2	1	2	1	....	....
1	1	2	...	2	...	2	2	...	...	...	...	12	5	9	8	6	11	....	....
1	3	2	4	12	8	10	15	8	3	...	...	39	31	30	40	35	13	21	1
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...	1	...	...	...	...	1	...	...	...	...	...	....	4	1	3	2	1	1	....
...	2	...	...	...	...	1	...	...	...	...	...	....	3	2	1	1	2	....	....
...	1	1	...	1	...	...	...	...	...	...	...	...	3	1	2	2	1	....	....
1	2	1	...	...	...	...	...	...	...	...	...	....	4	2	2	2	2	....	....
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2	1	1	1	...	...	...	...	...	...	...	...	....	7	4	3	7	....	....	....
...	...	2	...	...	...	...	...	...	...	...	...	....	2	.....	2	2	....	....	....
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...	...	1	...	...	...	...	1	...	...	...	...	....	2	1	1	1	....	1	....
...	...	...	...	1	...	...	...	...	...	...	...	2	1	3	.....	1	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	1	5	.....	....	5	....	....
...	...	...	...	...	...	...	...	...	...	...	...	11	12	23	.....	....	23	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	.....	....	4	....	....
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...	...	1	1	1	...	1	...	...	...	...	...	2	3	2	3	4	1	....	....
...	1	...	2	2	...	...	2	...	...	...	...	8	1	2	7	3	3	2	1
...	1	...	...	...	1	1	...	...	...	...	...	3	....	.....	3	2	....	....	1
...	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	...	1	1	1	1	...	...	2	...	...	...	7	....	2	5	4	1	1	1
...	...	...	...	...	1	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	1	1	1	1	1	1	....	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	1	...	...	...	...	...	...	...	...	...	...	3	5	8	.....	1	7	....	....
2	1	...	1	1	1	...	...	...	...	...	...	6	1	3	4	2	5	....	....
2	...	2	2	1	2	...	1	...	...	...	...	12	....	4	8	2	6	1	3
1	5	5	1	1	1	1	3	1	...	...	...	15	7	6	16	16	5	1	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
2	1	6	3	2	1	4	1	...	...	...	...	29	2	17	14	11	18	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	2	....	1	1	1	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	2	5	.....	....	5	....	....

TABLE 25.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN IRVINGTON.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Diphtheria and croup	9	....	....	2	1	...	...	...
Influenza	10	....	....	...	...	...	...	...
Erysipelas	18	....	....	...	...	...	...	...
Tuberculosis of the lungs	28	....	....	1	...	...	2	2
Tuberculous meningitis	30	....	1	1	1	...	...	...
Abdominal tuberculosis	31	....	....	...	...	...	...	...
Syphilis	37	1	....	...	...	1	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	1	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	...
Cancer and other malignant tumors of the skin	44	....	....	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	...	...	...	...	...
Chronic rheumatism and gout	48	....	....	...	...	...	...	...
Diabetes	50	....	....	...	...	1	...	...
Exophthalmic goitre	51	....	....	...	...	...	...	...
Anæmia, chlorosis	54	....	....	...	...	...	...	...
Other general diseases	55	....	....	...	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Including: Cerebrospinal fever	61A	....	....	1	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	....	...	...	...	...	...
Epilepsy	69	....	....	...	...	...	1	...
Other diseases of the nervous system	74	....	....	...	...	...	...	...
Acute endocarditis	78	....	....	...	...	...	...	...
Organic diseases of the heart	79	....	....	...	...	...	1	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Bronchopneumonia	91	....	....	1	...	...	...	...
Pneumonia	92	....	....	2	...	1	...	1
Pleurisy	93	....	....	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	....	1	...	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	....	5	2	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	...	...	...	...	...
Hernias, intestinal obstructions	109	....	....	...	...	...	...	...
Cirrhosis of the liver	113	....	....	...	...	...	...	...
Other diseases of the liver	115	....	....	...	...	...	...	...
Acute nephritis	119	....	....	...	...	...	...	...
Bright's disease	120	....	....	...	...	...	...	...
Diseases of the bladder	124	1	....	...	...	...	...	...
Accidents of pregnancy	134	....	....	...	...	...	...	...
Puerperal septicæmia	137	....	....	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	1	1	1	...	...	...	...
Congenital debility, icterus and sclerema	151	10	....	...	...	...	...	...
Other diseases peculiar to early infancy	152	1	1	...	...	...	...	...
Senility	154	....	....	...	...	...	...	...
Suicide by asphyxia	156	....	....	...	...	...	...	...
Suicide by hanging or strangulation	157	....	....	...	...	...	...	...
Suicide by firearms	159	....	....	...	...	1	...	...
Traumatism by machines	174	....	....	...	...	...	1	...
Traumatism by other crushing (vehicles, railroad, landslides, etc	175	....	....	1	...	...	...	...
Effects of heat	179	....	1	...	...	...	...	...
Cause of death not specified or ill-defined	189	1	....	...	...	...	...	...

Total deaths, 189. Death-rate, 12.86.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
								2					2	2				2	
						1							1		1		1		
4	4	2	1	3	4	2	1					16	10	16	10	16	7	3	
												2	1	3			3		
								1				1		1				1	
												1	1	2			2		
				1		2	2	1				3	4	3	4	4	1	2	
						1	1					1	1	1	1	2			
				2									2	1	1	1		1	
							1						1	1				1	
	1						1					2		2		2			
							1						1	1		1			
			1					1				2	3	4	1	2	2	1	
						1							1		1	1			
							1						1	1				1	
				1									1	1		1			
				1	1							2		2			2		
												1		1			1		
					2		4	3	1			4	6	4	6	6		4	
								1					1	1				1	
												1		1			1		
	1	1										1	1	2		2			
2		1				2	1		2			4	4	6	2	3	2	3	
	1		2	2	2	2	2	3	1			9	7	9	7	10	2	4	
			1				2		6			4	5	4	5	4	1	4	
									1			1	1	1	1	1	1		
		1		2			1		1	1		7	3	6	4	3	4	3	
						1							1	1		1			
						1						2		2			1	1	
												5	2	7			7		
			1				1					1	1	2		1		1	
	1												1	1		1			
			1									1		1		1			
												1		1		1			
								1					1		1			1	
1			1	1	1	2	2	6	4			11	7	8	10	10	1	7	
		1										2		2		1	1		
	1												1		1	1			
1													1	1	1	1			
												2	1	3			3		
												7	3	10			10		
												1	1	2			2		
								1	1			1	1	1	1			2	
				1	1		1	1				3	1		4	3		1	
		1										1			1		1		
								1				2			2		1	1	
												1			1		1		
													1	1			1		
												1		1			1		
												1		1			1		

TABLE 26.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN JERSEY CITY.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	....	2	1	6	5
Measles	6	....	13	16	....	2	....	....
Scarlet fever	7	....	1	25	8	....	2	1
Whooping cough	8	....	14	24	2	....	....	....
Diphtheria and croup	9	1	2	39	18	3	....	1
Including: Croup	9A	....	....	13	1	....	....	....
Influenza	10	....	....	....	....	....	....	....
Dysentery	14	....	....	....	....	....	....	....
Erysipelas	18	2	2	....	....	....	....	....
Purulent infection and septicæmia	20	....	....	....	....	....	....	....
Rabies	23	....	....	....	....	1	....	....
Tetanus	24	1	....	....	....	....	....	....
Tuberculosis of the lungs	28	....	4	6	5	5	28	57
Acute miliary tuberculosis	29	....	....	....	....	1	4	1
Tuberculous meningitis	30	....	3	16	3	2	....	....
Abdominal tuberculosis	31	....	....	4	3	....	....	....
Pott's disease	32	....	....	....	....	....	....	....
White swellings	33	....	....	....	....	1	....	....
Tuberculosis of other organs	34	....	....	1	2	....	1	....
Disseminated tuberculosis	35	....	1	....	....	....	1	....
Rickets	36	....	4	4	1	....	....	....
Syphilis	37	1	3	....	....	....	....	....
Cancer and other malignant tumors of the buccal cavity	39	....	....	1	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	1	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of the breast	43	....	....	....	....	....	....	....
Cancer and other malignant tumors of the skin	44	....	....	1	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	1	....	....	....	1
Acute articular rheumatism	47	....	....	....	1	2	1	1
Chronic rheumatism and gout	48	....	....	....	1	....	....	....
Scurvy	49	....	....	....	....	....	....	....
Diabetes	50	....	....	....	....	....	....	....
Exophthalmic goitre	51	....	....	....	....	....	1	....
Leuchæmia	53	....	....	....	....	....	....	1
Anæmia, chlorosis	54	....	....	....	....	....	1	....
Other general diseases	55	1	....	1	....	....	....	....
Alcoholism (acute or chronic)	56	....	....	....	....	....	....	....
Encephalitis	60	....	1	....	1	1	....	....
Simple meningitis	61	4	8	11	2	1	1	1
Including: Cerebrospinal fever	61A	1	2	5	3	3	1	1
Locomotor ataxia	62	....	....	....	....	....	....	....
Other diseases of the spinal cord	63	....	....	2	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	5	....	1	....	....	....	....
Softening of the brain	65	....	....	....	....	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	1	....
Other forms of mental alienation	68	....	....	1	....	....	....	....
Epilepsy	69	....	....	....	1	....	....	1
Convulsions (nonpueral)	70	....	....	....	....	....	....	1
Convulsions of infants	71	4	16	5	....	....	....	....
Neuralgia and neuritis	73	....	....	....	....	....	....	....
Other diseases of the nervous system	74	....	....	1	....	....	....	....
Diseases of the ears	76	....	1	....	....	1	....	....
Pericarditis	77	....	....	....	....	....	1	....
Acute endocarditis	78	....	1	4	9	6	6	4
Organic diseases of the heart	79	2	2	3	7	11	7	8

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
4	...	4	4	3	2	...	1	...	...	...	...	14	18	24	8	10	19	3	....
...	...	...	...	...	...	...	...	...	...	...	...	11	20	31	.....	....	31	....	....
...	...	...	...	...	...	...	...	...	...	...	...	25	12	33	4	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	14	26	40	.....	....	40	....	....
2	...	...	...	...	...	...	...	...	...	...	...	31	35	62	4	....	66	....	....
...	...	...	...	...	...	...	...	...	...	...	...	6	8	14	.....	....	14	....	....
...	...	1	...	...	2	...	...	3	...	...	...	4	2	3	3	3	....	3	....
...	1	...	...	...	...	...	...	1	1	...	...	1	2	1	2	2	1	....	....
...	1	1	1	1	...	...	1	...	...	...	...	5	4	6	2	4	5	....	....
1	...	1	...	1	1	1	2	...	...	...	...	4	3	1	6	4	....	3	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	1	...	...	...	...	...	...	...	...	...	...	2	....	1	.....	1	1	....	....
64	65	77	61	37	29	20	13	6	...	...	...	313	164	322	155	207	231	37	2
...	2	...	...	2	1	...	2	...	...	...	...	9	4	11	2	5	7	1	....
2	...	1	...	...	1	...	1	...	...	...	...	15	14	26	.....	4	25	....	....
...	...	1	...	1	1	...	...	...	...	...	...	5	5	9	1	1	8	1	....
...	...	...	1	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	.....	1	....	1	....	....
1	1	3	...	...	...	...	...	...	...	...	...	3	6	6	3	4	5	....	....
...	...	1	...	...	...	...	...	...	...	...	...	2	1	1	2	1	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	7	2	9	.....	....	9	....	....
...	1	...	1	...	...	...	...	...	...	...	...	3	3	5	1	....	6	....	....
...	1	...	1	1	1	1	2	1	...	...	...	8	1	3	6	6	1	2	....
1	2	1	10	5	15	15	19	8	1	...	...	36	41	30	47	51	8	18	....
2	...	1	4	2	3	3	11	6	3	...	...	12	24	15	20	19	4	13	....
...	3	3	3	9	8	3	2	3	...	...	...	....	34	22	12	18	3	13	....
...	1	...	2	4	1	2	2	3	1	...	...	....	16	11	5	7	3	6	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	1	1	1	2	5	6	4	...	...	...	14	8	13	9	16	4	2	....
...	1	...	1	...	3	...	...	...	1	...	...	8	3	7	4	4	4	3	....
...	...	...	1	...	...	...	1	1	...	...	...	1	3	3	1	2	1	1	....
...	...	...	...	...	...	...	1	1	...	...	...	1	1	1	1	2	...	...	....
2	3	1	3	1	2	6	11	3	...	...	...	17	15	14	18	16	4	12	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	1	...	...	...	...	...	...	2	....	2	.....	....	1	1	....
...	...	1	1	1	...	1	...	1	...	...	...	2	4	2	4	5	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	....	2	.....	....	2	....	....
...	9	7	8	2	4	1	3	...	...	...	...	29	5	22	12	12	14	8	....
...	...	...	...	...	...	...	...	1	...	...	...	....	4	2	2	...	3	1	....
...	...	...	...	1	...	1	1	...	...	...	...	16	15	28	3	2	28	1	....
...	...	...	...	...	...	...	...	...	...	...	...	8	8	15	1	...	16	...	....
...	...	...	...	1	1	1	2	...	...	...	...	5	....	2	3	2	1	2	....
1	...	...	1	...	2	...	3	2	1	...	...	8	4	4	8	6	3	3	....
4	2	2	11	11	17	21	55	46	15	1	...	95	97	78	114	88	24	77	3
...	...	...	...	...	...	...	...	1	...	...	...	....	1	1	.....	....	....	1	....
...	...	2	1	4	3	7	6	3	...	...	...	15	12	14	13	16	3	8	....
...	1	...	...	...	...	...	2	...	...	...	...	2	2	3	1	1	1	2	....
...	1	...	...	1	...	...	...	...	1	...	...	2	3	4	1	2	2	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	16	9	25	.....	....	25	....	....
...	...	1	1	...	...	...	1	...	1	...	...	....	4	2	2	2	1	1	....
1	...	1	1	...	...	...	...	...	...	...	...	4	....	4	.....	3	1	....	....
1	...	1	...	...	...	...	...	...	...	...	...	3	1	2	2	1	3	....	....
...	...	...	...	...	...	...	1	1	...	...	...	1	2	1	2	....	1	2	....
5	4	9	7	14	11	14	37	13	9	2	...	76	79	91	64	68	43	44	....
12	9	20	21	24	17	21	36	37	19	...	...	112	144	135	121	117	70	68	1

TABLE 26.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN JERSEY CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc.	81							
Embolism and thrombosis	82			1				
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)	83							
Diseases of the lymphatic system (lymphangitis, etc.)	84	2		2				
Hæmorrhage; other diseases of the circulatory system	85							
Diseases of the larynx	87			2				
Diseases of the thyreoid body	88							
Acute bronchitis	89	9	11	6	1			1
Chronic bronchitis	90							
Bronchopneumonia	91	24	79	84	2			
Pneumonia	92	8	41	65	13	3	10	8
Pleurisy	93		1	2	1			
Pulmonary congestion, pulmonary apoplexy	94			2				
Gangrene of the lung	95							
Asthma	96							
Pulmonary emphysema	97							
Other diseases of the respiratory system (tuberculosis excepted)	98						1	
Other diseases of the mouth and annexa	99							
Diseases of the pharynx	100			1	1		1	
Diseases of the œsophagus	101							
Ulcer of the stomach	102							1
Other diseases of the stomach (cancer excepted)	103	3	13	1				
Diarrhœa and enteritis (Under 2 years)	104	23	173	48				
Diarrhœa and enteritis (2 years and over)	105			18	6			1
Appendicitis and typhlitis	108				2	5	6	4
Hernias, intestinal obstructions	109	2	6	3	2			
Other diseases of the intestines	110				1		1	1
Cirrhosis of the liver	113							
Billiary calculi	114							
Other diseases of the liver	115							
Diseases of the spleen	116							
Simple peritonitis (nonpuerperal)	117				1			
Other diseases of the digestive system (cancer and tuberculosis excepted)	118							
Acute nephritis	119		2	1	1			1
Bright's disease	120				1	2	6	10
Other diseases of the kidneys and annexa	122							
Diseases of the bladder	124							
Other diseases of the urethra, urinary abscess, etc.	125							
Diseases of the prostate	126							
Uterine hæmorrhage (nonpuerperal)	128							
Uterine tumor (noncancerous)	129							
Other diseases of the uterus	130							
Cysts and other tumors of the ovary	131							
Salpingitis and other diseases of the female genital organs	132							
Accidents of pregnancy	134							2
Puerperal hæmorrhage	135							2
Other accidents of labor	136						1	1
Puerperal septicæmia	137						1	3
Puerperal albuminuria and convulsions	138							3
Puerperal phlegmasia alba dolens, embolus, sudden death	139							
Gangrene	142		1					
Acute abscess	144							
Other diseases of the skin and annexa	145	1		1				
Diseases of the bones (tuberculosis excepted)	146		1					
Congenital malformations (stillbirths not included)	150	22	3					
Congenital debility, icterus and sclerema	151	169	33	3				

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	2	2	1	1	5	3	...	...	...	9	5	5	9	8	2	4	....
...	...	2	2	2	6	9	25	38	22	3	...	52	57	38	71	45	7	55	2
...	...	...	4	3	1	...	4	1	1	1	...	5	11	8	8	4	3	9	....
...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	.....	....	4	....	....
...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	....	1	....	....
...	...	...	...	...	1	...	...	...	...	...	...	2	1	2	1	...	2	1	....
...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	1	...	...	....
...	...	...	1	...	...	3	3	6	6	3	...	22	28	30	20	10	27	13	....
...	...	...	...	...	1	2	9	3	1	1	...	8	9	1	16	3	4	10	....
1	...	2	2	4	3	...	11	6	3	...	...	125	96	191	30	8	172	40	1
10	10	14	24	25	19	25	28	25	6	2	...	159	177	216	120	106	181	47	2
...	3	2	1	1	1	3	3	1	1	...	...	10	10	13	7	8	6	6	....
...	1	...	...	...	...	...	2	...	...	...	...	2	3	3	2	2	2	1	....
...	...	...	...	...	...	...	2	...	...	...	...	2	...	.....	2	1	...	1	....
...	...	...	1	1	2	1	10	3	...	1	..	11	8	4	15	10	1	8	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	.....	1	1	...	...	....
...	...	...	...	...	...	1	...	...	...	...	...	1	1	.....	2	1	1	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	1	...	...	....
...	...	...	...	...	...	...	1	...	...	...	...	2	2	1	3	1	3	...	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	.....	1	1	...	...	....
1	1	2	2	1	1	4	1	...	...	...	...	9	5	6	8	4	6	4	....
...	...	...	1	...	1	2	9	8	2	...	...	18	22	28	12	12	17	11	....
...	...	...	...	...	...	...	...	...	...	...	...	137	107	236	8	...	244	...	....
...	3	2	3	5	4	3	11	10	8	...	...	34	40	32	42	24	26	24	....
3	4	4	2	3	3	2	...	1	...	...	...	22	17	25	14	13	22	4	....
1	2	1	3	...	2	3	2	1	...	1	...	21	8	21	8	10	15	4	....
...	...	3	...	2	...	...	1	1	...	...	...	5	5	2	8	7	2	1	....
...	...	5	11	12	6	8	10	6	2	...	...	37	23	27	33	33	10	17	....
...	...	...	...	...	...	1	2	...	...	...	...	...	3	1	2	1	...	2	....
1	1	2	1	2	1	...	4	...	...	...	...	6	6	6	6	8	2	2	....
...	...	...	...	...	...	...	1	...	...	...	...	...	1	.....	1	...	...	1	....
...	1	1	...	...	...	...	1	...	...	...	...	1	3	2	2	2	2	....	....
...	...	...	...	...	...	1	1	...	...	...	...	1	1	1	1	2	....	....	....
4	4	5	2	5	4	6	1	3	1	...	...	15	25	19	21	20	8	12	....
7	18	25	18	37	27	38	66	38	10	1	...	175	129	163	141	147	65	90	2
...	1	...	...	...	2	...	...	...	...	...	...	2	1	2	1	2	1	....	....
...	...	...	...	3	...	1	...	3	...	2	...	8	1	3	6	6	1	2	....
...	1	...	...	...	...	...	2	...	...	...	...	3	...	.....	3	3	....	....	....
...	...	...	...	...	...	...	1	3	2	...	...	6	...	2	4	4	....	2	....
...	...	...	...	...	1	...	...	...	...	...	...	...	1	.....	1	1	....	....	....
...	1	1	...	3	2	1	...	...	...	...	...	...	8	5	3	6	1	1	....
2	1	1	1	...	...	1	...	...	...	...	...	...	6	3	3	6	....	....	....
...	...	...	...	1	2	1	1	...	...	...	...	...	5	1	4	3	....	2	....
4	4	1	...	2	...	...	...	...	...	...	...	...	11	9	2	7	2	2	....
1	1	1	2	...	...	...	...	...	...	...	...	...	7	3	4	6	....	1	....
2	1	2	...	1	...	...	...	...	...	...	...	...	8	4	4	8	....	....	....
2	...	3	1	1	...	...	...	...	...	...	...	...	9	4	5	9	....	....	....
5	9	3	2	...	...	...	...	...	...	...	...	...	23	10	13	23	....	....	....
4	3	...	...	...	...	...	...	...	...	...	...	...	10	7	3	10	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	2	...	...	2	1	1	2	1	1	1	....
1	...	1	1	...	2	1	...	...	...	1	...	5	1	2	4	5	1	....	....
...	...	...	...	...	...	...	4	...	...	...	...	2	5	3	4	1	2	4	....
...	2	...	...	1	...	...	2	...	...	...	...	3	3	1	5	3	1	2	....
...	...	...	...	...	...	...	...	...	...	...	...	14	11	25	.....	....	25	....	....
...	...	...	...	...	...	...	...	...	...	...	...	121	84	204	1	....	205	....	....

TABLE 26.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN JERSEY CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases peculiar to early infancy	152	32	8	...	...	...	...	...
Lack of care	153	1	...	...	...	...	...	...
Senility	154	...	...	...	...	...	...	...
Suicide by poison	155	...	...	...	...	...	2	...
Suicide by asphyxia	156	...	...	...	...	...	...	...
Suicide by hanging or strangulation	157	...	...	...	...	...	...	...
Suicide by drowning	158	...	...	...	...	...	...	...
Suicide by firearms	159	...	...	...	...	...	1	...
Suicide by cutting or piercing instruments	160	...	...	...	...	...	...	...
Suicide by jumping from a high place	161	...	...	...	...	...	...	1
Other acute poisonings	165	...	...	1	1	...	...	...
Conflagration	166	...	...	...	...	...	...	...
Burns (conflagration excepted)	167	...	1	21	3	1	...	1
Absorption of deleterious gases (conflagration excepted)	168	...	...	...	...	1	1	3
Accidental drowning	169	...	...	...	3	1	6	4
Traumatism by fall	172	...	...	1	1	1	...	...
Traumatism by machines	174	...	...	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	...	...	2	4	5	5	6
Injuries by animals	176	...	...	...	...	...	...	...
Effects of heat	179	...	1	...	1	...	1	...
Electricity (lightning excepted)	181	...	...	...	...	...	...	3
Homicide by firearms	182	...	...	...	1	...	...	1
Homicide by other means	184	...	1	...	...	...	...	...
Other external violence	186	...	1	...	...	...	...	...
Cause of death not specified or ill-defined	189	5	29	7	1	...	...	...

Total deaths, 4,295. Death-rate, 14.87.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	...	...	...	...	22	18	40	...	...	40	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...
...	...	...	...	...	...	...	...	10	8	3	...	10	11	6	15	6	2	13	...
1	1	1	...	...	...	...	...	...	...	...	...	4	1	3	2	1	4	...	...
1	1	2	...	...	...	2	2	...	...	...	...	8	...	3	5	4	2	1	1
...	...	1	...	...	1	...	1	1	...	...	...	3	1	1	3	2	1	1	...
...	...	...	...	2	1	...	...	...	...	...	...	3	...	1	2	1	1	...	1
...	1	1	1	1	1	...	2	...	...	...	...	8	...	3	5	2	4	1	1
..	...	...	...	1	1	...	...	...	...	...	...	2	...	1	1	2	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...
...	...	1	...	...	...	...	1	...	...	...	...	2	2	2	2	1	2	1	...
..	1	1	...	...	...	...	...	...	...	...	...	2	...	...	2	...	1	...	1
1	5	...	1	1	2	...	...	1	...	...	...	18	20	30	8	7	31	...	...
...	2	...	4	3	2	2	3	2	...	...	...	16	7	9	14	13	5	5	...
2	5	5	8	1	2	2	2	...	...	...	1	41	1	18	24	16	16	2	8
6	2	2	3	4	5	3	4	7	3	...	...	29	13	22	20	15	15	12	...
...	1	1	1	...	...	...	1	...	...	...	...	4	...	3	1	4	...	...	...
11	6	7	6	5	6	1	6	1	...	...	...	59	12	37	34	32	31	5	5
...	...	1	...	...	...	...	1	...	...	...	...	2	...	...	2	1	1	...	...
...	...	...	...	1	...	...	...	1	...	...	...	3	2	2	3	1	3	1	...
...	1	1	...	...	...	...	...	...	...	...	...	5	...	3	2	2	3	...	...
..	1	1	...	...	...	...	...	...	...	...	...	3	1	3	1	1	2	1	...
1	...	1	...	...	...	...	1	1	...	...	...	2	3	1	4	2	1	1	1
...	...	...	...	...	...	...	...	1	...	...	...	...	2	1	1	...	1	1	...
...	...	1	...	...	...	...	...	...	...	...	...	22	21	40	3	...	43	...	...

TABLE 27.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN KEARNY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	....	1	....	....	....
Whooping cough	8	....	1	1	1	....	....	....
Diphtheria and croup	9	....	....	....	1	....	....	....
Including: Croup	9A	....	1	....	....	....	....	....
Dysentery	14	....	1	....	....	....	....	....
Purulent infection and septicæmia	20	....	....	1	....	....	....	....
Tuberculosis of the lungs	28	....	....	....	....	1	....	....
Syphilis	37	1	....	....	....	....	....	....
Cancer and other malignant tumors of the buccal cavity	39	....	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	1	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of the breast	43	....	....	....	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	....	....	....	....	....
Chronic rheumatism and gout	48	....	....	....	....	....	....	....
Diabetes	50	....	....	....	....	....	....	....
Anæmia, chlorosis	54	....	....	....	....	....	....	....
Other general diseases	55	1	....	....	....	....	....	....
Alcoholism (acute or chronic)	56	....	....	....	....	....	....	....
Simple meningitis	61	....	1	1	....	1	....	....
Locomotor ataxia	62	....	....	....	....	....	....	....
Other diseases of the spinal cord	63	....	....	....	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	....	....
Softening of the brain	65	....	....	....	....	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	....	....
Convulsions of infants	71	3	2	....	1	....	....	....
Neuralgia and neuritis	73	....	....	....	....	....	....	....
Other diseases of the nervous system	74	....	....	....	....	....	....	....
Diseases of the ears	76	....	1	....	....	....	....	....
Acute endocarditis	78	....	....	1	....	1	....	....
Organic diseases of the heart	79	....	....	....	1	....	....	....
Angina pectoris	80	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Diseases of the nasal fossæ	86	....	....	....	....	....	....	....
Diseases of the larynx	87	....	1	1	....	....	....	....
Acute bronchitis	89	1	2	....	....	....	....	....
Chronic bronchitis	90	....	....	....	....	....	....	....
Bronchopneumonia	91	1	3	....	2	....	....	....
Pneumonia	92	1	1	1	....	....	....	1
Pleurisy	93	....	....	....	....	....	....	....
Pulmonary congestion, pulmonary apoplexy	94	....	....	....	....	....	....	....
Asthma	96	....	....	....	....	....	....	....
Diseases of the œsophagus	101	1	....	....	....	....	....	....
Other diseases of the stomach (cancer excepted)	103	....	1	....	....	....	....	....
Diarrhœa and enteritis (Under 2 years)	104	1	8	1	....	....	....	....
Diarrhœa and enteritis (2 years and over)	105	....	....	1	1	....	....	....
Acute yellow atrophy of the liver	111	....	....	....	....	....	....	....
Cirrhosis of the liver	113	....	....	....	....	....	....	....
Other diseases of the liver	115	....	....	....	....	....	....	....
Acute nephritis	119	....	....	....	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	....
Diseases of the bladder	124	....	....	....	....	....	....	....
Other diseases of the urethra, urinary abscess, etc	125	....	....	....	....	....	....	....
Congenital malformations (stillbirths not included)	150	2	....	....	....	....	....	....
Congenital debility, icterus and sclerema	151	8	....	....	....	....	....	....
Other diseases peculiar to early infancy	152	3	1	....	....	....	....	....

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.											SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	...	...	3	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
2	3	2	3	3	2	1	2	1	...	...	...	16	4	10	10	15	3	2	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	1	...
...	...	1	...	...	...	1	3	...	...	...	...	3	2	3	2	3	1	1	...
...	...	...	...	...	...	...	1	...	...	...	...	2	...	2	...	1	1	...	...
...	1	...	1	1	...	...	1	...	...	...	...	4	...	1	3	3	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	1	...
...	...	1	...	...	...	1	...	...	1	...	...	3	...	2	1	1	...	2	...
...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	...	2	...	...	...	1	1	...	2	1	...	1	...
...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...
...	...	...	...	...	1	...	...	2	...	...	...	4	2	5	1	1	4	1	...
...	...	...	...	...	...	...	2	1	...	...	...	3	...	3	...	2	...	1	...
...	...	...	...	1	...	...	...	1	...	...	...	2	...	2	...	2	...	...	...
...	...	...	...	...	1	1	2	4	1	1	...	6	4	2	8	5	1	4	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	1	9	2	...	...	10	2	7	5	1	2	9	...
...	...	...	...	...	...	...	...	...	...	...	...	3	3	6	...	...	6	...	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	1	1	...	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	1	...	...	...	1	1	3	2	2	...	...	10	2	8	4	5	2	5	...
3	1	1	1	...	1	1	6	4	3	...	...	13	9	11	11	12	3	7	...
...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...
...	...	...	...	...	...	...	2	3	1	...	...	6	...	3	3	...	2	4	...
...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	2	...	...
...	...	...	1	...	...	...	...	...	...	...	...	1	3	3	1	1	3	...	...
...	...	...	...	...	...	...	1	1	3	...	...	4	1	3	2	...	1	4	...
...	...	...	...	...	...	...	...	...	1	...	...	4	3	7	...	1	6	...	...
2	...	1	1	1	...	...	1	6	...	...	...	9	7	8	8	7	6	3	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	1	2	...	...	1	1	...
...	...	...	...	...	...	...	...	...	...	...	...	4	6	10	...	...	10	...	...
...	...	...	...	...	...	...	1	4	1	...	...	7	1	5	3	2	3	3	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	1	...
1	...	1	...	...	...	1	1	1	...	...	...	4	1	3	2	4	1	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	1	...	...	...
...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...
...	...	...	...	1	...	...	4	4	2	...	...	8	3	4	7	4	...	7	...
...	...	...	...	...	...	...	...	2	2	...	...	4	...	2	2	1	...	3	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	5	3	8	...	...	8	...	...
...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	...	...	4	...	...

TABLE 27.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN KEARNY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Senility	154	....	....	...	...	...	...	...
Suicide by drowning	158	....	....	...	...	...	...	...
Suicide by firearms	159	....	....	...	...	...	...	...
Absorption of deleterious gases (conflagration excepted)	168	....	....	...	...	...	..	...
Accidental drowning	169	....	..	...	1	...	...	...
Traumatism by fall	172	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	...	...	...	...	2
Cause of death not specified or ill-defined	189	....	2	...	...	...	...	...

Total deaths, 248. Death-rate, 11.43.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Felmale.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	1	1	1	1	...	2	2	2	2	1	1	2	....
...	...	...	...	...	...	1	...	...	...	...	...	1	....	1	.....	....	....	1	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	....	....	1	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	....	1	....	....
...	1	...	...	...	...	...	1	...	...	...	...	1	1	.....	1	2	....	....	....
...	...	1	1	...	...	...	...	...	...	...	...	4	....	1	3	1	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	....	2	.....	....	2	....	....

TABLE 28.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN LAMBERTVILLE.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	...	...	...	...	...	...	...
Scarlet fever	7	...	...	1	2	...	...	...
Erysipelas	18	...	...	...	...	...	...	...
Tetanus	24	1	...	...	...	...	...	...
Tuberculosis of the lungs	28	...	...	...	...	...	1	...
Cancer and other malignant tumors of the stomach liver	40	...	...	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	...	...	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	...	...	...	...	...	...	...
Including: Cerebrospinal fever	61A	...	...	...	...	...	1	...
Cerebral hæmorrhage, apoplexy	64	...	...	...	...	...	...	...
Convulsions of infants	71	...	1	...	...	...	...	...
Neuralgia and neuritis	73	...	...	...	...	...	...	...
Acute endocarditis	78	...	...	...	...	...	...	...
Organic diseases of the heart	79	...	...	...	...	...	...	...
Angina pectoris	80	...	...	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc.	81	...	...	...	...	...	...	...
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)	83	...	...	...	...	...	...	...
Bronchopneumonia	91	...	1	...	...	...	...	...
Pneumonia	92	...	...	...	...	...	...	...
Pulmonary congestion, pulmonary apoplexy	94	...	...	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	...	...	1	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	...	3	...	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	...	...	...	...	...	...	...
Bright's disease	120	...	...	...	...	...	...	...
Other diseases of the kidneys and annexa	122	...	...	...	...	...	...	...
Diseases of the bladder	124	...	...	...	...	...	...	...
Gangrene	142	...	...	...	...	...	...	...
Congenital debility, icterus and sclerema	151	4	...	...	...	...	...	...
Senility	154	...	...	...	...	...	...	...
Traumatism by fall	172	...	...	...	...	...	...	...

Total deaths, 65. Death-rate, 14.63.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	1	...	...	...	...	...	...	1	...	...	1	1	1	1	...	1	1	...
...	1	...	...	...	...	...	...	...	...	...	...	2	2	4	.....	1	3	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	.....	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	...	...
1	...	...	...	...	...	...	...	...	...	...	...	2	...	2	.....	...	2	...	...
...	...	...	...	...	...	...	2	2	...	...	...	2	2	3	1	2	1	1	...
...	...	...	...	1	...	...	1	...	...	...	...	...	2	2	.....	2	...	...	...
...	...	...	1	...	...	...	...	...	...	...	...	...	1	.....	1	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	...	1	...	...
...	...	...	...	...	...	...	...	5	...	...	...	3	2	2	3	1	1	3	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	...	1	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	.....	...	...	1	...
...	...	...	...	...	...	...	...	...	1	...	...	...	1	.....	1	...	1	...	...
1	...	...	...	1	...	...	2	2	2	...	...	7	1	7	1	5	1	2	...
...	...	...	2	1	...	...	...	1	...	...	...	3	1	3	1	3	1	...	...
...	...	...	...	...	...	...	...	1	1	...	...	1	1	1	1	1	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	.....	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	...	1	...	...
...	...	...	...	...	...	...	2	2	...	...	...	1	3	3	1	3	1	...	...
...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	.....	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	.....	...	3	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	.....	...	...	1	...
...	...	...	...	...	...	...	2	...	...	...	...	1	1	2	.....	1	...	1	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	.....	1	...	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	.....	1	...	...	...
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	.....	1	...	...	...
...	...	...	...	...	...	...	...	...	1	1	1	2	2	4	.....	...	4	...	...
...	...	...	...	...	...	...	...	1	1	...	...	1	2	3	.....	1	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	.....	...	...	1	...

TABLE 29.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN LONG BRANCH.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	...	...	1	3
Malaria	4	....	....	...	...	...	...	...
Measles	6	....	....	1	...	...	...	...
Whooping cough	8	1	1	1	...	...	...	...
Diphtheria and croup	9	....	....	3	1	...	...	...
Purulent infection and septicæmia	20	....	....	...	...	1	...	...
Tetanus	24	....	....	1	...	...	...	...
Tuberculosis of the lungs	28	....	....	...	...	...	1	3
Tuberculous meningitis	30	....	....	...	...	...	...	...
Abdominal tuberculosis	31	....	....	...	...	...	1	...
Cancer and other malignant tumors of the buccal cavity	39	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	...
Cancer and other malignant tumors of the breast	43	....	....	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	...	1	...	...	...
Diabetes	50	....	....	...	...	...	...	...
Leuchæmia	53	....	....	...	...	...	...	...
Anæmia, chlorosis	54	....	....	...	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Chronic or lead poisoning	57	....	....	...	...	...	...	...
Locomotor ataxia	62	....	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Softening of the brain	65	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	....	...	...	...	...	...
Convulsions of infants	71	2	....	2	...	...	...	...
Other diseases of the nervous system	74	....	....	...	...	...	...	...
Acute endocarditis	78	....	....	...	...	...	1	...
Organic diseases of the heart	79	....	....	1	...	...	...	1
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Acute bronchitis	89	1	1	...	...	...	...	...
Chronic bronchitis	90	....	....	...	...	...	...	...
Bronchopneumonia	91	....	3	3	...	...	...	...
Pneumonia	92	....	1	1	...	...	...	...
Pleurisy	93	....	....	...	...	...	...	...
Asthma	96	....	....	...	...	...	...	...
Other diseases of the respiratory system (tuberculosis excepted)	98	....	....	...	...	...	...	...
Diseases of the pharynx	100	....	....	1	...	...	...	...
Ulcer of the stomach	102	....	....	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	2	2	1	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	....	6	...	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	...	...	...	...	...
Appendicitis and typhlitis	108	....	....	1	2	...	1	...
Hernias, intestinal obstructions	109	....	....	...	...	...	...	...
Other diseases of the intestines	110	1	....	...	...	...	1	...
Hydatid tumor of the liver	112	....	....	...	...	...	...	...
Cirrhosis of the liver	113	....	....	...	...	...	...	...
Acute nephritis	119	....	....	...	...	...	...	...
Bright's disease	120	....	....	...	1	...	1	...
Other diseases of the uterus	130	....	....	...	...	...	...	...
Salpingitis and other diseases of the female genital organs	132	....	....	...	...	...	...	...
Accidents of pregnancy	134	....	....	...	...	...	...	1
Other accidents of labor	136	....	....	...	...	...	...	...
Puerperal septicæmia	137	....	....	...	...	...	...	...
Gangrene	142	....	....	...	...	...	...	...

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	1	...	1	1	1	...	...	...	...	...	...	4	4	7	1	2	5	1	....
...	...	...	...	...	...	...	...	1	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	....	3	.....	....	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	.....	....	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	1	...	1	...	...	...	...	1	...	...	3	1	2	2	1	2	1	....
3	1	2	...	2	...	...	1	...	...	...	...	6	7	8	5	5	7	1	....
...	...	...	1	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	1	1	2	.....	1	1	....	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	1	1	...	...	...	1	1	1	...	...	...	1	4	3	2	3	2	....	....
...	...	...	1	...	...	1	2	...	...	...	...	2	2	3	1	3	....	1	....
1	...	1	...	...	...	...	...	...	...	...	...	....	2	1	1	1	....	1	....
...	...	...	...	...	...	...	...	...	1	...	...	....	1	.....	1	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	1	...	...	...	...	...	1	...	...	...	...	1	1	1	1	1	1	....	....
...	1	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	....	1	.....	1	....	....	1	....
...	...	...	1	2	...	...	1	...	...	...	...	1	3	3	1	3	....	....	1
...	...	...	1	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	1	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	1	...	1	1	1	1	1	6	1	...	...	7	6	10	3	9	3	....	1
...	...	...	...	...	...	...	1	1	...	...	...	....	2	1	1	....	....	2	....
...	...	...	...	...	1	...	...	1	...	...	...	2	....	.....	2	1	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	.....	....	4	....	....
...	...	1	...	1	...	...	...	...	...	...	...	1	1	2	.....	1	1	....	....
...	...	3	...	1	1	3	2	3	...	...	...	11	3	6	8	9	1	4	....
...	...	1	...	...	3	5	5	7	3	...	...	17	9	20	6	16	1	8	1
...	...	...	1	1	...	1	1	...	3	...	...	3	4	3	4	3	1	3	....
...	...	...	...	...	...	...	1	...	...	...	...	....	3	2	1	1	2	....	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	1	...	...	...	...	...	...	...	...	...	4	3	7	.....	....	7	....	....
2	...	1	3	...	1	2	...	...	1	...	...	6	6	9	3	5	4	3	....
1	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	1	1	....	....
...	...	1	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	....	1	.....	1	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	1	...	2	...	...	...	....	3	3	....	2	....	1	....
1	...	...	...	...	2	...	1	...	...	...	...	5	4	6	3	2	6	1	....
...	...	...	...	...	...	...	...	...	...	...	...	3	3	6	.....	....	6	....	....
...	1	...	1	...	...	...	...	...	2	...	...	2	2	3	1	1	1	2	....
2	...	...	...	...	...	...	...	...	...	...	...	3	3	5	1	1	4	....	1
...	...	...	...	...	...	2	2	...	...	...	...	....	4	4	.....	....	....	4	....
...	...	...	...	1	...	...	1	...	...	...	...	2	2	3	1	1	2	1	....
1	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	...	...	1	...	1	1	2	...	1	...	...	4	2	4	2	3	....	3	....
...	...	1	...	1	...	...	...	...	...	...	...	1	1	2	.....	2	....	....	....
...	...	4	...	1	3	2	3	6	4	...	...	18	7	21	4	11	5	9	....
...	...	...	...	1	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	1	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
1	...	1	...	...	...	...	...	...	...	...	...	....	3	2	1	3	....	....	....
1	...	1	...	...	...	...	...	...	...	...	...	....	2	1	1	1	....	1	....
...	...	1	...	...	...	...	...	...	...	...	...	....	1	.....	1	1	....	....	....
...	...	...	...	1	...	...	...	...	...	...	...	....	1	1	.....	....	....	1	....

TABLE 29.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN LONG BRANCH.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Diseases of the bones (tuberculosis excepted)	146	....	....	....	1	....	....	....
Congenital debility, icterus and sclerema	151	14	....	....	....	....	....	....
Other diseases peculiar to early infancy	152	1	....	....	....	....	....	....
Lack of care	153	1	....	....	....	....	....	....
Senility	154	....	....	....	....	....	....	....
Suicide by poison	155	....	....	....	....	....	....	....
Suicide by hanging or strangulation	157	....	....	....	....	....	....	....
Suicide by firearms	159	....	....	....	....	....	....	....
Suicide by cutting or piercing instruments	160	....	....	....	....	....	....	....
Burns (conflagration excepted)	167	....	....	1	....	1	....	....
Accidental drowning	169	....	....	....	....	....	....	1
Traumatism by fall	172	....	....	....	....	....	....	....
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	2	1	1	....
Homicide by firearms	182	....	....	....	....	....	....	1
Homicide by other means	184	1	....	....	....	....	....	....
Cause of death not specified or ill-defined	189	....	4	....	....	....	....	....

Total deaths, 286. Death-rate 20.48.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													1	1			1		
												6	8	14			14		
					1							1	1	1	1		2		
												1			1		1		
									1				1	1				1	
	1											1			1	1			
												1		1			1		
							1					1			1	1			
							1					1		1		1			
		2										4		3	1	2	2		
	1											2		1	1	1	1		
1												1		1			1		
1	2		2		1							8	2	8	2	3	7		
1												1	1	1	1	1	1		
													1	1			1		
												3	1	4			4		

TABLE 30.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN MILLVILLE.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1							
Malaria	4			1				
Whooping cough	8	1	1	2				
Including: Croup	9A			1				
Influenza	10							
Mycoses	25							
Tuberculosis of the lungs	28							
Abdominal tuberculosis	31			1			1	
Rickets	36		1					
Syphilis	37			1				
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Diabetes	50							
Locomotor ataxia	62							
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Other forms of mental alienations	68							
Epilepsy	69							
Convulsions of infants	71		1					
Acute endocarditis	78							
Organic diseases of the heart	79							
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Diseases of the larynx	87				1			
Chronic bronchitis	90							
Bronchopneumonia	91	1		2				
Pneumonia	92		1	2				
Pleurisy	93							
Pulmonary congestion, pulmonary apoplexy	94							
Asthma	96							
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103	1						
Diarrhœa and enteritis (Under 2 years)	104	1	7	2				
Diarrhœa and enteritis (2 years and over)	105			1				
Hernias, intestinal obstructions	109				1			
Acute nephritis	119				1			
Bright's disease	120							
Puerperal hæmorrhage	135							
Diseases of the bones (tuberculosis excepted)	146		1					
Congenital malformations (stillbirths not included)	150	2						
Congenital debility, icterus, and sclerema	151	10	3					
Other diseases peculiar to early infancy	152			1				
Lack of care	153		1					
Senility	154							
Suicide by poison	155							
Suicide by hanging or strangulation	157							
Accidental drowning	169						1	1
Traumatism by fall	172							
Traumatism by otherr crushing (vehicles, railroad, landslides, etc.)	175							
Cause of death not specified or ill-defined	189		3					

Total deaths, 170. Death-rate, 13.29.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
							1					1		1				1	
												1		1			1		
												1	3	4			4		
													1	1			1		
								1				1			1	1			
								1				1			1	1			
3	2	5		1	2	2	1					10	6	16		13	2	1	
												2		2			2		
													1	1			1		
									1				2	2			1	1	
							1					1		1				1	
								4				4		2	2	4			
					1		1						2	2		2			
2	1		1					1					5	5		3	1	1	
								2					2	1	1		1	1	
							1	2				1	2	2	1	2		1	
							1					1		1		1			
	1		1	1	2	2	3	3	2			9	6	13	2	11		4	
				1		1	3					1	4	4	1	2		3	
							1					1		1			1		
	1	1										1	1	2		2			
												1		1			1		
		1	1				2					3	1	3	1	2		2	
				2	2	2	1	1	2			6	4	7	3	7		3	
									1				1	1				1	
						1			1			2		2		2			
								2	1			1		1			1		
													3	3				3	
							1					1	3	4		1	3		
		1			1		1	3				4	5	8	1	4	4	1	
							1						1	1				1	
									1				1	1				1	
							1						1	1		1			
					1								1	1			1		
												1		1			1		
												7	3	10			10		
							1		1			3		3		2	1		
												1		1			1		
		1											2	2		1	1		
		1		3	1	1	1	5	1			7	6	9	4	6	1	6	
													1	1		1			
													1	1			1		
												2		2			2		
												8	5	13			13		
													1	1			1		
													1	1			1		
									1				1	1				1	
1													1	1		1			
							1						1		1			1	
			1									2	1	2	1		3		
								1					1	1				1	
					1							1		1			1		
												2	1	3			3		

TABLE 31.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN MONTCLAIR.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1							
Scarlet fever	7						1	
Whooping cough	8			2				
Diphtheria and croup	9		1	1				1
Influenza	10							
Erysipelas	18		1					
Tetanus	24						1	
Tuberculosis of the lungs	28						2	4
Tuberculous meningitis	30		1					1
Abdominal tuberculosis	31			1				
Tuberculosis of other organs	34				1			
Rickets	36	1	4					
Syphilis	37		3					1
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritnœum, intestines, rectum	41							
Cancer and other malignant tumors of the female genita organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of other organs or of organs not specified	45							
Diabetes	50							
Exophthalmic goitre	51							
Leuchæmia	53							
Anæmia, chlorosis	54							1
Alcoholism (acute or chronic)	56							
Simple meningitis	61		1					
Other diseases of the spinal cord	63							
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66				1			
Epilepsy	69							
Convulsions of infants	71	1						
Diseases of the ears	76			1				
Acute endocarditis	78				1		1	1
Organic diseases of the heart	79							
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82							
Diseases of the lymphatic system (lymphangitis, etc)	84			1				
Diseases of the larynx	87			1				
Acute bronchitis	89							
Chronic bronchitis	90							
Bronchopneumonia	91		4	3				
Pneumonia	92		5	6	2			
Pleurisy	93		3					1
Ulcer of the stomach	102							1
Other diseases of the stomach (cancer excepted)	103	1	7	1				
Diarrhœa and enteritis (Under 2 years)	104		2	1				
Diarrhœa and enteritis (2 years and over)	105			1				
Appendicitis and typhlitis	108				1			
Hernias, intestinal obstructions	109							
Other diseases of the intestines	110							
Cirrhosis of the liver	113							
Other diseases of the liver	115							
Acute nephritis	119							1
Bright's disease	120							
Calculi of the urinary passages	123							
Diseases of the bladder	124							

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AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1						1						2		1	1		2		
													1	1			1		
												2		2			2		
												1	2	3		1	2		
		1											1	1			1		
				1								1	1	2		1	1		
												1		1			1		
6	4	1	2	1	1	1	1					9	14	21	2	15	3	5	
												1	1	1	1		2		
													1	1			1		
		1											2	1	1	1	1		
												3	2	4	1		5		
												2	2	4			4		
							1					1			1			1	
		1			1	2	1	2	1			6	3	5	4	5	2	2	
		1	2	1	1			1	1				7	5	2	4	1	2	
			1	1		2	1	1					6	4	2		1	5	
					2		1	1					4	4		2	2		
			1	1			1						3	3		1	1	1	
							1	3				1	3	3	1			4	
		1	1										2	1	1	2			
												1		1			1		
							1						1	1		1			
	1	2										2	1	3		2	1		
												1		1			1		
							1						1		1	1			
		1		1	1	2	2	1	3			4	7	9	2	2	2	7	
							1		1			1	2	2	1	1	1	1	
					1	1							2	1	1	1		1	
												1		1			1		
													1	1			1		
		2		1			2	4	1			7	6	10	3	5	5	3	
			1	1	1	2	5	2	4			10	6	13	3	8	4	4	
					1		1	2	1			4	1	4	1	3		2	
						2	10	12	4	1		12	17	15	14	13	1	15	
1													2	2		1	1		
												1		1			1		
												1		1			1		
			1							1		1	1	1	1	1		1	
									1	1			2	1	1			2	
		1				1	1	1				4	7	8	3	1	8	2	
1	3	2	2	1	2	2	6	4		1		17	20	29	8	15	15	7	
												2	2	4			4		
		1				1	1					3	1	2	2	2	1	1	
			1				1		1	1		6	7	12	1	1	9	3	
													3	3			3		
						1			1			2	1	2	1	1	1	1	
				1									2	1	1		2		
					1		1					1	1	1	1			2	
							1						1	1		1			
							1					1		1				1	
			1										1	1				1	
					1								2	2		2			
	1	1				3	6	3	1			3	12	10	5	8	2	5	
							1						1		1			1	
									1			1			1			1	

TABLE 31.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN MONTCLAIR		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Diseases of the prostate	126	....	....	...	...	...	...	...
Cysts and other tumors of the ovary	131	....	....	...	...	..	...	...
Other accidents of labor	136	....	....	...	...	...	...	...
Puerperal septicæmia	137	....	....	...	...	...	...	...
Acute abscess	144	....	2	...	...	...	...	...
Diseases of the bones (tuberculosis excepted)	146	....	....	...	...	1	...	...
Diseases of the bones (tuberculosis and rheumatism excepted)	147	....	....	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	1	....	...	...	...	...	...
Congenital debility, icterus and sclerema	151	14	5	...	...	...	...	...
Other diseases peculiar to early infancy	152	3	....	...	...	...	...	...
Suicide by poison	155	....	....	...	...	...	...	...
Suicide by asphyxia	156	....	....	...	...	...	...	...
Poisoning by food	164	....	....	...	...	...	...	...
Burns (conflagration excepted)	167	....	....	1	2	...	...	...
Absorption of deleterious gases (conflagration excepted)	168	....	1	...	...	...	1	...
Traumatism by fall	172	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc)	175	....	....	1	1	...	...	1
Homicide by firearms	182	....	....	...	...	...	...	1
Cause of death not specified or ill-defined	189	....	4	...	...	...	...	...

Total deaths, 347. Death-rate 14.07.

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AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	1	...	.....	.....	1	....	1	.....	1	....	.....	.....
...	...	...	...	...	...	1	...	...	...	.....	.....	....	1	1	.....	1	....	.....	.....
1	...	1	...	1	...	...	...	...	...	.....	.....	....	3	1	2	3	....	.....	.....
1	...	...	...	...	...	...	...	...	...	.....	.....	....	1	1	.....	1	....	.....	.....
...	...	...	...	...	...	...	...	...	...	.....	.....	....	2	2	.....	....	2	.....	.....
...	...	...	...	...	...	...	...	...	...	.....	.....	1	....	1	.....	....	1	.....	.....
...	...	...	...	1	...	...	...	...	...	.....	.....	....	1	.....	1	1	....	.....	.....
...	...	...	...	...	...	...	...	...	...	.....	.....	1	...	1	.....	....	1	.....	.....
...	...	...	...	...	...	...	...	...	...	.....	.....	9	10	18	1	....	19	.....	.....
...	...	...	...	...	...	...	...	...	...	.....	.....	2	1	3	.....	....	3	.....	.....
1	...	...	...	...	...	...	1	...	...	.....	.....	2	....	1	1	1	....	.....	1
...	...	1	...	1	...	...	1	...	1	.....	.....	3	1	2	2	4	....	.....	.....
...	...	...	...	...	...	1	...	...	...	.....	.....	....	1	.....	1	1	....	.....	.....
...	...	...	...	...	...	1	...	...	1	.....	.....	....	5	3	2	1	3	1	.....
...	...	...	...	...	...	...	...	1	...	.....	.....	2	1	2	1	...	2	1	.....
1	...	...	...	...	...	...	...	...	2	.....	.....	2	1	3	....	1	....	2	.....
...	1	...	...	1	2	1	...	...	1	.....	.....	8	1	6	3	3	3	3	.....
...	...	...	...	...	...	...	...	...	...	.....	.....	....	1	1	.....	....	1	.....	.....
...	...	...	...	...	...	...	...	...	...	.....	.....	2	2	4	.....	....	4	.....	.....

TABLE 32.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN MORRISTOWN.		AGE PERIODS.						
		Under one month.	Under 1 year "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	...	1	...	...
Measles	6	....	1	...	...	...	...	...
Scarlet fever	7	....	....	1	...	...	...	...
Whooping cough	8	....	....	1	...	...	...	...
Including: Croup	9A	....	....	...	1	...	...	...
Tuberculosis of the lungs	28	....	....	...	...	1	2	3
Tuberculous meningitis	30	....	1	...	1	...	1	...
Tuberculosis of other organs	34	....	....	...	...	...	...	...
Disseminated tuberculosis	35	....	....	...	1	1	...	...
Rickets	36	....	1	...	...	...	...	...
Syphilis	37	....	1	...	...	...	...	...
Cancer and other malignant tumors of the buccal cavity	39	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	..	...	...	...
Cancer and other malignant tumors of the breast	43	....	....	...	...	...	...	...
Cancer and other malignant tumors of the skin	44	....	....	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	...	...	...	...	...
Diabetes	50	....	....	...	...	...	...	...
Anæmia, chlorosis	54	....	....	...	...	...	...	...
Other general diseases	55	1	....	...	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Simple meningitis	61	....	....	1	...	...	...	...
Including: Cerebrospinal fever	61A	....	....	2	...	...	...	...
Other diseases of the spinal cord	63	....	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	....	...	...	...	...	...
Epilepsy	69	....	....	...	...	...	...	...
Other diseases of the nervous system	74	....	1	...	...	...	...	1
Acute endocarditis	78	....	....	...	...	...	...	...
Organic diseases of the heart	79	....	....	...	...	...	...	...
Angina pectoris	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Embolism and thrombosis	82	....	....	...	...	...	...	...
Chronic bronchitis	90	....	....	...	...	...	...	...
Bronchopneumonia	91	....	3	2	...	...	...	...
Pneumonia	92	....	2	2	...	...	1	1
Pulmonary emphysema	97	....	....	...	...	...	...	...
Ulcer of the stomach	102	....	....	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	....	3	1	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	....	12	...	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	1	...	...	...	...
Appendicitis and typhlitis	108	....	....	...	1	...	...	...
Other diseases of the intestines	110	....	....	...	...	...	...	...
Cirrhosis of the liver	113	....	....	...	...	...	...	...
Other diseases of the liver	115	....	....	...	...	...	...	...
Acute nephritis	119	....	....	1	...	...	...	...
Bright's disease	120	....	....	...	...	...	...	...
Other diseases of the kidneys and annexa	122	....	1	...	...	...	...	...
Uterine tumor (noncancerous)	129	....	....	...	...	...	...	...
Other diseases of the uterus	130	....	....	...	...	...	...	...
Cysts and other tumors of the ovary	131	....	....	...	...	...	...	...
Salpingitis and other diseases of the female genital organs	132	....	....	...	...	...	...	...
Other accidents of labor	136	....	....	...	...	...	...	...
Puerperal septicæmia	137	....	....	...	...	...	1	...
Puerperal albuminuria and convulsions	138	....	....	...	...	...	...	...

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	1	...	...	...	...	...	...	2	...	1	1	1	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	1	2	...	1	1	1	2	...	...	...	...	7	7	11	3	5	9	...	...
1	...	...	...	...	...	...	...	...	...	...	...	2	2	3	1	...	4	...	...
1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	...	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	1	...	...	1	...
...	...	...	...	1	...	...	2	1	1	...	...	2	3	3	2	3	...	2	..
...	...	...	...	1	...	...	...	2	...	...	...	...	3	3	...	1	1	1	...
..	...	...	2	...	...	1	1	2	...	...	...	...	6	4	2	4	1	1	...
...	...	...	1	...	...	...	3	...	1	...	...	...	5	3	2	...	...	5	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	1	...	...	...	1	1	...	...	2	1	2	1	...	1	2	...
...	...	...	1	1	...	1	2	...	...	...	...	4	1	5	...	3	1	1	...
...	...	...	...	...	...	1	1	...	...	...	...	...	2	2	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	1	...	1	...	1	...	...	...	...	...	3	...	2	1	2	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	2	...	...
1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	1	...	1	1	1	2	...	...	...	3	3	4	2	2	2	2	...
...	...	...	...	...	...	...	...	2	2	...	...	1	3	3	1	1	1	2	...
...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...	1	...
1	...	...	...	...	...	...	1	...	...	...	...	2	2	4	...	2	2	...	...
2	...	...	...	1	...	...	1	5	...	...	...	2	7	4	5	3	3	3	...
...	...	1	...	1	4	2	4	1	4	...	...	6	11	14	3	8	4	5	...
1	...	...	1	...	1	...	1	1	...	...	...	2	3	2	3	4	...	1	...
...	...	...	...	1	...	...	7	3	1	...	...	8	4	7	5	5	3	4	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	...	1	...	...	...
...	1	...	...	2	...	...	1	1	...	...	...	5	5	8	2	1	8	...	1
1	1	3	1	1	1	1	5	3	1	...	...	14	10	17	7	7	13	3	1
...	...	...	...	...	...	...	2	...	...	...	...	2	...	1	1	1	...	1	...
...	...	...	...	...	...	...	1	1	...	...	...	1	1	2	...	1	1	...	...
...	...	...	...	...	...	...	1	1	...	...	...	3	3	5	1	...	5	1	...
...	...	...	...	...	...	...	...	...	...	...	...	8	4	12	...	...	12	...	...
...	...	1	...	...	...	...	...	1	...	...	...	1	2	3	...	1	2	...	...
1	...	1	...	...	...	...	...	...	...	...	...	1	2	2	1	1	2	...	...
2	...	...	...	...	...	...	...	1	...	...	...	1	2	2	1	2	1	...	...
...	...	...	1	1	...	1	...	1	2	...	...	4	2	6	...	2	1	3	...
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	1	...	...	...	...	...	...	...	...	...	...	2	2	...	1	1	...	...
...	...	...	1	1	...	...	5	2	2	1	...	6	6	8	4	7	2	3	...
1	...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	...	2	...	...
1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...
...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	1	...
1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	1	2	...	...	...	...	...	...	...	...	...	...	4	2	2	3	1	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	2	...	...	...

TABLE 32.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN MORRISTOWN.		AGE PERIODS.						
		Under one month.	Under 1 year "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Diseases of the bones (tuberculosis excepted)	146	....	....	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	3	....	...	...	...	...	...
Congenital debility, icterus and sclerema	151	12	2	...	...	...	...	...
Other diseases peculiar to early infancy	152	2	....	...	...	...	...	...
Senility	154	....	....	...	...	...	...	...
Suicide by firearms	159	....	....	...	...	...	...	...
Burns (conflagrations excepted)	167	....	....	2	...	...	...	...
Traumatism by fall	172	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.	175	....	....	...	...	...	...	3
Effects of heat	179	....	....	...	...	...	...	...
Cause of death not specified or ill-defined	189	....	8	1	...	...	...	...

Total deaths, 287. Death-rate, 22.56

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	1	...	...	...	...	...	...	1	.....	1	....	...	1	....
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	.....	....	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	10	14	.....	....	14	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	...	...	..	...	...	1	2	2	...	2	3	5	.....	....	....	5	....
...	...	...	1	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	1	2	...	...	...	...	3	2	5	.....	1	3	1	....
1	...	1	...	...	...	...	2	1	1	...	...	3	3	3	3	3	1	2	....
3	4	2	...	...	...	1	...	...	...	...	...	13	....	8	5	5	7	....	1
...	...	...	...	...	...	...	...	1	...	...	...	....	1	.....	1	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	4	5	9	.....	....	9	....	....

TABLE 33.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NEWARK.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	...	...	1	1	2	2	5
Malaria	4	...	...	...	...	...	...	...
Measles	6	1	3	14	1	...	...	...
Scarlet fever	7	...	1	18	6	...	1	...
Whooping cough	8	2	21	20	2	...	...	...
Diphtheria and croup	9	3	7	49	14	6	2	1
Including: Croup	9A	...	...	11	1	...	...	...
Influenza	10	...	...	...	...	...	...	...
Dysentery	14	...	1	...	...	...	...	...
Leprosy	17	...	...	...	...	...	...	1
Erysipelas	18	6	6	...	...	...	...	...
Other epidemic diseases	19	...	...	1	...	...	...	...
Purulent infection and septicæmia	20	...	...	1	1	1	...	...
Rabies	23	...	...	...	1	1	...	...
Tetanus	24	1	...	...	1	...	...	...
Pellagra	26	...	...	...	...	...	...	...
Tuberculosis of the lungs	28	1	3	3	3	6	37	59
Acute miliary tuberculosis	29	...	...	...	...	...	3	...
Tuberculous meningitis	30	...	7	19	7	2	4	...
Abdominal tuberculosis	31	...	1	3	2	1	1	...
Pott's disease	32	...	...	1	1	...	...	...
White swellings	33	...	...	1	1	...	...	...
Tuberculosis of other organs	34	...	1	1	1	2	...	...
Disseminated tuberculosis	35	...	...	2	2	...	...	...
Rickets	36	...	3	3	...	...	...	...
Syphilis	37	5	5	...	...	...	...	1
Gonococcus infection	38	...	...	1	...	...	...	...
Cancer and other malignant tumors of the buccal cavity	39	...	...	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	...	...	2	1	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	...	...	1	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	...	...	...	...	...	...	...
Cancer and other malignant tumors of the breast	43	...	...	...	...	...	...	...
Cancer and other malignant tumors of the skin	44	...	...	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	...	...	...	...	...	1	1
Other tumors (tumors of the female genital organs excepted)	46	...	...	...	...	...	...	...
Acute articular rheumatism	47	...	...	1	1	1	1	1
Chronic rheumatism and gout	48	...	...	...	...	...	...	...
Diabetes	50	...	...	...	1	...	1	3
Exophthalmic goitre	51	...	...	...	...	...	...	...
Addison's disease	52	...	...	...	...	...	...	...
Leuchæmia	53	...	...	...	...	...	...	...
Anæmia, chlorosis	54	...	1	...	1	2	1	1
Other general diseases	55	2	...	...	...	...	2	...
Alcoholism (acute or chronic)	56	...	...	...	...	...	...	1
Chronic lead poisoning	57	...	...	...	...	...	...	...
Encephalitis	60	...	...	...	...	...	...	...
Simple meningitis	61	2	9	13	1	1	2	1
Including: Cerebrospinal fever	61A	...	4	4	2	...	2	...
Locomotor ataxia	62	...	...	...	...	...	...	...
Other diseases of the spinal cord	63	1	2	1	1	1	...	...
Cerebral hæmorrhage, apoplexy	64	...	1	...	...	...	2	1
Softening of the brain	65	...	...	...	...	...	...	...
Paralysis without specified cause	66	...	...	...	...	...	1	...
General paralysis of the insane	67	...	...	...	...	...	...	...
Other forms of mental alienation	68	...	...	...	...	...	...	1
Epilepsy	69	...	1	1	...	...	1	1

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
6	6	5	2	3	1	...	...	...	...	...	...	21	13	21	13	5	18	1	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	6	13	19	.....	....	19	....	....
...	...	1	...	...	...	...	...	...	...	...	...	14	14	26	2	2	26	....	....
1	...	1	...	...	...	...	...	...	...	...	...	16	29	44	1	....	45	....	....
...	...	...	...	...	...	...	...	...	...	...	...	51	33	80	4	1	81	2	....
...	...	...	1	...	...	1	...	...	...	...	...	10	2	12	.....	....	12	....	....
...	...	...	...	...	...	...	...	...	...	...	...	5	1	3	3	3	2	1	....
...	...	...	...	1	1	...	2	1	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	.....	....	....
...	...	...	1	...	...	...	...	...	...	...	...	1	....	.....	1	....	.....	....	....
3	1	3	...	3	1	4	3	3	1	...	...	26	9	24	11	11	19	5	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	1	...	...	...	...	1	...	...	...	...	3	2	5	.....	....	4	1	....
...	...	1	...	...	...	...	...	...	...	...	...	3	...	3	.....	1	2	....	....
1	...	...	1	...	...	...	...	...	...	...	...	2	2	1	3	....	4	....	....
...	...	...	...	...	1	...	...	...	...	...	...	....	1	1	.....	....	.....	1	....
86	91	78	90	58	54	40	35	5	...	...	...	452	197	402	247	310	263	76	....
1	...	...	2	...	...	1	...	...	...	...	...	4	3	6	1	....	7	....	....
1	2	1	...	2	...	...	...	...	...	...	...	28	17	37	18	5	39	1	....
1	2	2	...	1	...	...	3	1	...	...	...	9	9	10	8	8	8	2	....
...	...	...	...	...	...	...	...	...	...	...	...	....	2	2	.....	....	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	....	2	.....	....	2	....	....
...	...	...	1	1	...	2	2	1	...	...	...	6	6	8	4	2	7	3	....
...	...	...	...	...	1	...	...	...	...	...	...	2	3	4	1	1	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	3	6	.....	....	6	....	....
2	2	1	...	...	...	1	2	...	...	...	...	10	9	15	4	5	13	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	1	1	1	5	6	3	...	1	...	15	3	8	10	11	3	4	....
...	1	3	13	12	19	14	33	18	6	1	...	64	59	40	83	78	14	31	....
4	...	3	1	8	5	5	13	8	2	...	...	21	29	23	27	32	6	12	....
1	...	1	9	5	6	8	6	7	...	...	...	....	44	32	12	27	4	13	....
...	1	1	...	1	3	4	7	3	...	...	...	1	19	11	9	6	6	8	....
...	...	...	1	...	1	3	2	1	...	...	...	6	2	4	4	1	....	7	....
...	...	1	7	4	2	4	8	10	2	...	...	22	18	20	20	20	6	13	....
...	...	...	...	...	...	...	...	1	...	1	...	....	2	1	1	....	2	....	....
...	1	2	...	2	2	2	3	2	2	...	...	11	10	13	8	9	8	4	....
...	...	...	...	...	...	2	...	...	1	...	...	1	2	.....	3	1	1	1	....
1	3	...	4	5	9	13	20	10	1	...	...	35	36	27	44	39	9	23	....
1	...	1	...	1	2	...	...	...	...	...	...	1	1	2	3	4	....	1	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
1	...	1	...	3	...	2	...	...	...	...	...	4	3	1	6	7	....	....	....
1	2	1	...	1	3	2	3	3	...	...	...	4	18	16	6	8	5	9	....
...	...	...	...	1	...	...	...	...	...	...	...	4	1	4	1	1	4	....	....
9	10	17	25	12	18	5	7	...	...	...	...	96	8	59	45	39	46	17	2
...	...	...	...	...	2	...	...	...	...	...	...	2	....	1	1	1	1	....	....
...	...	1	1	...	...	...	...	...	...	...	...	2	....	1	1	1	....	1	....
3	...	1	...	...	...	1	...	...	...	...	...	22	12	29	5	4	29	1	....
...	...	...	...	...	...	...	...	...	...	...	...	5	7	12	.....	....	12	....	....
...	...	3	...	1	1	1	...	...	...	...	...	5	1	4	2	3	2	1	....
3	1	1	1	...	1	1	3	1	1	...	...	13	6	11	8	4	10	5	....
1	2	4	8	15	23	28	68	54	30	...	...	117	120	99	138	105	24	104	4
...	...	...	...	...	...	...	1	...	1	...	...	1	1	1	1	.....	....	1	1
...	...	...	1	3	2	5	7	9	3	...	...	14	17	14	17	14	4	13	....
...	1	...	...	...	...	...	...	2	...	...	...	1	2	3	.....	1	1	1	....
...	...	2	1	...	1	1	4	...	...	...	...	4	6	5	5	4	5	1	....
1	3	1	3	1	...	3	...	...	...	...	...	8	8	12	4	7	7	2	....

TABLE 33.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NEWARK.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Convulsions of infants	71	8	13	4	...	...	...	...
Neuralgia and neuritis	73	....	....	...	...	...	...	...
Other diseases of the nervous system	74	....	....	4	1	...	1	1
Diseases of the ears	76	....	2	...	...	...	1	1
Pericarditis	77	....	....	...	...	2	...	...
Acute endocarditis	78	2	1	2	10	6	5	4
Organic diseases of the heart	79	2	....	5	4	4	3	9
Angina pectois	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Embolism and thrombosis	82	....	....	...	...	...	...	1
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)	83	....	....	...	...	...	...	...
Diseases of the lymphatic system (lymphangitis, etc.)	84	....	1	1	1	...	1	...
Diseases of the laryynx	87	....	2	...	1	...	...	...
Diseases of the thyreoid body	88	....	....	...	...	...	...	...
Acute bronchitis	89	15	25	5	2	...	1	...
Chronic bronchitis	90	....	1	2	...	1	...	...
Bronchopneumonia	91	18	75	97	10	3	1	...
Pneumonia	92	6	38	44	7	5	7	8
Pleurisy	93	....	2	4	...	...	1	1
Pulmonary congestion, pulmonary apoplexy	94	1	....	...	...	...	1	...
Gangrene of the lung	95	....	....	...	...	...	...	...
Asthma	96	....	1	...	...	1	...	...
Pulmonary emphysema	97	....	....	...	...	...	...	1
Other diseases of the respiratory system (tuberculosis excepted)	98	....	....	2	1	...	...	...
Diseases of the pharynx	100	....	1	...	...	1	1	...
Diseases of the œsophagus	101	....	....	...	...	...	...	...
Ulcer of the stomach	102	....	....	...	...	1	...	1
Other diseases of the stomach (cancer excepted)	103	11	27	5	1	...	1	...
Diarrhœa and enteritis (Under 2 years)	104	27	240	53	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	15	...	...	...	...
Appendicitis and typhlitis	108	....	1	3	5	7	7	7
Hernias, intestinal obstructions	109	3	3	2	...	...	...	1
Other diseases of the intestines	110	....	1	...	...	...	1	...
Cirrhosis of the liver	113	....	....	...	...	...	...	...
Biliary calculi	114	....	....	...	...	...	...	...
Other diseases of the liver	115	1	....	...	...	...	...	...
Diseases of the spleen	116	....	....	...	...	...	...	...
Simple peritonitis (nonpuerperal)	117	....	....	...	...	...	...	...
Other diseases of the digestive system (cancer and tuberculosis excepted)	118	....	....	...	...	...	...	...
Acute nephritis	119	....	1	1	3	1	3	1
Bright's disease	120	....	2	1	1	1	1	10
Other diseases of the kidneys and annexa	122	1	....	...	...	...	...	...
Calculi of the urinary passages	123	....	....	...	...	...	...	1
Diseases of the bladder	124	1	1	...	...	...	...	...
Other diseases of the urethra, urinary abscess, etc	125	....	....	...	...	...	...	...
Diseases of the prostate	126	....	....	...	...	...	...	...
Uterine tumor (noncancerous)	129	....	....	...	...	...	...	...
Other diseases of the uterus	130	....	....	...	...	...	...	1
Cysts and other tumors of the ovary	131	....	....	...	...	...	...	...
Salpingitis and other diseases of the female genital organs	132	....	....	...	...	...	...	2
Accidents of pregnancy	134	....	....	...	...	...	...	1
Puerperal hæmorrhage	135	....	....	...	...	...	1	2
Other accidents of labor	136	....	....	...	...	...	1	...
Puerperal septicæmia	137	....	....	...	...	...	3	8
Puerperal albuminuria and convulsions	138	....	....	...	...	...	1	1
Gangrene	142	....	....	1	...	...	...	...
Acute abscess	144	....	3	...	1	...	...	...

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	...	...	...	...	17	8	25	.....	....	25	....	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	1	...	....	....
2	1	4	...	...	...	1	...	...	...	...	...	9	6	12	3	6	9	....	....
...	...	...	...	...	1	...	...	...	...	...	...	3	2	5	.....	2	3	....	....
...	...	...	1	1	...	...	...	...	...	...	...	2	2	3	1	2	2	...	....
7	9	5	16	22	24	30	60	55	17	1	...	154	122	133	143	121	61	94	....
6	10	9	17	19	29	29	73	77	35	2	...	156	177	144	189	132	58	139	4
...	2	...	2	...	2	2	4	3	1	...	...	12	4	9	7	11	2	3	....
...	...	...	3	5	6	6	25	40	28	2	...	53	62	53	62	42	13	60	....
1	...	1	1	1	2	...	3	5	3	...	...	5	13	9	9	8	1	9	....
...	...	...	1	...	...	1	1	1	...	...	...	3	1	1	3	2	....	1	1
...	...	...	...	...	...	...	...	...	...	...	...	4	....	4	.....	....	4	....	....
...	...	...	1	...	...	...	...	...	...	...	...	4	....	4	.....	1	3	....	....
...	...	...	...	...	...	...	...	...	...	1	...	1	.....	.....	1	1	...	....	....
...	...	...	...	...	1	1	2	10	2	1	...	27	38	55	10	7	50	8	....
1	...	...	2	...	...	3	8	12	6	1	...	16	21	10	27	8	10	19	....
1	1	1	...	3	1	6	9	5	7	1	...	121	118	209	30	14	208	17	....
12	12	19	24	18	18	24	31	30	9	1	...	196	117	199	114	113	149	51	....
2	1	3	2	2	4	3	4	6	...	...	...	22	13	25	10	15	11	9	....
...	...	1	1	...	...	...	...	1	...	...	...	3	2	5	.....	3	1	1	....
...	...	...	...	...	1	...	...	...	...	...	...	1	.....	.....	1	...	...	1	....
...	...	...	1	1	5	4	8	6	1	...	...	18	10	11	17	13	4	11	....
...	...	...	...	...	...	...	1	...	1	...	...	2	1	1	2	2	....	1	....
...	1	...	...	...	...	...	...	1	...	...	...	3	2	4	1	1	4	...	....
...	...	...	...	...	...	1	...	1	1	...	...	4	2	4	2	...	3	3	....
...	...	...	...	...	...	1	...	1	...	...	...	1	1	.....	2	2	...	...	....
...	6	5	2	1	4	2	2	...	...	...	...	16	8	10	14	12	8	3	1
...	1	1	2	2	2	...	5	3	3	...	...	30	34	56	8	9	48	7	....
...	...	...	...	...	...	...	...	...	...	...	...	188	132	316	4	....	320	...	....
1	1	2	5	5	2	1	6	8	5	...	...	23	28	32	19	17	22	12	....
5	4	2	2	3	3	5	...	...	...	...	...	26	28	37	17	17	32	5	....
2	3	1	1	3	1	5	9	3	4	...	...	16	25	22	19	14	14	11	3
...	...	...	1	1	1	...	...	2	...	...	...	3	4	3	4	3	1	3	....
3	...	6	11	12	8	8	13	6	...	...	...	49	18	29	38	41	14	12	....
...	...	1	2	1	1	1	2	2	...	...	...	5	5	3	7	8	....	2	....
1	...	2	2	2	2	3	3	2	...	...	...	8	10	10	8	11	3	4	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	.....	1	1	...	...	....
...	...	2	...	...	...	...	...	1	...	...	...	1	2	2	1	1	2	....	....
...	...	...	...	...	...	...	...	...	1	...	...	....	1	.....	1	.....	...	1	....
2	2	2	1	2	6	2	3	5	2	...	...	23	14	19	18	19	11	7	....
9	14	23	24	47	37	42	103	58	28	1	...	210	192	208	194	192	76	128	6
1	...	...	...	2	...	...	6	2	2	...	...	13	1	9	5	8	1	5	....
...	...	1	1	2	1	...	2	...	...	...	...	4	4	6	2	5	2	1	....
...	...	...	...	2	1	1	1	5	3	...	...	14	1	12	3	8	3	4	....
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	...	...	...	1	2	2	...	...	...	5	....	2	3	3	....	2	....
...	1	...	3	2	...	...	...	...	1	...	...	....	7	5	2	4	1	2	....
1	...	3	...	1	...	...	...	...	...	...	...	....	6	3	3	5	1	....	....
...	...	1	...	...	...	...	...	2	...	...	...	....	3	2	1	1	...	2	....
...	1	1	...	...	1	...	...	...	...	...	...	....	5	3	2	2	2	1	....
4	1	3	...	...	...	...	...	...	...	...	...	....	9	5	4	7	...	2	....
5	1	3	2	...	...	...	...	...	...	...	...	....	14	8	6	13	1	....	....
5	5	5	...	...	...	...	...	...	...	...	...	....	16	8	8	16	...	....	....
11	6	6	2	...	...	...	...	...	...	...	...	....	36	18	18	29	5	2	....
2	6	3	1	...	...	...	...	...	...	...	...	....	14	5	9	13	1	....	....
...	...	...	...	1	...	...	2	1	1	...	...	3	3	4	2	2	1	3	....
...	...	...	...	...	...	1	1	...	...	...	...	5	1	4	2	2	4	...	....

TABLE 33.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NEWARK		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases of the skin and annexa	145	1	1	...	...	...	...	...
Diseases of the bones (tuberculosis excepted)	146	....	1	...	1	2	2	...
Diseases of the bones (tuberculosis and rheumatism excepted)	147	....	....	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	11	6	2	...	...	...	...
Congenital debility, icterus and sclerema	151	227	25	...	...	...	...	...
Other diseases peculiar to early infancy	152	54	5	...	...	...	...	...
Lack of care	153	6	2	...	...	...	...	...
Senilty	154	....	....	...	...	...	...	...
Suicide by poison	155	....	....	...	...	...	...	2
Suicide by asphyxia	156	....	....	...	...	...	2	2
Suicide by hanging or strangulation	157	....	....	...	...	...	...	...
Suicide by drowning	158	....	....	...	...	...	...	...
Suicide by firearms	159	....	....	...	...	...	...	...
Suicide by cutting or piercing instruments	160	....	....	...	...	...	...	...
Suicide by jumping from a high place	161	....	....	...	...	...	...	...
Suicide by crushing	162	....	....	...	...	...	...	...
Other suicides	163	....	....	...	...	...	...	...
Poisoning by food	164	....	....	1	...	...	...	...
Other acute poisonings	165	....	....	2	1	...	...	1
Conflagration	166	....	....	...	...	...	...	...
Burns (conflagration excepted)	167	....	1	25	7	1	...	2
Absorption of deleterious gases (conflagration excepted)	168	2	....	...	...	...	...	1
Accidental drowning	169	....	....	2	5	2	1	1
Traumatism by fall	172	....	....	5	3	3	2	3
Traumatism by machines	174	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	1	2	6	10	3	2	6
Injuries by animals	176	....	....	...	...	...	...	...
Starvation	177	....	....	1	...	...	...	...
Excessive cold	178	....	....	...	...	...	...	...
Effects of heat	179	1	1	...	...	...	...	...
Electricity (lightning excepted)	181	....	....	...	...	...	...	...
Homicide by firearms	182	....	....	...	...	...	...	3
Homicide by other means	184	1	....	...	...	...	...	...
Fractures (cause not specified)	185	....	....	...	...	...	...	...
Other external violence	186	....	....	2	...	...	...	...
Cause of death not specified or ill-defined	189	4	25	6	...	...	...	...

Total deaths, 5,597. Death-rate, 14.50.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1			2			1	2					8		4	4	5	3		
		2		2		1		1				5	7	9	3	5	6	1	
1			1									2		2		1	1		
												9	10	19			19		
												148	104	252			252		
												29	30	59			59		
												5	3	8			8		
							4	13	17	4		13	25	10	28	8	3	27	
1		2	3	1	2		2	1	1			15		5	10	7	5	3	
1	1	3	1	2	1	3	6					18	4	9	13	17	4	1	
	3				2		1	1				3	4	1	6	6		1	
2			2		2		1	1				7	1	2	6	2	3	3	
2	2	1	1	1	1		1					9		5	4	8		1	
1			1			1	1	1				4	1	3	2	2		3	
		1	1		1							2	1	1	2	3			
				1								1			1				1
							1					1		1		1			
												1		1			1		
	1						1					3	3	5	1	1	4	1	
							1					1			1	1			
2	1		1	1			3	1	2			21	26	33	14	9	34	4	
3			1		3	2	4	3	1			14	6	12	8	9	6	5	
1	3	2	2	1	2		2					21	3	13	11	6	11	2	5
2	1	6	4	6	1	3	9	9	6			43	20	33	30	21	22	17	3
1							1					2		1	1	1		1	
7	6	6	12	8	10	3	7	3	3			81	14	50	45	14	43	6	2
		1	2	2	1	1						7		4	3	5	1	1	
													1		1		1		
							1					1			1	1			
		2	1				3	1				8	2	7	3	4	3	2	1
	1											1		1		1			
5	1	2	1	1	1	1						11	4	7	8	8	5	1	1
	1			2		1						3	3	4	2	4	1	1	
										1		1		1			1		
												2		2			2		
				1								20	16	35	1		36		

TABLE 34.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NEW BRUNSWICK.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1							2
Whooping cough	8	1	2	1				
Diphtheria and croup	9			2	1			
Influenza	10					1		
Erysipelas	18	1						
Purulent infection and septicæmia	20		1					
Rabies	23				1			
Tuberculosis of the lungs	28			1			3	5
Tuberculous meningitis	30				1	1		
Abdominal tuberculosis	31						1	
Pott's disease	32							
Disseminated tuberculosis	35							
Rickets	36			1				
Syphilis	37	2		1				
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of other organs or of organs not specified	45							1
Other tumors (tumors of the female genital organs excepted)	46							
Acute articular rheumatism	47						1	1
Chronic rheumatism and gout	48							
Diabetes	50			1				
Other general diseases	55							
Alcoholism (acute or chronic)	56							
Simple meningitis	61		2	4				
Including: Cerebrospinal fever	61A		1					
Other diseases of the spinal cord	63		1					
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Epilepsy	69							1
Convulsions of infants	71		1					
Acute endocaridtis	78							1
Organic diseases of the heart	79	1	1		2	2	2	1
Angina pectoris	80							
Diseases of the arteries, atheroma and aneurysm, etc	81							
Embolism and thrombosis	82			1				
Diseases of the lymphatic system (lymphangitis, etc.)	84							
Acute bronchitis	89	1	2					
Bronchopneumonia	91		9	5				
Pneumonia	92		7	4			2	2
Pleurisy	93		2	1				
Pulmonary congestion, pulmonary apoplexy	94							
Pulmonary emphysema	97							
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103	4	2	1				
Diarrhœa and enteritis (Under 2 years)	104	4	38	11				
Diarrhœa and enteritis (2 years and over)	105			4	1			
Intestinal parasites	107			1				
Appendicitis and typhlitis	108					1	1	1
Hernias, intestinal instructions	109							
Other diseases of the intestines	110							
Cirrhosis of the liver	113							
Biliary calculi	114							
Other diseases of the liver	115							

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
	1											2	1	2	1	2	1		
												2	2	4			4		
												2	1	3			3		
													1	1			1		
													1	1			1		
					1							1	1	2			2		
													1	1			1		
7	4	9	1		2	2	1	1				21	15	24	12	18	16	2	
													2	1	1		2		
					1								2	1	1	1	1		
1													1		1	1			
		1	1									2		2		1	1		
												1		1			1		
1	1											3	2	3	2	2	3		
					1			1				1	1	1	1	2			
			3	1		1	2	4	2			6	7	8	5	6	1	6	
		1		2				1				2	2	1	3	1		2	1
			1		1								2	1	1	2			
			2						1				3	3		2		1	
					1			1				2	1	1	2		2	1	
							1						1		1			1	
					1	1		1				2	3	4	1	3	2		
							1						1	1		1			
		1				2	1						4	2	2	3	1		
													1	1		1			1
	1		1	3								4	1	3	2	2	2		
												4	2	6			6		
													1	1			1		
													1	1			1		
1	2	1	2	3	3	1	9	10	4			20	16	28	8	17	7	12	
		1					3	2				3	3	3	3	2	1	3	
												1		1			1		
												1		1			1		
			2			2		2				3	4	3	4	2	2	3	
	1	4	2	3	4	1	12	9	2			20	27	23	24	16	13	18	
	1						1	1				2	1	2	1	2	1		
				1	1		3	1	1	1		3	5	4	4	5	1	2	
													1	1			1		
				1								1			1		1		
								1				1	3	4			3	1	
								4				11	7	13	5	1	14	3	
2	5	1	1	2	1	1	7	13	3			27	24	32	19	17	21	13	
1								1				1	4	4	1		4	1	
								1				1			1			1	
						1		1				1	1	1	1	1		1	
						1							1	1			1		
												4	3	7			7		
												31	22	52	1		53		
				1		1			2			5	4	7	2	3	5	1	
												1		1			1		
				1			1					4	1	4	1	2	3		
1							2					1	2	2	1		1	2	
1									1				2	2			2		
			2			1	1					2	2	3	1	2	2		
								1	1				2		2			2	
						1		1	1			2	2	2	2	1	1	2	

TABLE 34.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NEW BRUNSWICK.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Acute nephritis	119			2				
Bright's disease	120							1
Diseases of the bladder	124							
Other diseases of the urethra, urinary abscess, etc.	125							
Uterine hæmorrhage (nonpuerperal)	128							
Uterine tumor (noncancerous)	129							
Other diseases of the uterus	130							
Puerperal hæmorrhage	135							1
Other accidents of labor	136							
Puerperal septicæmia	137							
Puerperal albuminuria and convulsions	138							
Acute abscess	144						1	
Congenital malformations (stillbirths not included)	150	1						
Congenital debility, icterus and sclerema	151	31	6					
Other diseases peculiar to early infancy	152	2						
Senility	154							
Suicide by hanging or strangulation	157							
Suicide by drowning	158							
Suicide by firearms	159							1
Other acute poisonings	165			1				
Conflagration	166							
Burns (conflagration excepted)	167			5				2
Accidental drowning	169				1		1	2
Traumatism by firearms	170							
Traumatism by fall	172			2				
Traumatism by machines	174							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175				3			
Injuries by animals	176			1				
Effects of heat	179							
Homicide by firearms	182							
Homicide by other means	184	1						
Cause of death not specified or ill-defined	189	3	6	1				

Total deaths, 555. Death-rate, 23.58.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 00.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	1	...	...	...	...	...	...	...	...	2	1	3	...	...	3	...	...
2	2	1	7	5	2	5	2	2	2	1	...	16	16	22	10	17	8	7	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1
...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	1	1	...	...	...	...	...	...	...	...	...	...	2	1	1	2	...	...	...
...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
1	...	1	...	...	...	...	...	...	...	...	...	...	2	1	1	2	...	...	...
...	...	2	...	...	...	...	...	...	...	...	...	...	2	1	1	2	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	24	13	37	...	...	37	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	2	...	...
...	...	...	...	...	...	...	1	4	2	1	...	3	5	3	5	3	...	5	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	1	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	3	...	...	3	...	3	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...
...	...	...	...	1	2	...	...	1	...	...	...	4	7	10	1	5	6	...	...
...	1	...	...	...	2	...	...	...	...	...	...	7	...	3	4	2	5	...	...
1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...
...	1	2	1	...	1	2	...	...	1	...	...	7	3	6	4	3	7	...	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
1	...	1	...	...	1	...	2	1	...	...	...	6	3	3	6	1	5	2	7
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	1	1	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	5	5	9	1	...	10	...	...

TABLE 35.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NORTH PLAINFIELD.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Scarlet fever	7	....	....	1	....	....	....	....
Diphtheria and croup	9	....	....	....	1	....	....	....
Influenza	10	....	....	....	....	....	....	....
Tuberculosis of the lungs	28	....	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Other tumors (tumors of the female genital organs excepted)	46	....	....	....	....	....	....	....
Leuchæmia	53	....	....	....	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	....	....
Epilepsy	69	....	....	....	....	....	1	....
Convulsions of infants	71	1	....	....	....	....	....	....
Acute endocarditis	78	....	....	....	....	....	....	....
Organic diseases of the heart	79	....	....	....	....	....	....	....
Angina pectoris	80	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Embolism and thrombosis	82	....	....	....	....	....	....	....
Bronchopneumonia	91	....	1	....	....	....	....	....
Pneumonia	92	....	....	....	....	....	....	....
Pulmonary emphysema	97	....	....	....	....	....	....	....
Diseases of the pharynx	100	....	....	....	....	....	....	....
Other diseases of the stomach (cancer excepted)	103	1	....	....	....	....	....	....
Diarrhœa and enteritis (Under 2 years)	104	....	3	....	....	....	....	....
Diarrhœa and enteritis (2 years and over)	105	....	....	....	....	....	....	....
Other diseases of the intestines	110	....	....	1	....	....	....	....
Other diseases of the digestive system (cancer and tuberculosis excepted)	118	....	....	....	1	....	....	....
Acute nephritis	119	....	....	....	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	....
Diseases of the prostate	126	....	....	....	....	....	....	....
Congenital malformations (stillbirths not included)	150	....	1	....	....	....	....	....
Congenital debility, icterus and sclerema	151	2	2	....	....	....	....	....
Senility	154	....	....	....	....	....	....	....
Suicide by hanging or strangulation	157	....	....	....	....	....	....	....
Suicide by firearms	159	....	....	....	....	....	....	....
Cause of death not specified or ill-defined	189	....	1	....	....	....	....	....

Total deaths, 82. Death-rate, 12.78.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	1	...
1	...	...	...	1	...	...	...	1	...	...	...	...	3	3	...	...	2	1	...
...	...	...	...	1	...	...	2	2	1	...	...	3	3	3	3	3	2	1	...
...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	1	...
...	...	...	...	...	...	...	2	1	1	1	...	3	2	5	...	2	...	3	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
1	1	...	...	...	...	...	3	1	1	...	...	4	3	6	1	4	1	2	...
...	...	...	...	1	...	...	1	1	1	2	...	2	4	4	2	1	1	4	...
...	...	...	...	...	...	...	1	1	...	...	...	1	1	2	...	1	...	1	...
...	1	...	...	...	...	...	1	1	...	...	...	2	1	3	...	3	...	...	...
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	1	...	...	1	1	2	...	...	1	1	...
...	...	...	...	1	1	...	...	...	1	...	...	2	1	2	1	2	...	1	...
...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	1	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	1	2	2	1	1	1	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	...	...	3	...	...
...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
1	...	1	...	...	...	...	...	2	...	...	...	1	3	1	3	3	1	...	...
...	...	1	1	2	1	...	2	3	1	...	...	5	6	8	3	5	1	5	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	1	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	4	...	4	...	...	4	...	...
...	...	...	...	...	...	...	1	1	...	...	...	1	1	1	1	1	1	...	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...

TABLE 36.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NUTLEY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Diphtheria and croup	9	....	....	....	1	....	....	....
Including: Croup	9A	....	1	....	....	....	....	....
Tuberculosis of the lungs	28	....	....	....	....	....	....	1
Tuberculous meningitis	30	....	1	1	1	....	....	....
Syphilis	37	....	1	....	....	....	....	....
Cancer and other malignant tumors of the buccal cavity	39	....	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	....	....	....	....	....
Simple meningitis	61	....	....	1	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	1	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	....	....
Acute endocarditis	78	....	....	....	....	....	....	....
Organic diseases of the heart	79	....	....	....	....	....	....	....
Embolism and thrombosis	82	....	....	....	....	....	....	....
Bronchopneumonia	91	....	5	....	....	....	....	....
Pneumonia	92	....	1	1	....	....	1	....
Other diseases of the stomach (cancer excepted)	103	1	....	....	....	....	....	....
Diarrhœa and enteritis (Under 2 years)	104	....	4	....	....	....	....	....
Diarrhœa and enteritis (2 years and over)	105	....	....	....	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	1
Other accidents of labor	136	....	....	....	....	....	....	....
Congenital debility, icterus and sclerema	151	5	....	....	....	....	....	....
Suicide by drowning	158	....	....	....	....	....	....	....
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	....	....	1	....
Cause of death not specified or ill-defined	189	....	1	1	....	....	....	....

Total deaths, 63. Death-rate, 9.16.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													1	1			1		
												1			1		1		
			2	1				1				2	3	4	1	5			
												2	1	3			3		
													1	1			1		
								1				1		1		1			
						1		1				2			2	2			
								1				1		1			1		
												1			1		1		
												1		1			1		
	1							1				1	1	2		1	1		
1					1				2			2	2	2	2	2		2	
	1			1	1				1			2	2	3	1	2	1	1	
								1				1		1		1			
												2	3	5			5		
						1			2	1		5	2	5	2	1	3	3	
												1		1			1		
												3	1	4			4		
						1							1	1		1			
					1	1	1					3	1	1	3	2	1	1	
		1											1		1	1			
												2	3	5			5		
		1										1		1		1			
2			1									4			4	1	3		
												1	1	2			2		

TABLE 37.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ORANGE.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1						1	
Whooping cough	8	1	2	1	1			
Diphtheria and croup	9			4	1			
Influenza	10							
Erysipelas	18							
Purulent infection and septicæmia	20							
Tuberculosis of the lungs	28					1	1	11
Acute miliary tuberculosis	29							1
Tuberculous meningitis	30			5				
Abdominal tuberculosis	31			1				
Syphilis	37			1				
Cancer and other malignant tumors of the buccal cavity	39						1	
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of other organs or of organs not specified	45							
Acute articular rheumatism	47			1				
Diabetes	50							
Exophthalmic goitre	51							1
Leuchæmia	53					1		
Anæmia, chlorosis	54							
Other general diseases	55					1		
Alcoholism (acute or chronic)	56							1
Simple meningitis	61		1	1	1	1		
Cerebral hæmorrhage, apoplexy	64		1	1				
Paralysis without specified cause	66							
General paralysis of the insane	67							
Other forms of mental alienation	68							
Epilepsy	69							
Other diseases of the nervous system	74					1		
Acute endocarditis	78				2		3	1
Organic diseases of the heart	79						2	1
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82							
Diseases of the lymphatic system (lymphangitis, etc.)	84							
Acute bronchitis	89		2	1		1		
Chronic bronchitis	90							
Bronchopneumonia	91	1	5	2				
Pneumonia	92		5	10	1	1	2	2
Pleurisy	93		1			1		
Gangrene of the lung	95							
Asthma	96							
Other diseases of the respiratory system (tuberculosis excepted)	98							
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103		2	1				
Diarrhœa and enteritis (Under 2 years)	104	1	11	1				
Diarrhœa and enteritis (2 years and over)	105							
Appendicitis and typhlitis	108			1	3		2	1
Hernias, intestinal obstructions	109						3	
Other diseases of the intestines	110	2						
Cirrhosis of the liver	113							
Other diseases of the liver	115							
Simple peritonitis (nonpuerperal)	117							

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													1	1			1		
													5	5			5		
												4	1	5			5		
					1							1			1			1	
						1	1					2			2	1		1	
						1						2			2	1	1		
8	10	5	8	5	4	3	1					36	21	40	17	31	18	8	
1													2		2		2		
	1			2	1							1	8	8	1	3	6		
													1	1			1		
												1		1			1		
													1		1		1		
			3	1	2	1	5		1			4	9	3	10	7	3	3	
								2	1				3	3			1	2	
	1		1	1		1							4	3	1	3		1	
					1		1	2					4	3	1	1	2	1	
							1	1				1	1	2		1		1	
1							1					3		2	1	1	2		
		2	1	1		2	2					3	5	5	3	5	2	1	
												1		1			1		
					1							1	1	1	1	1	1		
					1		2	1					4	3	1		2	2	
													1	1			1		
	2	1	2	1								7		6	1		4	3	
			1									1	4	4	1	1	4		
		1	1	1	3	3	14	7	2			17	17	20	14	20	5	9	
							1						1		1	1			
									1				1		1		1		
									1				1	1			1		
						1		1					2	1	1	1		1	
												1		1			1		
	2		3		1	2	3		4			9	12	14	7	6	6	9	
3		2	2	3	1		4	4	3			13	12	14	11	10	8	7	
							2					1	1	2		1		1	
				1	1	1	2	3	3			5	6	3	8	4	1	6	
		2										1	1	1	1	1		1	
		1											1		1	1			
					2			2			3	6	5	7	4	4	5	2	
					1		2	1				2	2	1	3	3		1	
								1	1			7	3	9	1		8	2	
	1	1	2	2	2	1	7	8				29	16	32	13	15	23	7	
		1					1					1	3	3	1	2	2		
				1								1			1		1		
								2				1	1		2	1		1	
1												1		1			1		
						1							1	1			1		
	1											3	1	3	1		4		
												9	4	13			13		
							1					1			1	1			
1		2		1		1	1					11	2	9	4	5	8		
	2		1				2	1	1			3	7	6	4	3	5	2	
												2		2			2		
	1	1			3							4	1	3	2	2	3		
							1					1			1			1	
			1					1					2		2		1	1	

TABLE 37.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ORANGE.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	
Acute nephritis	119				1				2
Bright's disease	120			1					
Diseases of the bladder	124								
Diseases of the prostate	126								
Uterine tumor (noncancerous)	129								
Cysts and other tumors of the ovary	131								1
Salpingitis and other diseases of the female genital organs	132								1
Accidents of pregnancy	134								
Other accidents of labor	136								
Acute abscess	144				1				
Diseases of the bones (tuberculosis excepted)	146								
Congenital malformations (stillbirths not included)	150		1	1					
Congenital debility, icterus and sclerema	151	33	2						
Other diseases peculiar to early infancy	152	9	3						
Senility	154								
Suicide by poison	155								1
Suicide by asphyxia	156					1			1
Suicide by firearms	159								
Other acute poisonings	165								
Burns (conflagration excepted)	167			7					
Absorption of deleterious gases (conflagration excepted)	168								
Traumatism by cutting or piercing instruments	171						1		
Traumatism by fall	172								
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175			1	2		1		
Injuries by animals	176								
Cause of death not specified or ill-defined	189		1	1					

Total deaths, 516. Death-rate, 16.25.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere	Married.	Single.	Widowed.	Not stated.
1	...	1	2	4	2	...	3	1	...	1	...	11	7	13	5	6	6	6	...
...	...	2	1	...	5	3	4	5	3	...	...	8	16	13	11	10	3	11	...
...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	1	...	...	...
...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...
1	2	...	...	...	...	...	...	...	...	...	...	...	3	3	...	3	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	2	...	...	...	...	...	...	...	...	...	...	...	2	1	1	1	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	19	16	35	...	...	35	...	...
...	...	...	...	...	...	...	...	...	...	...	...	8	4	12	...	...	12	...	...
...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	...	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...
...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...
...	...	...	...	1	...	...	...	...	...	...	...	4	4	8	...	1	7	...	...
...	...	...	1	...	...	1	...	...	...	...	...	1	1	1	1	...	1	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
1	...	...	...	1	...	...	1	...	2	...	...	4	1	3	2	5	...	...	...
1	...	...	...	4	...	...	...	...	...	...	...	10	2	7	5	8	4	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	1	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	2	...	...

TABLE 38.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PASSAIC CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	....	....	....	2	....
Measles	6	....	....	3	7	....	....	....
Scarlet fever	7	....	....	1	....	1	....	....
Whooping cough	8	....	5	2	....	....	....	....
Diphtheria and croup	9	....	2	11	1	....	....	....
Including: Croup	9A	....	....	1	....	....	....	....
Influenza	10	....	....	....	....	....	....	....
Dysentery	14	....	1	....	....	....	1	....
Erysipelas	18	1	....	....	....	....	....	....
Tuberculosis of the lungs	28	....	1	....	1	1	4	6
Acute miliary tuberculosis	29	....	1	....	....	....	1	....
Tuberculous meningitis	30	....	....	3	1	....	1	....
Abdominal tuberculosis	31	....	1	1	....	1	....	1
Pott's disease	32	....	....	....	1	....	....	....
Tuberculosis of other organs	34	....	....	....	....	....	....	....
Disseminated tuberculosis	35	....	....	....	....	....	....	....
Rickets	36	....	1	....	....	....	....	....
Syphilis	37	....	....	2	....	....	....	....
Cancer and other malignant tumors of the buccal cavity	39	....	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of the breast	43	....	....	....	....	....	....	....
Cancer and other malignant tumors of the skin	44	....	....	....	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	1	....	....	....	....
Other tumors (tumors of the female genital organs excepted)	46	....	....	....	....	1	....	....
Acute articular rheumatism	47	....	....	....	....	....	1	....
Chronic rheumatism and gout	48	....	....	....	....	....	....	....
Diabetes	50	....	....	....	....	....	....	....
Leuchæmia	53	....	1	....	....	....	....	....
Alcoholism (acute or chronic)	56	....	....	....	....	....	....	....
Other chronic poisonings	59	....	....	....	....	....	....	....
Simple meningitis	61	1	3	2	2	....	2	1
Including: Cerebrospinal fever	61A	....	....	2	....	....	....	....
Locomotor ataxia	62	....	....	....	....	....	....	....
Other diseases of the spinal cord	63	....	....	....	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	1	....	....	....	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	....	....
General paralysis of the insane	67	....	....	....	....	....	....	....
Epilepsy	69	....	....	....	....	2	....	....
Convulsions of infants	71	1	4	....	1	....	....	....
Chorea	72	1	....	....	....	....	....	....
Neuralgia and neuritis	73	....	....	....	....	....	....	....
Other diseases of the nervous system	74	....	....	....	....	....	1	....
Acute endocarditis	78	....	....	....	1	3	1	....
Organic diseases of the heart	79	....	....	1	3	2	2	1
Angina pectoris	80	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	1	....	....	....	....	....
Embolism and thrombosis	82	....	....	....	....	....	....	....
Acute bronchitis	89	4	5	5	....	....	....	....
Chronic bronchitis	90	....	....	....	....	....	....	....
Bronchopneumonia	91	16	32	14	....	....	....	....
Pneumonia	92	8	49	32	1	....	2	4
Pleurisy	93	....	....	1	....	....	....	....
Pulmonary congestion, pulmonary apoplexy	94	....	....	....	....	....	....	1
Asthma	96	....	....	....	....	....	....	....

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	1	...	...	...	...	...	...	...	...	...	...	2	1	1	2	1	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	9	9	1	....	10	....	....
1	...	...	...	...	...	...	...	...	...	...	...	2	1	2	1	1	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	4	7	.....	....	7	....	....
...	...	...	...	...	...	...	...	...	...	...	...	9	5	12	2	....	14	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
10	4	12	7	6	2	2	1	...	...	...	...	28	29	16	41	35	15	7	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	4	3	2	....	5	....	....
1	...	...	...	...	...	...	...	...	...	...	...	....	5	3	2	1	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	....	1	.....	1	....	1	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	2	...	...	...	...	...	...	...	...	2	2	2	2	....	4	....	....
...	...	...	...	...	...	1	1	...	...	...	...	2	....	.....	2	1	....	1	....
...	1	...	...	1	2	2	1	...	...	...	...	3	4	.....	7	5	....	2	....
...	...	...	...	3	...	1	2	1	...	...	...	2	5	3	4	5	....	2	....
...	...	...	...	...	...	...	1	1	...	...	...	.....	2	.....	2	1	....	1	....
...	...	...	...	...	...	1	...	...	...	...	...	.....	1	.....	1	....	....	1	....
...	...	...	...	...	1	...	...	...	...	...	...	.....	1	.....	1	....	....	1	....
...	...	...	1	...	2	1	...	...	...	...	...	2	3	3	2	4	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	.....	1	.....	1	....	1	....	....
...	...	1	...	...	...	...	...	...	...	...	...	.....	2	2	...	1	1	....	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	.....	1	.....	1	1	....	....	....
1	...	...	...	...	...	...	...	...	...	...	...	2	....	1	1	..	2	....	....
...	2	...	2	1	...	...	...	...	...	...	...	4	1	2	3	2	3	....	....
...	...	...	...	...	...	1	...	...	...	...	...	..	1	1	.....	1	....	....	....
...	...	...	...	1	...	...	...	...	...	...	...	4	8	10	2	2	10	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	2	2	1	1	2	....	....
...	1	...	...	...	...	1	...	...	...	...	...	1	1	2	.....	2	...	....	....
...	...	...	...	1	1	...	...	...	...	...	...	2	....	1	1	2	....	....	....
...	...	3	2	1	2	1	4	4	3	...	...	10	11	4	17	13	1	7	....
...	...	...	1	1	2	...	1	1	...	...	...	3	3	2	4	5	1	....	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	4	6	.....	....	6	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	1	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	.....	1	....	1	....	....
2	1	...	...	...	3	1	4	1	1	1	...	9	10	8	11	4	9	6	....
1	...	2	3	7	5	2	3	1	2	...	...	19	16	14	21	19	13	3	....
...	...	...	...	...	...	...	1	...	...	...	...	1	....	.....	1	....	....	1	....
...	...	...	...	1	1	1	1	2	2	...	...	4	5	3	6	3	1	5	....
...	...	...	...	...	...	1	1	1	...	...	...	1	2	2	3	3	....	....	....
...	...	...	...	...	...	...	...	1	...	...	...	7	8	13	2	....	14	1	....
...	...	...	...	2	...	...	...	1	...	...	...	1	2	.....	3	2	1	....	....
...	...	...	...	...	...	...	2	1	1	...	...	38	28	61	5	1	63	2	....
4	1	7	3	1	3	1	5	2	2	...	...	63	62	94	31	23	96	5	1
...	...	1	...	...	...	...	...	1	1	...	...	3	1	3	1	1	2	1	....
...	...	...	...	...	1	...	...	...	...	...	...	....	2	1	1	....	1	1	....
...	...	...	...	...	...	1	1	...	1	...	...	2	1	1	2	1	....	2	....

TABLE 38.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PASSAIC CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases of the mouth and annexa	99	1	...	...	...	...	...	...
Ulcer of the stomach	102	...	...	...	...	...	...	2
Other diseases of the stomach (cancer excepted)	103	1	8	1	1	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	6	75	11	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	...	2	2	...	...	...	...
Appendicitis and typhlitis	108	...	...	...	2	2	2	1
Hernias intestinal obstructions	109	...	1	2	...	...	1	1
Other diseases of the intestines	110	...	...	...	...	...	...	...
Cirrhosis of the liver	113	...	...	...	...	...	...	...
Acute nephritis	119	...	...	...	1	...	...	...
Bright's disease	120	...	2	...	...	...	1	1
Other diseases of the kidneys and annexa	122	...	...	...	...	...	...	...
Calculi of the urinary passages	123	...	...	...	...	...	...	...
Uterine tumor (noncancerous)	129	...	...	...	...	...	...	...
Other diseases of the uterus	130	...	...	...	...	...	...	...
Cysts and other tumors of the ovary	131	...	...	...	...	...	...	...
Salpingitis and other diseases of the female genital organs	132	...	...	...	...	...	...	1
Accidents of pregnancy	134	...	...	...	...	...	...	...
Puerperal hæmorrhage	135	...	...	...	...	...	...	1
Other accidents of labor	136	...	...	...	...	...	...	2
Puerperal septicæmia	137	...	...	...	...	...	...	1
Puerperal albuminuria and convulsions	138	...	...	...	...	...	...	...
Acute abscess	144	...	1	1	...	...	...	...
Other diseases of the skin and annexa	145	...	...	...	...	...	...	...
Diseases of the bones (tuberculosis excepted)	146	...	...	...	1	2	...	...
Congenital malformations (stillbirths not included)	150	1	2	...	...	...	...	...
Congenital debility, icterus and sclerema	151	59	6	...	...	...	...	...
Other diseases peculiar to early infancy	152	11	...	...	...	...	...	...
Senility	154	...	...	...	...	...	...	...
Suicide by poison	155	...	...	...	...	...	...	...
Suicide by asphyxia	156	...	...	...	...	...	...	...
Suicide by hanging or strangulation	157	...	...	...	...	...	...	...
Suicide by firearms	159	...	...	...	...	...	...	1
Suicide by cutting or piercing instruments	160	...	...	...	...	...	...	...
Burns (conflagration excepted)	167	...	...	3	2	...	...	...
Absorption of deleterious gases (conflagration excepted)	168	...	...	...	...	...	...	...
Accidental drowning	169	...	...	2	1	2	...	...
Traumatism by firearms	170	...	...	1	...	...	...	...
Traumatism by fall	172	...	...	...	1	...	...	...
Traumatism by machines	174	...	...	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc	175	...	...	...	2	...	1	1
Effects of heat	179	...	...	...	...	...	...	...
Electricity (lightning excepted)	181	...	...	...	...	...	...	...
Homicide by firearms	182	...	...	...	...	...	...	1
Homicide by other means	184	1	...	...	...	...	...	...
Ill-defined organic disease	187	...	...	...	...	...	...	...
Cause of death not specified or ill-defined	189	...	10	...	1	...	...	...

Total deaths, 871. Death-rate, 13.41.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													1	1			1		
	1											1	2	2	1		3		
1					1			1				12	2	11	3		13	1	
												53	39	89	3		92		
	2		1	1	1	1						5	5	5	5	5	5		
1		1				1						6	4	6	4	2	7	1	
			1			1						3	4	2	5	1	5	1	
	1												1		1	1			
				2	1	1						2	2	2	2	3		1	
			1	1	1	4						4	4	3	5	6	2		
1	1		3	3	6	3	10	5	1			24	13	15	22	24	5	8	
								1	1			1	1	2		1		1	
							1						1	1		1			
				2									2	2		1	1		
			1										1	1		1			
			1										1		1	1			
			1										2	2		2			
1													1	1		1			
			1										2		2	2			
1	2												5	1	4	5			
3			1										5	3	2	5			
1													1		1	1			
													2	1	1		2		
						1							1		1	1			
			1									3	1	4		1	3		
												2	1	3			3		
												37	28	65			65		
												7	4	11			11		
									1				1	1			1		
	1												1		1	1			
1												1		1		1			
									1				1		1			1	
			1									2			2	1	1		
			1										1		1	1			
		1				1	1					1	7	6	2	1	6	1	
			2		1				1			1	3		4	3		1		
			2									6	1	2	5	1	5		1
	1		1									2	1	1	2	2	1		
1	1	1	1	1	1		1			1		7	2	1	8	4	2	3	
		1			1		1					3		1	2	3			
1	3	2	2	2	1		1					15	1	5	11	8	6	1	1
				1								1			1		1		
	1											1			1	1			
	1	1										2	1	1	2	3			
		1											2	1	1	1	1		
								1				1		1				1	
												4	7	10	1		11		

TABLE 39.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, . THE YEAR ENDING

DEATHS IN PATERSON.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1				1		2	1
Measles	6			2				
Scarlet fever	7			2	1		1	
Whooping cough	8		4	6	1			
Diphtheria and croup	9		1	8	3	1		
Influenza	10							
Dysentery	14							
Erysipelas	18	2	2					
Purulent infection and septicæmia	20			1				
Rabies	23			1				
Tetanus	24							
Pellagra	26							
Tuberculosis of the lungs	28					1	12	23
Acute miliary tuberculosis	29						2	
Tuberculous meningitis	30		1	4				
Abdominal tuberculosis	31		1		1	1	1	
Pott's disease	32							
Tuberculosis of other organs	34		1	1			1	1
Syphilis	37		1					1
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of the skin	44							
Cancer and other malignant tumors of other organs or of organs not specified	45			1				
Acute articular rheumatism	47				1			1
Diabetes	50						1	
Anæmia, chlorosis	54							
Other general diseases	55	1						
Alcoholism (acute or chronic)	56							
Encephalitis	60							
Simple meningitis	61	3	6	7		2		
Including: Cerebrospina fever	61A						1	
Locomotor ataxia	62							
Other diseases of the spinal cord	63							
Cerebral hæmorrhage, apoplexy	64				1			
Softening of the brain	65							
Paralysis without specified cause	66							
Other forms of mental alienation	68							
Epilepsy	69							1
Convulsions of infants	71	3	5	3				
Chorea	72							
Other diseases of the nervous system	74							
Diseases of the ears	76			2				
Pericarditis	77							
Acute endocarditis	78			1	1	1	4	1
Organic diseases of the heart	79	1		1	4	10	4	2
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc.	81							
Embolism and thrombosis	82			1	1			
Diseases of the lymphatic system (lymphangitis, etc.)	84					1		
Hæmorrhage; other diseases of the circulatory system	85		1					
Diseases of the larynx	87		1					
Acute bronchitis	89	5	3	1				
Chronic bronchitis	90							

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1	3	1	1	...	1	...	...	...	...	...	...	6	5	8	3	5	5	1	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	...	...	4	...	...
...	...	...	...	...	...	...	...	...	...	...	...	8	3	11	...	...	11	...	...
...	...	...	...	...	...	...	...	...	...	...	...	8	5	13	...	...	13	...	...
...	...	...	...	...	...	1	...	...	1	...	...	2	...	1	1	2	...	...	...
...	...	...	...	...	...	2	1	...	...	...	...	...	3	3	...	1	1	1	...
...	...	...	...	1	...	...	...	...	1	...	...	2	4	4	2	...	4	2	...
...	1	...	...	...	...	...	...	...	...	...	...	...	2	1	1	1	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	1	...	...
...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
22	29	23	20	13	15	6	8	3	...	...	...	106	61	121	39	84	71	15	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	1	1	...	...
...	...	...	1	...	...	...	...	...	...	...	...	4	2	5	1	...	6	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	...	...	4	...	...
...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...
...	...	...	1	1	...	...	1	...	...	...	...	3	4	7	...	2	4	1	...
...	1	1	...	1	...	...	1	...	...	...	...	3	3	4	2	1	3	2	...
...	...	...	...	...	2	1	2	...	...	...	...	4	1	1	4	3	1	1	...
...	1	3	1	6	8	9	12	8	2	...	...	22	28	17	33	28	7	15	...
..	..	1	1	4	...	4	4	1	...	...	...	8	7	4	11	7	2	6	...
1	...	1	3	2	2	3	4	...	...	...	...	...	16	4	12	9	1	6	...
...	...	...	...	1	1	...	2	2	1	...	...	1	6	4	3	2	1	4	...
...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	...	...	1	...
...	...	1	...	...	4	...	6	1	...	...	...	7	6	6	7	5	3	5	...
...	1	...	1	...	...	1	...	...	...	...	...	3	2	3	2	3	2	...	...
...	...	2	2	1	2	5	4	3	...	...	...	6	14	13	7	11	4	5	...
...	...	1	...	...	1	2	3	1	...	...	...	3	5	3	5	6	...	2	...
...	...	...	1	...	...	1	...	...	...	...	...	3	...	2	1	1	2	...	...
1	...	...	2	...	1	2	1	...	...	...	...	6	1	6	1	5	2	...	...
...	...	2	...	...	...	...	...	...	...	...	...	1	1	2	...	...	2	...	...
...	1	1	...	1	1	...	1	...	...	...	...	11	12	21	2	4	19	...	...
...	1	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	2	...	...
...	1	1	...	...	...	2	1	...	...	...	...	4	...	2	2	3	1	...	...
...	...	...	1	1	1	...	1	...	...	...	...	1	3	1	3	4	...	...	...
...	1	...	1	4	8	6	18	37	4	...	...	33	47	31	49	38	4	38	...
...	...	...	...	...	...	...	1	1	...	...	...	2	...	1	1	2	...	...	...
...	1	...	...	...	2	1	5	5	3	...	...	7	10	5	12	11	...	6	...
...	...	...	...	...	...	1	1	...	2	...	...	2	2	1	3	...	1	3	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	7	4	11	...	...	11	...	...
...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	1	...
1	...	...	2	1	...	...	...	...	...	...	...	3	1	2	2	2	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	2	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1	...	...	...
1	1	3	2	4	4	6	18	15	2	1	...	31	34	31	34	22	20	23	...
9	8	7	9	9	14	16	37	30	15	1	...	87	90	81	96	74	49	54	...
...	...	...	2	1	...	1	2	1	...	...	...	6	1	4	3	3	3	1	...
...	...	...	1	...	2	2	8	7	5	...	...	12	13	11	14	11	2	12	...
...	...	...	...	...	...	...	1	1	...	...	...	2	2	4	...	...	2	2	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	1	...	...	...	...	...	...	...	1	1	2	...	...	1	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	1	...	1	1	3	2	...	...	9	8	12	5	3	9	5	...
...	...	...	...	...	...	...	1	3	...	...	...	...	4	2	2	...	...	4	...

TABLE 39.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PATERSON.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Bronchopneumonia	91	9	27	18	1	...	...	...
Pneumonia	92	5	18	28	2	1	3	3
Pleurisy	93	....	....	2	...	...	...	...
Pulmonary congestion, pulmonary apoplexy	94	....	....	...	...	...	...	...
Asthma	96	....	1	...	...	...	...	...
Other diseases of the respiratory system (tuberculosis excepted)	98	....	....	...	...	...	...	...
Diseases of the pharynx	100	....	....	...	...	...	...	...
Ulcer of the stomach	102	....	....	...	...	...	1	...
Other diseases of the stomach (cancer excepted)	103	3	4	1	...	...	...	2
Dairrhœa and enteritis (Under 2 years)	104	5	87	8	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	2	1	1	1	...
Appendicitis and typhlitis	108	....	....	1	1	...	3	...
Hernias, intestinal obstructions	109	....	..	...	...	1	...	...
Other diseases of the intestines	110	....	....	...	...	...	1	1
Cirrhosis of the liver	113	....	....	...	...	...	...	1
Biliary calculi	114	....	....	...	...	...	...	...
Other diseases of the liver	115	3	....	...	...	...	...	1
Simple peritonitis (nonpuerperal)	117	....	....	1	...	1	...	...
Acute nephritis	119	....	2	2	...	...	...	2
Bright's disease	120	1	....	..	1	..	...	4
Other diseases of the kidneys and annexa	122	....	....	..	...	...	...	...
Calculi of the urinary passages	123	....	....	..	...	...	...	...
Diseases of the bladder	124	....	....	..	...	...	...	...
Diseases of the prostate	126	....	....	..	...	...	...	...
Uterine tumor (noncancerous)	129	....	....	..	...	...	...	...
Other diseases of the uterus	130	....	....	..	...	...	...	1
Cysts and other tumors of the ovary	131	....	....	..	...	...	...	1
Salpingitis and other diseases of the female genital organs	132	....	....	..	...	...	...	1
Accidents of pregnancy	134	....	....	..	...	...	...	3
Puerperal hæmorrhage	135	....	....	..	...	...	...	...
Other accidents of labor	136	....	....	..	...	...	...	1
Puerperal septicæmia	137	....	....	..	...	1	...	3
Puerperal albuminuria and convulsions	138	....	....	..	...	...	1	1
Gangrene	142	....	....	1	...	...	...	...
Other diseases of the skin and annexa	145	....	....	..	...	...	...	...
Diseases of the bones (tuberculosis excepted)	146	....	....	..	...	...	1	...
Congenital malformations (stillbirths not included)	150	1	4	1	...	...	...	...
Congenital debility, icterus and sclerema	151	51	11	...	...	...	...	...
Other diseases peculiar to early infancy	152	15	2	...	...	...	...	...
Senility	154	....	....	...	...	...	...	...
Suicide by poison	155	....	....	...	...	...	1	...
Suicide by asphyxia	156	....	....	...	...	...	...	...
Suicide by hanging or strangulation	157	....	....	...	...	...	1	1
Suicide by firearms	159	....	....	...	...	...	...	1
Suicide by cutting or piercing instruments	160	....	....	...	...	...	...	...
Poisoning by food	164	....	....	...	...	1	...	...
Other acute poisonings	165	....	....	1	...	...	...	...
Burns (conflagration excepted)	167	....	....	3	...	...	2	...
Absorption of deleterious gases (conflagration excepted)	168	1	....	...	1	...	...	1
Accidental drowning	169	....	....	...	3	1	...	...
Traumatism by fall	172	....	....	...	...	2	1	...
Traumatism in mines and quarries	173	....	....	...	...	...	...	...
Traumatism by machines	174	....	....	...	...	1	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	1	2	4	2	1
Homicide by firearms	182	....	....	...	...	...	...	...
Homicide by other means	184	....	....	...	...	...	...	...
Other external violence	186	....	....	...	...	...	1	...
Cause of death not specified or ill-defined	189	2	14	2	...	...	...	...

Total deaths, 1,779. Death-rate, 13.27.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90	Not stated	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1	...	...	...	...	2	1	1	3	2	...	...	30	35	59	6	6	56	3	....
8	4	2	6	12	6	9	19	17	7	...	...	79	71	93	57	54	70	26	....
2	1	...	3	...	1	...	1	1	...	...	...	7	4	7	4	7	3	1	....
...	...	...	...	...	...	...	...	1	...	...	...	1	...	.....	1	1	....	....	....
...	...	2	...	1	1	1	3	3	1	...	...	6	7	4	9	5	3	5	....
...	...	...	...	...	2	2	2	...	...	...	...	4	2	1	5	4	1	1	....
1	...	...	...	...	...	...	...	...	...	...	...	1	...	.....	1	....	1	....	....
...	...	2	...	...	1	...	1	1	...	...	...	3	3	3	3	3	1	2	....
1	...	1	1	2	1	...	...	...	...	...	...	8	8	12	4	6	10	....	....
...	...	...	...	...	...	...	...	...	...	...	...	54	46	99	1	....	100	....	....
...	...	1	2	...	2	1	3	5	4	...	...	12	11	11	12	7	8	8	....
1	1	1	3	1	...	...	...	...	...	...	...	8	4	7	5	5	7	....	....
...	...	1	...	3	4	2	2	3	...	...	...	6	10	6	10	5	4	7	....
...	...	...	...	...	3	...	2	...	...	...	...	2	5	3	4	4	2	1	....
...	...	...	2	2	2	2	5	1	1	...	...	13	3	8	8	9	2	5	....
...	...	1	...	...	...	...	...	...	...	...	...	1	...	.....	1	1	....	....	....
...	...	...	1	1	3	2	3	1	...	...	...	4	11	6	9	7	5	3	....
...	...	...	...	...	...	1	2	...	...	...	...	5	...	2	3	3	2	....	....
3	1	...	1	2	3	2	7	3	...	...	...	16	12	16	12	15	8	5	....
3	3	2	8	9	8	13	29	21	15	1	...	72	46	44	74	63	15	40	....
...	1	1	...	...	1	...	...	...	1	...	...	3	1	.....	4	1	1	2	....
...	...	1	...	...	1	...	1	...	...	...	...	2	1	.....	3	1	1	1	....
...	...	...	...	...	...	...	3	2	1	...	...	3	3	3	3	1	1	4	....
...	...	...	...	...	...	...	1	3	1	...	...	5	...	2	3	3	....	2	....
...	...	1	...	1	1	...	...	...	...	...	...	....	3	2	1	2	1	....	....
...	1	1	...	...	...	...	...	...	...	...	...	....	3	1	2	1	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	....	2	2	.....	2	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	3	3	.....	2	1	....	....
2	...	...	1	...	...	...	...	...	...	...	...	....	3	1	2	3	....	....	....
...	1	3	1	...	...	...	...	...	...	...	...	....	6	1	5	5	1	....	....
2	2	1	...	...	...	...	...	...	...	...	...	....	9	6	3	7	2	....	....
3	1	1	...	...	...	...	...	...	...	...	...	....	7	4	3	7	....	....	....
...	...	...	...	...	...	...	...	1	...	1	...	1	2	2	1	....	1	2	....
...	...	...	...	...	...	1	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	1	...	1	...	...	...	...	...	...	...	2	1	2	1	2	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	3	6	.....	....	6	....	....
...	...	...	...	...	...	...	...	...	...	...	...	36	26	60	2	....	62	....	....
...	...	...	...	...	...	...	...	...	...	...	...	12	5	17	.....	....	17	....	....
...	...	...	...	...	...	...	3	5	5	2	...	5	10	3	12	4	1	10	....
1	1	1	...	1	...	1	1	...	...	...	...	3	4	1	6	2	2	2	1
2	...	1	...	1	1	2	2	...	...	...	...	8	1	2	7	5	2	2	....
...	...	1	...	1	...	...	...	...	...	...	...	3	1	2	2	1	2	....	1
...	2	...	1	...	...	2	...	...	...	...	...	6	....	3	3	4	1	1	....
...	...	1	...	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	...	...	...	1	...	...	...	...	...	....	2	2	.....	1	1	....	....
...	...	...	...	1	1	...	...	...	...	...	...	1	2	1	2	1	2	....	....
...	...	...	...	...	...	...	...	1	...	...	...	1	5	5	1	....	5	1	....
...	...	...	...	...	...	...	...	1	1	...	...	3	2	3	2	....	3	2	....
...	...	1	...	...	...	...	...	...	...	...	...	5	....	4	1	1	4	....	....
2	1	2	3	2	2	...	2	9	1	...	...	18	9	12	15	11	8	7	1
...	...	1	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	1	...	...	...	...	...	...	...	...	...	2	....	1	1	1	1	....	....
3	4	2	3	6	2	1	4	3	1	...	...	35	4	14	25	16	18	3	2
...	3	1	...	...	...	...	...	...	...	...	...	4	....	1	3	2	1	1	....
...	1	...	...	1	...	...	1	...	...	...	...	3	....	.....	3	3	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	11	7	17	1	....	18	....	....

TABLE 40.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PERTH AMBOY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1					1	3	1
Measles	6		1	1				
Scarlet fever	7			5	2		1	
Whooping cough	8		8	7				
Diphtheria and croup	9		1	22	5	2		
Including: Croup	9A			1				
Erysipelas	18		2					
Purulent infection and septicæmia	20					1		
Tetanus	24	1			1	1		
Tuberculosis of the lungs	28		1				1	4
Tuberculous meningitis	30			1			1	
Abdominal tuberculosis	31			1	1			
Tuberculosis of other organs	34			1				
Syphilis	37	1						
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40			1				
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of other organs or of organs not specified	45							
Acute articular rheumatism	47							
Diabetes	50							
Anæmia, chlorosis	54							
Other general diseases	55						1	
Alcoholism (acute or chronic)	56							
Chronic lead poisoning	57							
Simple meningitis	61		1	3	1		1	
Locomotor ataxia	62							
Other diseases of the spinal cord	63							
Cerebral hæmorrhage, apoplexy	64							
Epilepsy	69		1					
Convulsions of infants	71		4	6	2			
Diseases of the ears	76					1		
Acute endocarditis	78			1	3			
Organic diseases of the heart	79							
Diseases of the arteries, atheroma aneurysm, etc	81							
Acute bronchitis	89	1	3					
Chronic bronchitis	90							
Bronchopneumonia	91		1	3		1		
Pneumonia	92	1	10	8				2
Pleurisy	93				1			
Pulmonary congestion, pulmonary apoplexy	94							
Asthma	96							
Diseases of the pharynx	100		1					
Other diseases of the stomach (cancer excepted)	103	1	9	3				
Diarrhœa and enteritis (Under 2 years)	104	11	64	11				
Diarrhœa and enteritis (2 years and over)	105			3				
Appendicitis and typhlitis	108			1			1	1
Cirrhosis of the liver	113							
Other diseases of the digestive system (cancer and tuberculosis excepted)	118							
Acute nephritis	119							
Bright's disease	120							2
Other accidents of labor	136							2
Puerperal septicæmia	137							2
Puerperal albuminuria and convulsions	138						1	1
Gangrene	142							
Diseases of the bones (tuberculosis excepted)	146					1		
Congenital malformations (stillbirths not included)	150	8	1					

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	1	...	...	...	...	...	...	...	...	...	...	4	2	4	2	1	5	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	...	2	...	...
...	...	...	..	...	...	...	...	...	...	...	...	5	3	7	1	...	8	...	...
...	...	...	..	...	...	...	...	...	...	...	...	9	6	15	...	...	15	...	...
...	...	...	...	...	...	...	...	...	...	...	...	15	15	29	1	...	30	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	...	2	...	...
...	...	...	...	...	1	...	...	...	...	...	...	2	...	1	1	1	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	...	...	3	...	...
4	2	4	4	6	1	...	2	...	...	...	...	21	8	14	15	21	8	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	...	2	...	...
1	...	...	...	...	...	...	...	...	...	...	...	...	3	2	1	1	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	1	1	...	...	...
...	1	...	...	1	2	2	4	2	2	...	...	12	3	5	10	10	1	4	...
...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	1	...	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	1	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	1	...	...	...
...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...
...	...	...	1	...	1	...	...	...	...	...	...	2	...	...	2	2	...	...	...
...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	2	1	1	...	...
...	...	1	...	1	..	1	1	...	...	...	...	4	...	1	3	2	1	...	1
...	1	...	2	...	...	...	...	...	...	...	...	3	...	...	3	3	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	5	1	5	1	...	6	...	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...
...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	2	...	3	3	1	4	3	1	...	...	6	11	6	11	8	2	7	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	9	3	12	...	...	12	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	1	...	2	...	1	3	2	...	...	...	6	8	7	7	7	4	3	...
1	2	3	1	1	1	4	3	5	...	...	...	9	12	5	16	16	1	4	...
...	...	...	...	...	1	...	...	2	3	...	...	2	4	3	3	2	...	4	...
...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	...	...	4	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	4	1	5	...	...	5	...	...
1	2	3	3	1	1	2	2	2	...	...	...	22	16	27	11	15	21	2	...
...	...	...	...	1	...	...	1	...	...	...	...	2	1	1	2	1	2	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	1	...
...	...	...	...	...	2	...	...	...	...	...	...	2	...	...	2	1	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	...	...	1	...	...	...	...	...	7	7	13	1	1	13	...	...
...	...	...	...	...	...	...	...	...	...	...	...	51	35	85	1	...	86	...	...
...	...	1	...	...	...	1	1	...	...	...	...	4	2	4	2	3	3	...	...
1	1	...	...	...	...	...	...	...	...	...	...	5	...	3	2	1	4	...	...
...	...	...	1	1	...	1	2	...	...	...	...	2	3	...	5	4	...	1	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...
1	3	4	...	2	5	3	3	3	...	...	...	10	16	10	16	21	1	4	...
...	1	...	...	...	...	...	...	...	...	...	...	...	3	1	2	3	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	2	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	1	1	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	1	...
...	...	...	1	...	...	...	...	...	...	...	...	...	2	1	1	1	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	5	4	9	...	...	9	...	...

TABLE 40.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PERTH AMBOY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Congenital debility, icterus and sclerema	151	34	4	...	...	...	...	...
Other diseases peculiar to early infancy	152	8	5	...	...	...	...	...
Lack of care	153	3	1	...	...	...	...	...
Senility	154	....	....	...	...	...	...	...
Suicide by poison	155	....	....	...	...	...	...	...
Suicide by firearms	159	....	....	...	...	...	...	...
Burns (conflagration excepted)	167	....	....	5	1	...	...	...
Accidental drowning	169	....	....	1	1	1	...	1
Traumatism by firearms	170	....	....	...	...	...	1	...
Traumatism by fall	172	....	....	...	...	...	...	...
Traumatism by machines	174	....	....	...	...	...	...	2
Traumatism by other crushing (vehicles, railroad, landslides, etc)	175	....	....	...	...	1	...	...
Electricity (lightning excepted)	181	....	....	...	...	...	1	...
Cause of death not specified or ill-defined	189	....	3	1	...	...	1	...

Total deaths, 537. Death-rate, 14.98.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	...	...	...	...	24	14	38	.....	....	38	....	....
...	..	...	...	...	...	...	...	...	...	...	...	6	7	13	.....	....	13	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	.....	....	4	....	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	.....	1	....	1	....	....
...	...	1	...	...	...	...	...	...	...	...	...	1	...	.....	1	1	....	..	....
..	...	1	...	.	...	...	...	...	...	...	...	1	..	1	.....	1	....	....	....
1	...	...	...	...	...	...	...	...	...	...	...	5	2	5	2	1	6	....	....
1	1	...	...	...	...	...	...	...	...	...	...	6	....	3	3	1	5	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
2	1	...	1	1	...	...	...	...	...	...	...	5	....	1	4	3	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	..	1	1	1	1	....	....
1	4	5	4	1	...	...	1	1	...	...	...	17	1	5	13	12	6	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	1	5	.....	...	5	....	....

TABLE 41.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PHILLIPSBURG.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	
Measles	6			1					
Scarlet fever	7					1			
Whooping cough	8		1	2					
Diphtheria and croup	9			3					
Influenza	10								
Dysentery	14								
Tuberculosis of the lungs	28			1		2		4	
Cancer and other malignant tumors of the buccal cavity	39								
Cancer and other malignant tumors of the stomach, liver	40								
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41								
Cancer and other malignant tumors of the breast	43								
Acute articular rheumatism	47				1				
Chronic rheumatism and gout	48								
Diabetes	50								
Alcoholism (acute or chronic)	56								
Simple meningitis	61		2	1					
Other diseases of the spinal cord	63				1				
Cerebral hæmorrhage, apoplexy	64								
Paralysis without specified cause	66		1						
Convulsions of infants	71		1	1					
Other diseases of the nervous system	74								
Acute endocarditis	78					1			
Organic diseases of the heart	79								
Angina pectoris	80								
Diseases of the arteries, atheroma aneurysm, etc	81								
Embolism and thrombosis	82								
Acute bronchitis	89		1						
Bronchopneumonia	91	1			1				
Pneumonia	92		1	2					
Pleurisy	93								
Pulmonary congestion, pulmonary apoplexy	94	1							
Other diseases of the respiratory system (tuberculosis excepted)	98								
Diseases of the pharynx	100		1						
Ulcer of the stomach	102								
Other diseases of the stomach (cancer excepted)	103	1	3						
Diarrhœa and enteritis (Under 2 years)	104		10	1					
Diarrhœa and enteritis (2 years and over)	105							1	
Other diseases of the intestines	110								
Cirrhosis of the liver	113								
Biliary calculi	114								
Other diseases of the liver	115								
Acute nephritis	119								
Bright's disease	120								
Other diseases of the skin and annexa	145	1							
Congenital malformations (stillbirths not included)	150	1							
Congenital debility, icterus and sclerema	151	8							
Other diseases peculiar to early infancy	152	2	1						
Senility	154								
Suicide by poison	155								
Burns (conflagration excepted)	167							1	
Traumatism by fall	172								
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175					1		1	
Homicides by firearms	182								
Cause of death not specified or ill-defined	189		1	1					

Total deaths, 172. Death-rate, 12.08.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	...	....
...	...	...	...	...	...	...	...	...	...	..	..	...	1	1	.....	....	1	...	....
...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	.....	...	3	...	....
...	...	...	...	.	...	...	..	1	...	...	...	1	3	4	.....	....	3	1	....
...	...	...	...	...	...	...	1	..	1	...	...	...	2	1	1	....	1	1	....
..	...	...	...	...	1	...	..	1	...	...	...	2	...	.....	2	1	1	..	....
3	1	...	1	...	1	...	1	...	...	...	...	8	6	13	1	7	7	....	....
...	...	..	...	1	...	..	..	...	...	...	...	...	1	1	.....	1	...	....	....
...	...	...	...	..	1	..	...	...	...	...	.	1	...	.....	1	....	1	....	....
...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	.....	....	1	....	....
...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	.....	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	....	1	....	....
...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	...	...	1	...	2	...	...	...	...	2	1	2	1	3	....	....	....
...	...	...	...	...	..	...	1	...	...	...	...	1	...	1	.. ..	1	....	..	....
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	.....	....	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	1	...	...	2	1	2	4	4	3	..	...	8	9	14	3	11	....	6	....
...	...	...	...	...	...	1	1	1	...	...	...	...	4	4	.....	....	1	3	....
...	..	...	...	...	...	...	..	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	.....	1	....	....	....
...	...	...	..	1	1	..	..	1	1	...	...	4	1	4	1	2	1	2	....
...	...	...	...	...	...	4	2	4	...	...	...	3	7	8	2	5	1	4	....
...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	.. ..	....	....	1	....
...	...	1	...	...	...	...	1	...	...	...	...	2	...	2	.....	1	1	....	....
...	...	1	...	...	...	...	1	...	...	...	...	1	1	1	1	1	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	1	...	...	...	...	...	...	...	...	3	....	3	.....	....	3	....	....
...	...	...	...	...	...	...	4	2	...	...	...	5	4	6	3	1	3	5	....
...	...	1	...	...	...	...	...	...	...	...	...	1	...	.....	1	1	....	....	....
...	...	...	...	...	...	...	1	...	...	...	...	1	1	2	.....	1	1	....	....
...	..	...	1	...	...	...	...	...	...	...	...	1	...	1	.....	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	1	...	...	...	...	...	...	...	...	1	...	.....	1	1	....	....	....
...	...	...	...	...	...	2	...	...	...	...	...	4	2	6	.....	2	4	....	....
...	...	...	...	...	...	...	...	...	...	...	...	9	2	10	1	...	11	....	....
...	...	1	...	...	...	...	...	2	1	...	...	2	3	2	3	1	1	3	....
...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	....	1	....	....	....
...	...	...	...	...	1	...	...	...	...	...	...	...	1	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	1	..	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	1	...	1	1	...	...	...	....	2	2	.....	1	....	1	....
...	...	...	...	...	...	...	1	...	...	...	...	...	1	.....	1	1	....	....	....
1	...	...	...	..	1	1	5	4	1	...	...	8	5	12	1	7	1	5	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	5	8	.....	....	8	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	.....	....	3	....	....
...	...	...	...	...	...	...	...	...	2	...	...	....	2	1	1	....	2	....	....
1	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	1	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	1	...	1	...	...	...	1	1	...	...	...	5	1	5	1	4	2	....	....
...	1	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	..	...	...	...	...	...	...	...	...	...	...	2	....	2	.....	....	2	....	....

TABLE 42.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PLAINFIELD.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1				1		1	
Scarlet fever	7			3	3	2	1	
Whooping cough	8		2					
Diphtheria and croup	9			2				
Dysentery	14							
Purulent infection and septicæmia	20							
Tuberculosis of the lungs	28						3	1
Acute miliary tuberculosis	29						1	
Abdominal tuberculosis	31							
Tuberculosis of other organs	34							1
Disseminated tuberculosis	35						1	
Syphilis	37		1					
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of other organs or of organs not specified	45							
Acute articular rheumatism	47			1				1
Diabetes	50							
Anæmia, chlorosis	54							
Simple meningitis	61		1	1				
Other diseases of the spinal cord	63			1				
Cerebral hæmorrhage, apoplexy	64	1						
General paralysis of the insane	67							
Epilepsy	69			1				
Convulsions of infants	71	2	1					
Other diseases of the nervous system	74							
Acute endocarditis	78					1	1	
Organic diseases of the heart	79				3			
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Diseases of the lymphatic system (lymphangitis, etc.)	84			1				
Diseases of the larynx	87							
Acute bronchitis	89		2	1				
Chronic bronchitis	90							
Broncho pneumonia	91		3		1			
Pneumonia	92		3		4			
Pleurisy	93			1				
Other diseases of the respiratory system (tuberculosis excepted)	98							
Other diseases of the mouth and annexa	99	1						
Diseases of the pharynx	100				1			
Diseases of the œsophagus	101							
Other diseases of the stomach (cancer excepted)	103		4					
Diarrhœa and enteritis (Under 2 years)	104	1	12	1				
Diarrhœa and enteritis (2 years and over)	105							
Appendicitis and typhlitis	108				1			2
Hernias, intestinal obstructions	109		1	1				
Other diseases of the intestines	110							
Other diseases of the liver	115						1	
Acute nephritis	119				1			
Bright's disease	120	1		1				1
Diseases of the bladder	124							
Other diseases of the urethra, urinary abscess, etc	125							
Uterine tumor (noncancerous)	129							

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1	1	...	...	...	...	...	...	...	...	...	...	3	1	3	1	1	3	...	...
...	1	...	...	...	...	...	...	...	...	...	...	2	8	7	3	1	9	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	....	.....	1	1	....	...	...
...	...	...	1	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	...	...
3	1	...	2	2	1	...	3	...	...	...	...	9	7	10	6	7	8	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	...	1	...	...
...	...	...	1	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	...	...
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	...	1	...	...
...	...	1	...	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	...	...
...	...	1	...	...	2	...	3	2	2	...	...	6	4	7	3	7	1	2	...
...	...	...	...	...	...	1	2	...	...	...	...	....	3	1	2	2	....	1	...
...	...	...	2	...	...	...	...	...	...	...	...	....	2	1	1	2	....	...	...
...	...	1	...	...	2	...	1	...	...	...	...	....	4	3	1	1	2	1	...
...	...	...	1	...	...	2	1	...	...	...	...	2	2	3	1	2	...	2	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	...	...
...	...	...	...	1	...	...	...	3	...	...	...	4	...	2	2	1	....	3	...
...	1	1	...	...	...	...	...	...	...	...	...	1	1	1	1	....	1	1	...
...	...	...	1	...	...	...	...	...	...	...	...	3	....	3	.....	....	2	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	...	...
...	1	...	...	1	4	...	6	8	4	...	...	13	12	16	9	11	4	10	...
...	...	...	...	1	...	...	...	...	...	...	...	1	....	1	.....	1	....	...	...
...	...	...	...	...	...	1	1	...	...	...	...	2	1	3	.....	1	1	1	...
...	...	...	...	...	...	...	...	...	...	...	...	3	....	3	.....	....	3	...	...
...	1	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	1	....	...	...
...	...	...	2	...	5	1	3	2	2	...	...	8	9	13	4	7	3	7	...
...	...	1	...	2	1	...	4	1	2	...	...	9	5	11	3	9	4	1	...
...	...	...	...	1	...	11	...	3	1	...	...	2	4	5	1	1	....	5	...
...	...	...	...	...	...	...	4	2	2	...	...	2	6	4	4	2	....	6	...
...	...	...	...	...	...	...	...	...	...	...	...	....	1	.....	1	....	1	....	...
...	...	...	...	...	...	...	2	...	...	...	...	2	....	1	1	2	....	...	...
...	...	...	...	...	...	...	1	...	1	...	...	4	1	5	.....	1	3	1	...
...	...	...	1	...	...	...	...	...	...	...	...	....	1	.....	1	1	....	...	...
1	...	...	...	...	...	...	...	...	...	...	...	2	3	4	1	1	4	...	...
1	2	...	...	1	1	2	1	3	3	...	...	8	13	16	5	6	8	7	...
...	...	...	...	...	...	...	1	1	...	...	...	3	....	1	2	1	1	1	...
...	...	...	...	...	...	...	1	...	...	...	...	....	1	.....	1	....	....	1	...
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	....	1	.....	1	....	...	...
...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	.....	....	4	...	...
...	...	...	...	...	...	...	...	...	...	...	...	10	4	14	.....	....	14	...	...
...	...	...	...	...	...	...	...	1	...	...	...	....	1	1	.....	....	....	1	...
...	...	...	...	...	...	...	1	...	...	...	...	3	1	4	.....	1	2	1	...
...	...	...	...	...	...	...	3	...	...	...	...	3	2	4	1	1	3	1	...
...	...	...	...	...	1	...	...	...	...	...	...	1	....	1	.....	1	....	...	...
...	...	...	1	...	...	...	1	...	...	...	...	....	3	1	2	1	1	1	...
...	...	1	...	1	1	2	1	2	...	1	...	9	1	9	1	7	1	2	...
1	...	1	...	1	...	...	5	3	1	...	...	8	7	12	3	8	3	4	...
...	...	...	...	...	...	...	1	...	1	...	...	2	....	1	1	1	....	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	....	.....	1	1	....	...	...
...	1	...	...	...	...	...	...	...	1	...	...	....	2	2	.....	....	1	1	...

TABLE 42.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PLAINFIELD.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Salpingitis and other diseases of the female genital organs.	132	....	....	...	...	...	...	...
Puerperal hæmorrhage.	135	....	....	...	...	...	...	...
Puerperal septicæmia.	137	....	....	...	...	...	1	...
Puerperal albuminuria and convulsions.	138	....	....	...	...	...	...	...
Gangrene.	142	....	....	...	...	...	...	...
Other diseases of the skin and annexa.	145	....	....	...	...	..	...	...
Diseases of the bones (tuberculosis excepted)	146	....	....	...	...	...	...	...
Diseases of the bones (tuberculosis and rheumatism excepted)	147	....	....	...	...	...	...	...
Congenital debility, icterus and sclerema.	151	15	1	...	...	...	...	...
Other diseases peculiar to early infancy.	152	4	1	...	...	...	...	...
Senility.	154	....	....	...	...	...	...	...
Suicide by poison.	155	....	....	...	...	...	...	1
Suicide by asphyxia.	156	....	....	...	...	...	...	...
Suicide by hanging or strangulation.	157	....	....	...	...	...	...	1
Traumatism by fall	172	....	....	...	1	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	2	...	...	1	...
Injuries by animals	176	....	....	...	...	...	...	...
Homicide by cutting or piercing instruments.	183	....	....	...	...	...	...	...
Cause of death not specified or ill-defined.	189	....	1	...	...	...	...	...

Total deaths, 309. Death-rate, 14.17.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
1	1	...	...	...	...	...	...	...	...	...	...	...	2	1	1	2	...	...	...
...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	1	1	...	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	10	6	16	...	...	16	...	...
...	...	...	...	...	...	...	...	...	...	...	...	3	2	5	...	...	5	...	...
...	...	...	...	...	...	...	...	...	...	2	...	...	2	2	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...
1	...	...	...	...	...	...	1	...	1	...	...	3	1	4	...	1	2	1	...
1	...	...	...	...	1	...	3	...	...	...	...	7	1	6	2	2	4	2	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...

TABLE 43.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PRINCETON.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	...	...	1	...
Whooping cough	8	....	1	...	...	...	...	...
Tuberculosis of the lungs	28	....	....	...	...	...	...	...
Abdominal tuberculosis	31	....	....	...	...	1	...	...
Cancer and other malignant tumors of the buccal cavity	39	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	...
Leuchæmia	53	....	....	...	...	...	...	...
Anæmia, chlorosis	54	....	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Organic diseases of the heart	79	....	....	...	...	...	...	1
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Acute bronchitis	89	....	2	1	...	...	...	...
Bronchopneumonia	91	....	....	...	...	...	...	...
Pneumonia	92	....	1	...	...	...	...	...
Asthma	96	....	....	...	...	...	...	...
Diseases of œsophagus	101	....	....	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	1	1	...	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	....	1	...	...	...	...	...
Hernias, intestinal obstructions	109	....	1	...	...	...	...	...
Other diseases of the intestines	110	....	....	...	...	...	...	1
Bright's disease	120	....	....	...	...	...	...	...
Senility	154	....	....	...	...	...	...	...
Burns (conflagration excepted)	167	....	....	1	...	...	...	...
Traumatism by fall	172	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	...	...	...	1	...

Total deaths, 61. Death-rate, 13.26.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													1		1		1		
													1	1			1		
1		1										2		2		1	1		
													1	1			1		
						1						1		1			1		
							1					1		1		1			
				1		1		1				1	2	3		2		1	
					1								1	1		1			
1												1		1		1			
1													1	1			1		
			1				1	2	1			2	3	4	1	4		1	
						1	2	5	1			5	5	10		3	1	6	
							1					1		1		1			
									1	1		2	3	3	2		3	2	
	1												1		1	1			
	1				1		1	2					6	4	2	3	1	2	
								1				1			1	1			
									1			1			1	1			
				1		1						2	2	4		1	2	1	
													1	1			1		
													1	1			1		
												1			1		1		
						1		3				1	3	3	1	3		1	
								1	1	1			3	2	1		2	1	
												1		1			1		
	1											1		1			1		
			1									1	1	2			1	1	

TABLE 44.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN RAHWAY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1							
Scarlet fever	7			1		1		
Whooping cough	8		2	1				
Influenza	10							
Tuberculosis of the ungs	28							
Abdominal tuberculosis	31							
Tuberculosis of other organs	34							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of other organs or of organs not specified	45							1
Acute articular rheumatism	47							
Addison's disease	52							
Leuchæmia	53							
Anæmia, chlorosis	54							
Encephalitis	60		1					
Other diseases of the spinal cord	63			2				
Cerebral hæmorrhage, apoplexy	64							
Diseases of the ears	76			1				
Acute endocarditis	78				1			
Organic diseases of the heart	79						1	
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82							
Bronchopneumonia	91		1					
Pneumonia	92				1			
Asthma	96							
Other diseases of the respiratory system (tuberculosis excepted)	98							
Other diseases of the stomach (cancer excepted)	103	2						
Diarrhœa and enteritis (Under 2 years)	104		6	1				
Diarrhœa and enteritis (2 years and over)	105			1				
Appendicitis and typhlitis	108							
Hernias, intestinal obstructions	109							
Cirrhosis of the liver	113							
Acute nephritis	119							
Bright's disease	120							
Diseases of the bladder	124							
Puerperal albuminuria and convulsions	138							
Congenital debility, icterus and sclerema	151	4						
Other diseases peculiar to early infancy	152	1						
Lack of care	153		1					
Burns (conflagration excepted)	167			1				
Accidental drowning	169			1	2			
Traumatism by fall	172							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175							1
Electricity (lightning excepted)	181							

Total deaths, 132. Death-rate, 13.51.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1												1		1			1		
												1	1	2			2		
													3	3			3		
								1				1			1	1			
2		2	2	1								5	2	6	1	4	3		
1												1		1			1		
1													1	1			1		
					1		1	2	1			2	3	3	2	3	1	1	
								2				1	1	2				2	
							1						1		1	1			
												1		1			1		
			1									1		1			1		
							1						1	1			1		
			1										1		1	1			
					1							1		1			1		
												2		2			2		
					1	3	5	4	1			9	5	9	5	6	1	7	
													1	1			1		
						1	1	1	2	1		3	4	6	1	1	2	4	
							2	1	1			1	4	4	1	1	2	2	
							3	2	2			3	4	7		3		4	
						1						1			1	1			
					1							1	1	2		1	1		
						1	3	1	1			3	4	4	3	3	1	3	
					1							1		1		1			
								1					1		1			1	
								1				3		3		1	2		
												4	3	7			7		
												1		1			1		
					1							1			1	1			
1										1		1	1	1	1		1	1	
					1							1			1	1			
					1		1					1	1	2			2		
			2	1		1	4	3	1			6	7	10	3	4	2	7	
										1		1		1				1	
													1	1		1			
												3	1	4			4		
												1		1			1		
													1	1			1		
												1		1			1		
		1										2	2	3	1	1	3		
					1				1			1	1	2		1		1	
	1	2	1				3					8		4	4	4	2	2	
					1							1		1		1			

TABLE 45.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN RED BANK.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Scarlet fever	7							
Whooping cough	8		3					
Diphtheria and croup	9				1			
Influenza	10							
Other epidemic diseases	19					1		
Tuberculosis of the lungs	28							
Abdominal tuberculosis	31							
Tuberculosis of other organs	34							
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the female genital organs	42							
Acute articular rheumatism	47							
Diabetes	50							
Alcoholism (acute or chronic)	56							
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Convulsions of infants	71	1						
Other diseases of the nervous system	74							
Acute endocarditis	78							
Organic diseases of the heart	79							
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Acute bronchitis	89							
Chronic bronchitis	90							
Bronchopneumonia	91		1					
Pneumonia	92		2	1	1			
Diseases of the pharynx	100							
Diarrhœa and enteritis (Under 2 years)	104		9	2				
Hernias, intestinal obstructions	109			1				
Cirrhosis of the liver	113							
Biliary calculi	114							
Bright's disease	120							
Uterine tumor (noncancerous)	129							
Puerperal septicæmia	137							
Other diseases of the skin and annexa	145							
Congenital malformations (stillbirths not included)	150	1						
Congenital debility, icterus and sclerema	151	5						
Lack of care	153	1						
Suicide by poison	155							
Other acute poisonings	165							
Absorption of deleterious gases (conflagration excepted)	168							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175				1			

Total deaths, 103. Death-rate 12.75.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1													1	1		1			
												1	2	3			3		
													1	1			1		
									1			1		1		1			
												1		1			1		
	1			1				1				3		3		1	1	1	
			1									1		1				1	
		1										1		1		1			
			1										1	1		1			
					1		1					1	1	2		1	1		
					1			2					3	3		1	1	1	
						1							1	1		1			
	1						1					1	1	2			1	1	
1		2				1						4		4		1	2	1	
					2		2	3	4			2	9	10	1	6	1	4	
							1		1			1	1	2		2			
												1		1			1		
			1										1	1		1			
								1				1			1			1	
1			1	1			1	1				2	3	4	1	2	1	2	
				1									1	1		1			
								2	2			2	2	3	1	1		3	
									1				1	1			1		
								1					1	1		1			
													1	1			1		
		1		1	1			3				3	7	10		6	4		
							1						1	1				1	
												7	4	11			11		
												1		1			1		
								2				2		1	1	2			
								1					1		1			1	
			1			2	2	1	2			3	5	7	1	5		3	
									1				1	1				1	
	1												1	1		1			
								1					1	1			1		
													1	1			1		
												3	2	5			5		
													1	1			1		
							1						1		1		1		
						1		1				1		1				1	
						1						1		1			1		
						1						1	1	2		1	1		

TABLE 46.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN RIDGEWOOD.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Tuberculosis of the lung	28	....	....	....	....	....	....	....
Cancer and other malignant tumors of the buccal cavity	39	....	....	....	....	....	....	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organ	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of the breast	43	....	....	....	....	....	....	....
Cancer and other malignant tumors of the skin	44	....	....	....	....	....	....	....
Diabetes	50	....	....	....	....	....	....	....
Including: Cerebrospinal fever	61A	....	....	1	....	....	....	....
Locomotor ataxia	62	....	....	....	....	....	....	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	....	....
Acute endocarditis	78	....	....	....	....	....	....	....
Organic diseases of the heart	79	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Embolism and thrombosis	82	....	....	....	....	....	....	....
Diseases of the lymphatic system (lymphangitis, etc.)	84	....	1	....	....	....	....	....
Pneumonia	92	....	....	....	....	1	....	....
Other diseases of the stomach (cancer excepted)	103	....	....	....	....	....	....	....
Diarrhœa and enteritis (Under 2 years)	104	1	....	....	....	....	....	....
Appendicitis and typhlitis	108	....	....	....	....	....	....	1
Hernias, intestinal obstruction	109	....	1	....	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	....
Congenital debility, icterus and sclerema	151	1	....	....	....	....	....	....
Suicide by asphyxia	156	....	....	....	....	....	....	....
Suicide by firearms	159	....	....	....	....	....	....	1
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	....	....	....	1
Homicide by other means	184	1	....	....	....	....	....	....

Total deaths, 75. Death-rate. 11.95.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Felmale	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1			3									1	3	3	1	3	1		
								1				1		1		1			
								1					1		1			1	
						1	1						2	2		1	1		
					1			1					2	1	1	1		1	
					1								1	1				1	
						1	1			1			1	2			2		
													1	1			1		
						1						1			1	1			
			1		3		2	4	2			7	5	10	2	7	3	2	
						1	1						2	2		1		1	
			1			1						2		2		2			
		1		1		1	4	3	1	1		5	7	10	2	7		5	
						1			1			1	1		2	1		1	
							1					1		1		1			
												1		1			1		
						2	1	4	2			6	4	5	5	3	1	6	
						1							1	1			1		
													1	1			1		
												1		1			1		
								1					2	2		1	1		
		1						3	2			3	3	3	3		1	5	
												1		1			1		
				1								1			1		1		
												1		1			1		
							1					2			2		1		1
													1		1		1		

TABLE 47.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ROOSEVELT.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	...	...	...	...
Measles	6	....	2	...	...	...	...	...
Whooping cough	8	....	4	...	3	...	...	...
Tuberculosis of the lungs	28	....	....	1	...	...	...	1
Rickets	36	....	1	...	...	...	...	...
Other tumors (tumors of the female genital organ excepted)	46	....	....	...	...	...	...	...
Other general diseases	55	....	....	1	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Including: Cerebro pinal fever	61A	....	1	...	...	...	...	...
Other diseases of the spinal cord	63	....	....	1	...	...	...	...
Convulsions of infants	71	....	1	...	...	...	...	...
Acute endocarditis	78	....	....	...	1	...	...	...
Organic diseases of the heart	79	....	....	...	...	...	...	...
Acute bronchitis	89	....	....	1	...	...	...	...
Bronchopneumonia	91	....	....	3	...	...	...	...
Pneumonia	92	....	1	...	...	...	...	...
Diseases of the pharynx	100	....	....	...	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	2	17	7	...	...	...	...
Diarrhœa and enteritis (2 years and over.)	105	....	....	2	...	...	...	...
Cirrhosis of the liver	113	....	....	...	...	...	...	...
Acute nephritis	119	....	1	...	...	...	...	1
Bright's disease	120	....	....	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	2	....	...	...	...	...	...
Congenital debility, icterus and sclerema	151	5	2	...	...	...	...	...
Other diseases peculiar to early infancy	152	1	....	...	...	...	...	...
Burns (conflagration excepted)	167	....	....	...	...	1	...	...
Accidental drowning	169	....	....	...	1	...	...	...
Traumatism by fall	172	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc	175	....	....	...	...	...	...	1
Effects of heat	179	....	....	...	...	...	...	...
Cause of death not specified or ill-defined	189	....	2	...	...	...	...	...

Total deaths, 85. Death-rate 14.69.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	1	...	...	...	...	...	...	...	...	...	1	.....	1	1	...	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	4	7	.....	....	7	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	2	1	2	1	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	.....	1	....	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	1	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	1	...	1	1	2	.....	....	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	1	...	...	...	...	...	...	...	...	2	2	.....	....	2	....	....
...	...	1	1	...	...	...	...	...	...	...	...	2	....	1	1	2	....	....	....
...	...	...	...	...	...	...	...	...	1	...	...	1	1	1	1	1	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	.....	....	3	....	....
1	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	1	...	...	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	18	8	24	2	....	26	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	....	2	.....	....	2	....	....
...	...	...	1	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	2	....	2	.....	....	2	....	....
...	...	...	...	1	1	...	...	...	...	...	...	1	1	.....	2	1	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	....	2	....	....
...	...	...	...	...	...	...	...	...	...	...	...	3	4	7	.....	....	7	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	2	...	...	...	...	...	...	...	...	...	...	3	....	1	2	1	1	....	1
...	1	...	...	...	...	...	...	...	...	...	...	1	....	.....	1	....	1	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	...	...	...	1	...	...	...	...	...	...	1	....	.....	1	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	....	....	2	....	....

TABLE 48.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN RUTHERFORD.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Scarlet fever	7	....	....	....	1	....	....	....
Tuberculosis of the lungs	28	....	....	....	....	....	2	....
Cancer and other malignant tumors of the stomach, liver	40	....	....	....	....	....	....	....
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	....	....	....	....	....
Cancer and other malignant tumors of the female genital organs	42	....	....	....	....	....	....	....
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	....	....	....	....	....
Diabetes	50	....	....	....	....	....	1	....
Cerebral hæmorrhage, apoplexy	64	....	....	....	....	....	....	....
Paralysis without specified cause	66	....	....	....	....	....	....	....
General paralysis of the insane	67	....	....	....	....	....	....	....
Other diseases of the nervous system	74	....	....	....	....	....	1	....
Acute endocarditis	78	....	....	....	....	....	....	....
Organic diseases of the heart	79	....	1	....	....	....	....	....
Angina pectoris	80	....	....	....	....	....	....	....
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	....	....	....	....	....
Chronic bronchitis	90	....	....	....	....	....	....	....
Bronchopneumonia	91	....	....	....	....	....	....	....
Pneumonia	92	....	....	....	....	....	....	....
Other diseases of the stomach (cancer excepted)	103	....	....	....	1	....	....	....
Diarrhœa and enteritis (2 years and over)	105	....	....	....	1	....	....	....
Other diseases of the intestines	110	....	....	....	....	....	....	....
Cirrhosis of the liver	113	....	....	....	....	....	....	....
Bright's disease	120	....	....	....	....	....	....	....
Cysts and other tumors of the ovary	131	....	....	....	....	....	....	....
Puerperal albuminuria and convulsions	138	....	....	....	....	....	....	1
Congenital debility, icterus and sclerema	151	2	1	....	....	....	....	....
Senility	154	....	....	....	....	....	....	....
Burns (conflagration excepted)	167	....	....	1	....	....	....	....
Cause of death not specified or ill-defined	189	1	....	....	....	....	....	....

Total deaths, 66. Death-rate, 8.11.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													1	1			1		
1		1				1	1					5	1	4	2	3	3		
					1	1							2	1	1	1		1	
							2					1	1	1	1	1		1	
			1										1	1		1			
					1								1	1					
												1		1				1	
					1		3	3	2			5	4	6	3	3	1	5	
							1					1				1			
								1				1		1		1			
													1	1			1		
									1				1	1				1	
				1				2				1	3	3	1		1	3	
1												1		1			1		
								3	3	1		2	5	3	4	2	1	4	
								2					2		2			2	
									1				1		1			1	
	1			2		1			2			1	5	5	1	4		2	
												1		1			1		
												1		1			1		
	1											1			1		1		
				1								1			1			1	
					1	1	1	1	2			2	4	6		1	1	4	
			1										1	1			1		
													1	1		1			
												2	1	3			3		
									1				1	1				1	
												1		1			1		

TABLE 49.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SALEM CITY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Whooping cough	8	....	3	1	...	...	...	...
Including: croup	9A	....	....	1	...	...	...	...
Tetanus	24	....	....	1	...	...	...	...
Tuberculosis of the lungs	28	....	....	...	...	...	...	2
Tuberculous meningitis	30	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Acute articular rheumatism	47	....	....	...	...	...	...	...
Diabetes	50	....	....	...	...	...	...	...
Simple meningitis	61	....	....	1	...	...	...	...
Other diseases of the spinal cord	63	....	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	....	...	...	...	...	...
Acute endocarditis	78	....	....	...	...	...	...	...
Organic diseases of the heart	79	....	....	...	...	...	...	...
Angina pectoris	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Bronchopneumonia	91	....	....	2	...	...	...	...
Pneumonia	92	....	....	...	...	...	...	1
Pulmonary congestion, pulmonary apoplexy	94	....	....	...	...	...	...	...
Diseases of the pharynx	100	....	....	...	...	...	...	...
Ulcer of the stomach	102	....	....	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	....	2	...	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	....	6	3	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	1	...	...	...	...
Hernias, intestinal obstructions	109	....	1	...	...	...	...	...
Cirrhosis of the liver	113	....	....	...	...	...	...	...
Acute nephritis	119	....	....	1	...	...	...	...
Bright's disease	120	....	....	...	...	...	...	...
Diseases of the bladder	124	....	....	...	...	...	...	...
Acute abscess	144	....	....	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	1	....	...	...	...	...	...
Congenital debility, icterus and sclerema	151	6	2	...	...	...	...	...
Other diseases peculiar to early infancy	152	1	....	...	...	...	...	...
Senility	154	....	....	...	...	...	...	...
Accidental drowning	169	....	....	...	...	...	...	...
Traumatism by fall	172	....	....	...	...	...	...	...
Traumatism by machines	174	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	...	...	...	...	...
Cause of death not specified or ill-defined	189	....	2	...	...	...	...	...

Total deaths, 115. Death-rate, 17.12.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												3	1	4			4		
												1		1			1		
												1		1			1		
	3			2		1	1					4	5	9		8	1		
			1									1		1			1		
	1				1	1	1		1			3	2	5		3		2	
								1					1	1				1	
			1		1								2	2		2			
						1							1	1		1			
												1		1			1		
							1						1	1				1	
						3		3				3	3	5	1	2		4	
									3			1	2	3				3	
									1				1	1			1		
	1		1					6	2	1		4	7	11		4	3	4	
						1						1			1	1			
								1	2			2	1	3		2		1	
								2	1			3	2	5			2	3	
						2	3	4		1		4	7	10	1	4	2	5	
									1				1		1			1	
								1				1		1		1			
		1										1		1		1			
												1	1	2			2		
												6	3	9			9		
										1			2	2			1	1	
													1	1			1		
		1										1		1		1			
												1		1			1		
							2	3	1			4	2	5	1	2	1	3	
								1				1		1		1			
									1				1		1			1	
												1		1			1		
												4	4	8			8		
												1		1			1		
									3				3	2	1			1	
	1		1									2		1	1	2			
				1			1					1		1		1			
												1		1		1			
				1						1			1		1			1	
												2		2			2		

TABLE 50.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SOMERVILLE.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Including: Croup	9A			1				
Tuberculosis of the lungs	28							3
Abdominal tuberculosis	31					1		
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Diabetes	50							
Anæmia, chlorosis	54							
Other general diseases	55							
Simple meningitis	61						1	
Locomotor ataxia	62							
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
General paralysis of the insane	67							
Epilepsy	69							
Convulsions of infants	71	1						
Acute endocarditis	78							
Organic diseases of the heart	79						1	
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82	1						
Acute bronchitis	89			1				
Bronchopneumonia	91			1				
Pneumonia	92							
Asthma	96							
Other diseases of the stomach (cancer excepted)	103		1				1	
Diarrhœa and enteritis (Under 2 years)	104		4	2				
Diarrhœa and enteritis (2 years and over)	105			1				
Appendicitis and typhlitis	108							
Other diseases of the liver	115							
Acute nephritis	119							
Bright's diseases	120							
Congenital debility, icterus and sclerema	151	1						
Other diseases peculiar to early infancy	152	1						
Lack of care	153		1					
Other acute poisonings	165	1						
Conflagration	166						1	
Traumatism by fall	172						1	
Traumatism by machines	174							
Traumatism by other crushing (vehicles, railroad, landslides, etc)	175						1	1

Total deaths, 96. **Death-rate, 18.37.**

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												1		1			1		
	1						2					5	1	5	1	1	4	1	
													1	1			1		
			1	1			1	1				2	2	3	1	3		1	
					1								1		1		1		
						1		1					2	2				2	
							1						1	1			1		
						1			1			1		1			1		
												1		1			1		
			1										1	1					
				1			1	3	3			4	4	5	3	5		3	
						1				1		1		1		1			
										1		1		1		1			
			1									1		1			1		
												1		1			1		
		1				1	1	1				2	2	4		1		3	
		1	1			1		1				3	2	4	1	1	3	1	
								1				1		1		1			
							1	1		2		1	3	2	2			4	
												1		1			1		
										1			2	2			1	1	
							1					2		2		1	1		
				1	1	2	1	1				5	1	3	3	4		1	1
							1	1					2		2			2	
						1						1	2	2	1	1	2		
					1				1	1		3	3	6			6		
						1							5	5		2	1	2	
							1						2	1	1	1		1	
												1		1		1			
				1								1			1	1			
		1		1			2	2	1			2	5	7		2	3	2	
													1	1			1		
												1		1			1		
													1	1			1		
												1		1			1		
												1		1			1		
				1						1		2	1	2	1	1	1	1	
1												1			1	1			
								1				3		3		1	2		

TABLE 51.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SOUTH AMBOY.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Scarlet fever	7				1			
Whooping cough	8		1	2				
Diphtheria and croup	9					1		
Tuberculosis of the lungs	28					1		
Tuberculous meningitis	30					1		
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the skin	44							
Diabetes	50							
Other diseases of the spinal cord	63							
Cerebral hæmorrhage, apoplexy	64		1	1				
Softening of the brain	65							
Paralysis without specified cause	66							
Convulsions of infants	71			1				
Acute endocarditis	78						1	
Organic diseases of the heart	79					1		
Angina pectoris	80							
Diseases of the arteries, atheroma, aneurysm, etc	81							
Embolism and thrombosis	82							
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)	83							
Bronchopneumonia	91			1				
Pneumonia	92							
Diarrhœa and enteritis (Under 2 years)	104		4	3				
Diarrhœa and enteritis (2 years and over)	105			1				
Hernias, intestinal obstructions	109							
Other diseases of the intestines	110							
Cirrhosis of the liver	113							
Bright's disease	120							
Other diseases of the kidneys and annexa	122							
Puerperal albuminuria and convulsions	138							
Congenital debility, icterus and sclerema	151	3						
Lack of care	153		1					
Burns (conflagration excepted)	167				1			
Accidental drowning	169				1			
Traumatism by fall	172							
Traumatism by machines	174						1	
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175							1
Electricity (lightning excepted)	181							

Total deaths, 88. Death-rate, 11.80.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												1		1			1		
												1	2	3			3		
													1	1			1		
	1		2		1		1					6		6			4	2	
												1		1			1		
				1		1						2		1	1	1	1		
							1						1	1		1			
									1			1		1		1			
					1		1					1		1		1		1	
			1				2	1	1			3	4	6		4	3		
								1					1					1	
			1										1	1		1			
													1	1			1		
				1					1			2	1	3		1	1	1	
		2			1		1	4	1			3	7	5		4	1	5	
	1												1	1		1			
								1					1	1		1			
				1		1							2			1		1	
				1									1	1		1			
													1	1			1		
	1			1	2			1				3	2	3		3	1	1	
												2	5	7			7		
										1			2	2			1	1	
							1						1		1	1			
								1					1	1		1			
					1								1		1	1			
			1		1		1					3		2	1	2		1	
						1							1		1	1			
		1											1	1					
												2	1	3			3		
													1	1			1		
													1	1			1		
		1			1	1	1					4	1	2	3	1	1	1	2
		1		1	1							2	1	1	2	1	1	1	1
												1		1			1		
							2					2	1		3	2		1	
		1										1		1			1		

TABLE 52.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SOUTH ORANGE.		AGE PERIODS.							
		Under one month.	Under 1 year "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Measles	6	...	1	1	...	...	...	...
Scarlet fever	7	...	...	...	1	...	...	...
Tuberculosis of the lungs	28	...	...	...	...	...	...	1
Tuberculous meningitis	30	...	...	1	...	...	...	...
Abdominal tuberculosis	31	...	...	1	...	...	...	...
Disseminated tuberculosis	35	...	...	...	...	...	1	...
Cancer and other malignant tumors of other or of organs not specified	45	...	...	...	...	...	...	...
Diabetes	50	...	...	...	...	...	...	...
Anæmia, chlorosis	54	...	...	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	...	...	...	...	...	...	...
Acute endocarditis	78	...	...	...	...	...	...	...
Organic diseases of the heart	79	...	...	...	...	...	...	...
Angina pectoris	80	...	...	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	...	...	...	...	...	...	...
Embolism and thrombosis	82	...	...	...	...	...	...	...
Acute bronchitis	89	...	1	...	...	...	...	...
Bronchopneumonia	91	...	2	...	...	...	...	...
Pneumonia	92	...	1	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	...	...	...	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	...	...	...	1	...	...	...
Cirrhosis of the liver	113	...	...	...	...	...	...	...
Bright's disease	120	...	...	...	...	...	...	...
Gangrene	142	...	...	...	...	...	...	...
Diseases of the bones (tuberculosis excepted)	146	...	...	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	...	1	...	...	...	...	...
Congenital debility, icterus and sclerema	151	1	...	...	...	...	...	...
Other acute poisonings	165	...	...	1	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	...	...	...	1	...	...	...

Total deaths, 57. Death-rate, 8.55.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													2	2			2		
													1	1			1		
		1	1			1						4		4		1	2	1	
													1	1			1		
													1	1			1		
													1	1			1		
							1	1					2	1	1	1		1	
	1												1	1		1			
								1				1		1				1	
					1	1	3	1				1	5	3	3	4		2	
			1			1		1	1			2	2	1	3	2	1	1	
			1		1		1	2				3	2	4	1	5			
								1				1		1		1			
								1				1		1		1			
								1					1	1				1	
												1		1			1		
												1	1	2			2		
							1				1	2	1	1	2	1	1	2	
			1										1	1		1			
							1		1			1	2	2	1	1	1	1	
						1	1					2		1	1	2			
		1		1			3	1				4	2	5	1	5		1	
								1				1			1			1	
												1		1		1			
				1								1		1			1		
												1		1			1		
													1	1			1		
		1										2		1	1		2		

TABLE 53.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SUMMIT.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	...	...	...	...
Measles	6	....	....	1	...	...	...	...
Diphtheria and croup	9	....	....	1	...	...	...	...
Influenza	10	....	....	...	...	...	...	...
Dysentery	14	....	2	...	...	...	...	...
Erysipelas	18	....	....	...	...	...	...	...
Tuberculosis of the lungs	28	....	....	...	...	...	1	1
Tuberculous meningitis	30	....	1	...	...	...	...	...
Syphilis	37	....	....	...	...	...	...	...
Cancer and other malignant tumors of the buccal cavity	39	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	...
Acute articular rheumatism	47	....	....	...	...	...	...	...
Anæmia, chlorosis	54	....	....	...	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Other diseases of the spinal cord	63	....	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	....	...	...	...	...	...
Convulsions of infants	71	....	1	...	...	...	...	...
Other diseases of the nervous system	74	....	....	...	...	...	...	...
Acute endocarditis	78	....	....	...	...	...	...	1
Organic diseases of the heart	79	....	....	...	...	1	1	...
Angina pectoris	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Bronchopneumonia	91	....	2	...	...	...	...	...
Pneumonia	92	....	....	1	...	...	...	...
Pulmonary congestion, pulmonary apoplexy	94	....	....	...	...	...	...	...
Asthma	96	....	....	...	...	...	...	...
Other diseases of the stomach (cancer excepted)	103	1	....	1	...	...	...	...
Diarrhœa and enteritis (Under 2 years)	104	....	1	...	...	...	...	...
Diarrhœa and enteritis (2 years and over)	105	....	....	...	...	...	...	...
Appendicitis and typhlitis	108	....	....	...	...	...	...	...
Hernias, intestinal obstructions	109	....	....	...	...	...	...	...
Bright's disease	120	....	....	...	...	...	...	...
Diseases of the prostate	126	....	....	...	...	...	...	...
Other accidents of labor	136	....	....	...	...	...	...	...
Puerperal septicæmia	137	....	....	...	...	...	...	1
Following childbirth (not otherwise defined)	140	....	....	...	...	...	...	...
Congenital malformations (stillbirths not included)	150	2	....	1	...	...	...	...
Congenital debility, icterus and sclerema	151	4	....	...	...	...	...	...
Other diseases peculiar to early infancy	152	1	....	...	...	...	...	...
Senility	154	....	....	...	...	...	...	...
Suicide by poison	155	....	....	...	...	...	...	1
Suicide by firearms	159	....	....	...	...	...	...	...
Burns (conflagration excepted)	167	....	....	1	...	...	...	...
Absorption of deleterious gases (conflagration excepted)	168	....	....	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	...	1	...	...	...
Homicide by firearms	182	....	....	1	...	...	...	...

Total deaths, 120. Death-rate, 15.20.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
		1											1	1		1			
													1	1			1		
													1		1		1		
								1				1			1	1			
													2	2			2		
									1			1			1			1	
1	1	3		3		2	2					8	6	12	2	9	4	1	
												1		1			1		
				1								1		1			1		
						1	1					2		1	1	2			
			1	1			1	2				2	3	4	1	3		2	
							2						2	2		1	1		
			1					1					2	2		2			
									1			1				1			
							2						2	2				2	
						1	1					2		1	1	1	1		
						1						1		1				1	
						1	2	1				1	3	4		2		2	
									1				1	1				1	
													1	1			1		
		1										1		1		1			
		1		1			1		1	2		2	5	6	1	2	2	3	
			1		1		1	5	1			6	5	5	6	4	2	5	
							1	1				1	1	1		1		1	
							1		3			2	2	4		3		1	
							1					1	2	3		1	2		
	2					1		1	1			2	4	4	2	2	2	2	
			1									1			1	1			
									1				1	1				1	
							1					1	2	3			2	1	
												1		1			1		
							1						1		1			1	
		1				1						2		2		2			
				1									1	1		1			
				1	2	1	1	1				2	4	4	2	1	3	2	
									1			1		1				1	
	1												1		1	1			
1													2	1	1	2			
	1												1		1	1			
												3		3			3		
												3	1	4			4		
												1		1			1		
								1	1				2	2				2	
													1	1		1			
							1					1		1				1	
		1										1	1	2			2		
1												1		1			1		
							1					2		2			2		
			1									1	1	1	1	1	1		

TABLE 54.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN TOWN OF UNION.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Scarlet fever	7			1				
Whooping cough	8		1	4				
Diphtheria and croup	9			2	2	1		
Dysentery	14							
Erysipelas	18							
Purulent infection and septicæmia	20	1						
Tuberculosis of the lungs	28						2	7
Tuberculous meningitis	30			1				
Tuberculosis of other organs	34							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Acute articular rheumatism	47							
Chronic rheumatism and gout	48							
Diabetes	50							
Alcoholism (acute or chronic)	56							
Including: Cerebrospinal fever	61A		1					
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Epilepsy	69							
Acute endocarditis	78					1		
Organic diseases of the heart	79					1	1	
Diseases of the arteries, atheroma aneurysm, etc	81							
Acute bronchitis	89		1					
Bronchopneumonia	91		7	2	1			
Pneumonia	92		2	3				
Pleurisy	93							
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103		1					
Diarrhœa and enteritis (Under 2 years)	104		8	3				
Diarrhœa and enteritis (2 years and over)	105				1			
Appendicitis and typhlitis	108							
Other diseases of the intestines	110		1					
Cirrhosis of the liver	113							
Acute nephritis	119							
Bright's disease	120							
Other diseases of the kidneys and annexa	122							
Calculi of the urinary passages	123							
Diseases of the bladder	124							
Congenital malformations (stillbirths not included)	150	1		1				
Congenital debility, icterus and sclerema	151	10	1					
Other diseases peculiar to early infancy	152	2						
Suicide by poison	155							
Suicide by asphyxia	156							
Burns (conflagration excepted)	167							
Absorption of deleterious gases (conflagration excepted)	168							
Traumatism by fall	172							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175			1				
Homicide by firearms	182							
Cause of death not specified or ill-defined	189		2					

Total deaths, 227. Death-rate, 9.69.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												1		1			1		
												2	3	5			5		
												3	2	5			5		
									1				1		1			1	
								1	1				2	1	1			2	
		1										1	1	2			1	1	
4	3	4	2	2	1	2						20	7	21	6	14	12	1	
													1	1			1		
1												1		1		1			
			2			2	2					3	3	3	3	4	1	1	
							1						1	1		1			
							3						3	2	1	1	1	1	
1								1				1	1	1	1		1	1	
									1			1			1			1	
						2	1	2	1				6	2	4	3		3	
						1						1		1		1			
													1	1			1		
			2		2	1	5	2				6	7	3	10	6	2	5	
			1		1			1					3	1	2	2	1		
												1		1		1			
			1	1			6	1	1			4	7	4	7	7	1	3	
		3	2	1	1	2		2				7	6	5	8	5	7	1	
								2				2			2	1		1	
													1	1			1		
			1		1		1	1		1		5	10	12	3	3	10	2	
3	1	1	3			1	6	3		1		12	12	12	12	8	9	7	
							1						1		1	1			
			1									1			1	1			
							3					1	3	1	3		1	3	
												8	3	11			11		
					1			1				1	2	2	1	1	1	1	
			1										1		1	1			
													1	1			1		
			3		2	1						4	2	3	3	6			
		1											1	1		1			
1	1		1	1	3	2	5	7	1			10	12	7	15	8	2	12	
									1			1			1			1	
	1												1		1	1			
	1											1			1			1	
												1	1	2			2		
												7	4	11			11		
												1	1	2			2		
	1												1	1		1			
						1						1			1	1			
					1							1			1		1		
							1						1		1			1	
			1									1		1				1	
												1		1			1		
		1										1			1	1			
												1	1	2			2		

TABLE 55.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN TRENTON.		AGE PERIODS.							
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1	....	....	...	1	1	9	1
Measles	6	....	3	10	...	...	...	...
Scarlet fever	7	....	1	15	8	1	1	...
Whooping cough	8	....	5	5	...	...	...	...
Diphtheria and croup	9	....	1	20	6	1	...	...
Including: Croup	9A	....	....	1	...	...	...	...
Influenza	10	....	....	...	...	...	...	...
Dysentery	14	....	....	...	...	...	...	...
Erysipelas	18	....	....	...	...	...	...	1
Purulent infection and septicæmia	20	....	....	...	...	...	...	...
Tetanus	24	1	....	1	2	...	1	...
Tuberculosis of the lungs	28	....	....	3	1	1	6	22
Acute miliary tuberculosis	29	....	....	...	2	...	...	1
Tuberculous meningitis	30	....	2	6	...	...	...	1
Abdominal tuberculosis	31	....	1	...	1	1	1	...
White swellings	33	....	....	...	...	1	...	...
Tuberculosis of other organs	34	....	....	...	...	...	...	...
Disseminated tuberculosis	35	....	....	2	1	...	1	...
Rickets	36	....	2	...	...	...	...	...
Syphilis	37	1	....	...	...	...	...	...
Gonococcus infection	38	....	....	...	...	...	...	...
Cancer and other malignant tumors of the buccal cavity	39	....	....	...	...	...	...	...
Cancer and other malignant tumors of the stomach, liver	40	....	....	...	...	...	...	...
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41	....	....	...	...	...	...	...
Cancer and other malignant tumors of the female genital organs	42	....	....	...	...	...	...	...
Cancer and other malignant tumors of the breast	43	....	....	...	...	...	...	...
Cancer and other malignant tumors of the skin	44	....	....	...	...	...	...	...
Cancer and other malignant tumors of other organs or of organs not specified	45	....	....	...	1	...	...	...
Acute articular rheumatism	47	....	....	1	...	...	...	...
Diabetes	50	....	....	...	...	...	...	...
Leuchæmia	53	....	....	...	...	...	...	...
Anæmia, chlorosis	54	....	....	...	...	...	...	...
Other general diseases	55	....	....	...	...	...	...	...
Alcoholism (acute or chronic)	56	....	....	...	...	...	...	...
Encephalitis	60	....	....	...	...	...	...	...
Simple meningitis	61	1	5	2	2	...	...	...
Including: Cerebrospinal fever	61A	....	2	2	...	1	...	...
Locomotor ataxia	62	....	....	...	...	...	...	...
Other diseases of the spinal cord	63	1	....	...	...	...	...	...
Cerebral hæmorrhage, apoplexy	64	....	1	...	...	...	...	...
Softening of the brain	65	....	....	...	...	...	...	...
Paralysis without specified cause	66	....	1	...	...	...	...	...
General paralysis of the insane	67	....	....	...	...	...	...	...
Other forms of mental alienation	68	....	....	...	...	...	...	...
Epilepsy	69	....	....	...	...	...	...	...
Convulsions of infants	71	4	3	...	3	...	...	...
Other diseases of the nervous system	74	....	....	...	...	...	...	...
Diseases of the ears	76	....	1	...	...	...	...	...
Pericarditis	77	....	....	...	...	...	...	...
Acute endocarditis	78	2	2	2	1	1	4	2
Organic diseases of the heart	79	1	....	1	3	2	2	3
Angina pectoris	80	....	....	...	...	...	...	...
Diseases of the arteries, atheroma aneurysm, etc	81	....	....	...	...	...	...	...
Embolism and thrombosis	82	....	....	...	...	1	...	1
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.)	83	....	....	...	...	...	...	...
Acute bronchitis	89	2	10	4	...	...	...	...

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AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	4	1	1	...	2	...	2	...	...	...	...	15	7	15	7	8	13	1	....
...	...	...	...	...	...	...	...	...	...	...	...	9	4	13	.....	...	13	....	....
1	...	...	...	...	...	...	...	...	...	...	...	9	18	26	1	2	25	....	....
...	...	...	...	...	...	...	...	...	...	...	...	5	5	10	.....	....	10	....	....
...	...	...	...	...	...	...	...	...	...	...	...	15	13	25	3	....	28	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	....	1	....	....
...	...	...	...	...	...	1	...	...	1	1	...	....	3	2	1	....	1	2	....
...	...	...	...	...	...	...	...	1	...	...	...	....	1	.....	1	....	....	1	....
...	...	1	2	...	...	1	1	...	...	...	...	3	3	3	3	5	....	1	....
...	...	...	...	1	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	1	...	...	...	...	...	...	...	4	2	6	.....	1	5	....	....
23	21	26	12	18	12	10	12	3	1	...	...	117	54	123	48	83	66	19	3
...	...	...	...	1	...	...	...	...	...	...	...	2	2	4	.....	1	3	....	....
2	...	...	...	...	...	...	...	...	...	...	...	7	4	10	1	1	10	....	....
1	1	1	...	...	...	...	...	...	...	...	...	1	6	5	2	3	4	....	....
...	...	...	1	...	...	...	...	...	...	...	...	1	1	2	.....	1	1	....	....
1	1	...	...	...	...	...	1	...	...	...	...	1	2	3	.....	...	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	4	4	.....	1	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	.....	...	2	....	....
1	3	1	...	...	...	...	...	...	...	...	...	2	4	4	2	2	4	....	....
1	...	...	...	...	...	...	...	...	...	...	...	....	1	.....	1	1	...	....	....
...	1	...	...	1	...	1	...	2	...	...	...	4	1	2	3	2	1	1	1
...	2	2	2	6	4	7	14	6	2	...	...	20	25	28	17	27	2	16	....
1	...	...	1	1	2	2	2	1	1	...	...	6	5	7	4	7	3	1	....
...	...	...	3	1	4	2	2	1	...	...	...	....	13	7	6	7	1	5	....
...	...	...	...	3	3	1	3	1	...	...	...	....	11	9	2	5	2	4	....
...	...	...	...	...	...	...	2	...	1	...	...	1	2	1	2	1	....	2	....
...	...	...	...	2	3	2	1	1	...	...	...	7	3	8	2	4	2	4	....
...	...	...	1	1	...	...	...	...	...	...	...	2	1	1	2	2	1	....	....
1	...	...	...	...	2	2	3	...	...	...	...	4	4	4	4	5	1	2	....
1	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	...	1	....	....
...	...	1	1	...	...	1	...	...	...	...	...	3	...	1	2	3	....	....	....
1	...	...	...	...	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	2	...	1	2	...	...	1	...	...	...	6	...	2	4	3	2	....	1
1	...	...	...	2	...	...	...	...	...	...	...	2	2	3	1	3	1	....	....
...	...	...	...	...	...	2	...	...	...	...	...	7	5	12	.....	1	10	1	....
...	...	...	...	...	...	...	...	...	...	...	...	4	1	4	1	....	5	....	....
...	...	...	...	...	...	...	1	...	...	...	...	....	1	1	.....	....	....	1	....
...	...	...	2	...	3	...	1	2	1	...	...	5	5	8	2	3	3	4	....
...	...	2	4	12	4	14	24	23	9	2	...	48	47	66	29	45	9	41	....
...	...	...	...	...	...	...	5	1	...	...	...	5	1	4	2	3	2	1	....
...	...	4	1	7	4	6	6	2	2	...	...	22	11	25	8	18	7	8	....
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	.....	...	1	....	....
1	...	1	2	...	1	...	1	...	...	...	...	6	1	3	4	5	2	....	....
1	2	1	3	...	...	2	...	...	...	...	...	8	1	6	3	6	3	....	....
...	...	...	...	...	...	...	...	...	...	...	...	4	6	10	.....	...	10	....	....
1	...	...	...	3	2	...	...	...	...	...	...	3	3	5	1	4	1	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	.....	....	1	...	....
...	...	...	...	...	...	...	...	...	1	...	...	....	1	.....	1	....	....	1	....
2	2	1	2	1	1	...	18	8	3	...	...	26	26	36	16	16	19	17	....
1	6	6	9	6	13	16	32	28	15	3	...	74	73	94	53	65	35	47	....
1	...	1	1	2	2	1	4	3	...	...	...	8	7	11	4	10	1	4	....
...	...	...	...	1	2	3	12	25	8	1	...	24	28	27	25	19	8	25	....
1	...	...	...	...	...	...	...	1	...	...	...	....	4	3	1	2	....	2	....
...	...	...	...	1	...	...	...	...	...	...	...	....	1	1	.....	1	....	....	....
...	...	...	...	...	...	...	1	2	1	...	...	11	9	18	2	1	16	3	....

TABLE 55.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN TRENTON.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Chronic bronchitis	90							
Bronchopneumonia	91	5	26	21	1			1
Pneumonia	92	7	26	25	4		2	5
Pleurisy	93		1		1		2	
Pulmonary congestion, pulmonary apoplexy	94	1						
Gangrene of the lung	95							
Asthma	96			1				
Pulmonary emphysema	97			1				
Other diseases of the respiratory system (tuberculosis excepted)	98							
Other diseases of the mouth and annexa	99			1				
Diseases of the pharynx	100		1	1	1			
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103	4	2	2				
Diarrhœa and enteritis (Under 2 years)	104	16	116	17				
Diarrhœa and enteritis (2 years and over)	105			5	1			
Appendicitis and typhlitis	108			1	1		2	
Hernias, intestinal obstructions	109		1					
Other diseases of the intestines	110	2	1					
Hydatid tumor of the liver	112							
Cirrhosis of the liver	113							
Biliary calculi	114							
Other diseases of the liver	115		2					
Simple peritonitis (nonpuerperal)	117							
Acute nephritis	119			2	1			
Bright's disease	120		1	1				1
Other diseases of the kidneys and annexa	122							
Calculi of the urinary passages	123							
Diseases of the bladder	124					1		
Diseases of the prostate	126							
Uterine tumor (noncancerous)	129							
Other diseases of the uterus	130							
Cysts and other tumors of the ovary	131							
Salpingitis and other diseases of the female genital organs	132						3	
Accidents of pregnancy	134						1	
Puerperal hæmorrhage	135						1	
Other accidents of labor	136							
Puerperal septicæmia	137						2	3
Puerperal albuminuria and convulsions	138						1	
Gangrene	142							
Furuncle	143							
Acute abscess	144							
Other diseases of the skin and annexa	145			2				
Congenital malformations (stillbirths not included)	150	6	2	2				
Congenital debility, icterus and sclerema	151	99	11	3				
Other diseases peculiar to early infancy	152	14	3					
Senility	154							
Suicide by poison	155							
Suicide by hanging or strangulation	157							
Suicide by drowning	158							
Suicide by firearms	159							
Suicide by cutting or piercing instruments	160							
Poisoning by food	164				1		1	
Other acute poisonings	165			2				
Conflagration	166						1	
Burns (conflagration excepted)	167		1	4			1	1
Accidental drowning	169			1	3	2		
Traumatism by fall	172			1	1			
Traumatism by machines	174							

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	1	...	...	...
...	...	...	1	2	3	...	8	7	1	...	...	29	47	66	10	7	61	8	...
4	5	4	5	11	16	10	19	12	4	...	...	82	80	120	42	55	84	19	4
...	...	...	1	...	...	...	1	...	...	...	...	4	2	5	1	1	5	...	...
...	...	...	...	...	...	...	2	1	2	...	...	3	3	4	2	3	1	2	...
...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...
...	...	1	...	...	...	1	3	...	...	1	...	3	4	5	2	4	1	2	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	...	...	3	...	...	...	1	...	...	...	2	2	2	2	2	1	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...
1	...	...	...	...	...	...	...	...	...	...	...	2	2	4	...	...	4	...	...
...	...	1	2	...	...	1	1	2	...	...	...	4	3	4	3	2	2	2	1
...	...	...	1	1	...	1	...	1	...	...	...	6	7	11	2	4	9	...	...
...	...	...	...	...	...	...	...	...	...	...	...	75	74	149	...	...	149	...	...
1	...	...	...	...	1	...	4	6	1	...	...	7	12	13	6	5	6	8	...
...	3	2	...	1	...	...	2	...	...	...	...	5	7	7	5	5	6	1	...
...	1	2	2	4	2	1	2	1	1	...	...	9	8	9	8	8	6	3	...
1	...	...	...	1	1	1	...	...	...	...	...	4	3	4	3	3	3	1	...
...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...
1	1	2	...	2	4	...	5	1	...	...	...	12	4	7	9	10	1	5	...
...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	1	...	...	...
...	...	...	1	1	...	...	...	1	...	...	...	3	2	4	1	2	3	...	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	...	1	...	...
...	...	1	2	...	2	1	2	4	...	...	...	9	6	9	6	8	4	3	...
4	4	3	5	9	10	11	23	23	5	3	...	58	45	71	32	56	10	37	...
...	1	...	...	1	1	...	...	1	...	...	...	3	1	2	2	3	...	1	...
...	...	...	1	...	...	...	2	...	...	...	...	1	2	1	2	2	...	1	...
...	...	...	...	...	...	...	1	...	2	...	...	3	1	4	...	...	1	3	...
...	...	...	...	...	...	1	1	2	...	...	...	4	...	1	3	2	1	1	...
...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	...
...	1	...	...	...	...	...	1	...	...	...	...	...	2	2	...	1	1	...	...
...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	1	...	...	...
1	...	1	1	...	...	...	...	...	...	...	...	...	6	5	1	4	2	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...	2	1	1	1	1	...	...
...	3	1	...	...	...	...	...	...	...	...	...	...	5	3	2	5	...	...	...
1	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2	2	...	...	...
1	...	1	...	...	...	...	...	...	...	...	...	...	7	3	4	7	...	...	...
1	...	...	1	...	...	...	...	...	...	...	...	...	3	3	...	2	1	...	...
...	...	1	...	...	...	1	...	...	1	...	...	3	...	2	1	1	2	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	1	...	...
...	...	1	...	...	...	...	1	...	...	...	...	2	...	1	1	1	1	...	...
...	1	...	3	...	...	...	1	...	...	...	...	2	5	4	3	5	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	6	4	9	1	...	10	...	...
...	...	...	...	...	...	...	...	...	...	...	...	68	45	113	...	...	113	...	...
...	...	...	...	...	...	...	...	...	...	...	...	10	7	17	...	...	17	...	...
...	...	...	...	...	...	...	1	5	1	2	...	3	6	5	4	...	...	9	...
1	1	...	1	...	...	...	...	...	...	...	...	2	2	3	1	1	2	1	...
2	...	...	...	...	1	1	...	...	...	...	...	4	...	3	1	3	1	...	...
1	...	...	...	...	1	1	...	...	...	...	...	1	2	...	3	3	...	...	...
2	1	2	...	...	...	...	...	...	...	...	...	5	1	1	5	5	...	1	...
...	...	2	...	...	...	1	...	...	...	...	...	1	2	1	2	3	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	2	...	...
1	1	1	...	...	...	...	...	...	...	...	...	2	3	3	2	3	2	...	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...
...	1	1	2	1	...	...	1	...	...	...	...	4	9	9	4	6	7	...	...
1	1	...	...	2	1	2	2	...	...	...	...	16	...	9	7	3	9	2	2
...	2	...	1	5	2	2	2	5	3	...	...	17	7	14	10	11	5	8	...
2	1	...	...	...	1	...	...	...	...	...	...	4	...	3	1	4	...	...	...

TABLE 55.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN TRENTON.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	....	....	3	2	...	...	6
Effects of heat	179	....	....	...	...	...	...	...
Electricity (lightning excepted)	181	....	....	...	...	...	...	1
Homicide by firearms	182	....	....	...	...	...	...	...
Homicide by other means	184	....	....	...	...	...	...	...
Fractures (cause not specified)	185	....	....	...	1	...	...	...
Other external violence	186	....	....	...	...	...	...	1
Cause of death not specified or ill-defined	189	3	9	4	1	...	...	...

Total deaths, 1,927. Death-rate, 18.46.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
1	2	2	3	1	3	3	2	1	...	...	...	24	5	17	12	11	15	2	1
...	...	...	...	1	...	...	...	1	...	...	...	2	....	1	1	1	....	1	....
...	...	...	...	...	...	...	...	...	...	...	...	1	....	1	.....	....	1	....	....
...	...	2	...	...	...	1	...	...	...	...	...	2	1	2	1	2	....	....	1
...	...	...	...	...	...	1	...	...	...	...	...	1	....	1	.....	1	....	....	....
...	...	...	...	...	...	...	...	...	...	...	...	....	1	.....	1	....	1	....	....
...	2	1	1	1	...	...	...	...	...	...	...	6	...	4	2	1	2	3	....
...	...	...	...	...	...	...	...	...	...	...	...	8	9	17	.....	....	17	....	....

TABLE 56.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN VINELAND.		AGE PERIODS.						
		Under one month.	Under 1 year "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1					1		
Diphtheria and croup	9			1	1			
Influenza	10							
Erysipelas	18			1				
Tuberculosis of the lungs	28							
Disseminated tuberculosis	35							
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Other tumors (tumors of the female genital organs excepted)	46							
Acute articular rheumatism	47							
Diabetes	50							
Simple meningitis	61			1				
Locomotor ataxia	62							
Other diseases of the spinal cord	63							
Cerebral hæmorrhage, apoplexy	64							
Softening of the brain	65							
Paralysis without specified cause	66							
Convulsions of infants	71	1						
Acute endocarditis	78							
Organic diseases of the heart	79						1	
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82							
Diseases of the lymphatic system (lymphangitis, etc.)	84			1				
Acute bronchitis	89							
Bronchopneumonia	91	1						
Pneumonia	92	1	2	1				
Pulmonary congestion, pulmonary apoplexy	94							
Diseases of the pharynx	100							
Other diseases of the stomach (cancer excepted)	103	1						
Diarrhœa and enteritis (Under 2 years)	104	1						
Diarrhœa and enteritis (2 years and over)	105							
Appendicitis and typhlitis	108						1	
Hernias, intestinal obstructions	109							
Cirrhosis of the liver	113							
Simple peritonitis (nonpuerperal)	117							
Acute nephritis	119							
Bright's disease	120		1	1				
Cysts and other tumors of the ovary	131							
Acute abscess	144							
Congenital debility, icterus and sclerema	151	3						
Other diseases peculiar to early infancy	152	2	1					
Suicide by firearms	159					1	1	
Burns (conflagration excepted)	167			1				
Traumatism by firearms	170							
Traumatism by fall	172							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175				1			
Cause of death not specified or ill-defined	189		3					

Total deaths, 125. Death-rate, 21.95.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
													1		1		1		
												1	1		2		2		
							1						1		1		1		
								1				2			1	1	1		
1	3		2		1		3					4	6		9	1	5	4	1	
					1								1		1		1			
								1				1			1		1			
1		1		1			2	1	1			3	4		5	2	5		2	
							2	1				1	2	1		2			3	
						1							1			1			1	
		1											1			1	1			
							1					1			1		1			
							1						1		1		1			
						1	1						2		1	1	2			
													1			1		1		
					1							1				1	1			
					1								1		1		1			
							2	2				2	2		3	1	3		1	
							1					1			1		1			
							1		1				2		2				2	
													1		1			1		
									1			1			1				1	
1					2	2	1	1	1	1		5	5		6	4	5	3	2	
	1											1				1	1			
								2	4			2	4		4	2	2		4	
						1							1			1	1			
												1			1			1		
									1				1		1				1	
			1						1			2	1		3		1	1	1	
				1	1		1		1			5	3		7	1	2	5	1	
				1				1				2			1	1	1	1		
		1											1		1			1		
								1				1	1		1	1		1	1	
												1			1			1		
			1				1	1				1	2		3		2		1	
1									1	1		2			2				2	
				1		2						1	1		2		1	1		
			1										1		1				1	
							1					1			1				1	
		1		1		1	2	1	1			5	4		8	1	2	3	4	
				1									1		1		1			
							1						1		1			1		
												2	1		3			3		
												3			3			3		
												1	1		2			2		
												1			1			1		
1													1		1		1			
						1	1		1			1	2		1	2	1		2	
	1			1	1							2	2		4		3	1		
												1	2		3			3		

TABLE 57.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN WESTFIELD.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1							
Influenza	10							
Tuberculosis of the lungs	28						1	
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of other organs or of organs not specified	45							
Acute articular rheumatism	47							
Simple meningitis	61							
Cerebral hæmorrhage, apoplexy	64							1
Paralysis without specified cause	66							
Acute endocarditis	78					1		
Organic diseases of the heart	79							1
Diseases of the arteries, atheroma aneurysm, etc	81							
Acute bronchitis	89	1						
Chronic bronchitis	90							
Pneumonia	92							
Pleurisy	93							
Other diseases of the stomach (cancer excepted)	103		3					
Diarrhœa and enteritis (Under 2 years)	104		1					
Diarrhœa and enteritis (2 years and over)	105							
Biliary calculi	114							
Congenital malformations (st llbirths not included)	150		1					
Congenital debility, icterus and sclerema	151	5	1					
Other diseases peculiar to early infancy	152	1						
Senility	154							
Traumatism by fall	172							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175					1		

Total deaths, 61. Death-rate 8.58.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
						1							1	1				1	
1													1	1			1		
1			1									1	2	2	1	2	1		
						1	1		1			2	1	3		2		1	
							1					1		1					
1												1		1		1			
							1						1	1				1	
							2	3	2	1		4	5	6	3	3	1	4	1
							1					1		1				1	
				1					1				3	3		1	1	1	
		1				1		1	1			3	2	4	1	3	1	1	
								1	1				2	1	1			2	
								1					2	2			1	1	
							1					1			1	1			
1			1			1	2		2			2	5	4	3	4		3	
							1						1		1			1	
												2	1	3			3		
													1	1			1		
							1					1		1		1			
							1	1					2	1	1			2	
												1		1			1		
												1	5	6			6		
												1		1			1		
								1				1		1				1	
									1				1	1				1	
		1										2		1	1		2		

TABLE 58.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN WEST HOBOKEN.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Typhoid fever	1				1			
Malaria	4						1	
Measles	6		1	5				
Scarlet fever	7			2	2			
Whooping cough	8		5		1			
Diphtheria and croup	9			6				
Including: Croup	9A			3	2			
Influenza	10		1					
Dysentery	14		1					
Erysipelas	18				1			
Mycoses	25							
Tuberculosis of the lungs	28			1			8	7
Acute miliary tuberculosis	29			1				
Tuberculous meningitis	30		2	2	1			1
Abdominal tuberculosis	31			1				
Tuberculosis of other organs	34							
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritonæum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of other organs or of organs not specified	45							
Acute articular rheumatism	47			2		1		
Diabetes	50							
Other general diseases	55	1						
Alcoholism (acute or chronic)	56							
Chronic lead poisoning	57							
Simple meningitis	61		2	3	1		1	
Locomotor ataxia	62							
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Other forms of mental alienation	68							
Convulsions of infants	71		1					
Other diseases of the nervous system	74							
Pericarditis	77					1		
Acute endocarditis	78							1
Organic diseases of the heart	79					1	2	
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Acute bronchitis	89	1	1					
Chronic bronchitis	90							
Bronchopneumonia	91	1	3	8				
Pneumonia	92		5	8		1	1	3
Pulmonary congestion, pulmonary apoplexy	94							
Asthma	96							
Other diseases of the respiratory system (tuberculosis excepted)	98				1			
Ulcer of the stomach	102							1
Other diseases of the stomach (cancer excepted)	103	1	1					1
Diarrhœa and enteritis (Under 2 years)	104	3	8	5				
Diarrhœa and enteritis (2 years and over)	105			2				
Appendicitis and typhlitis	108							1
Other diseases of the intestines	110		1					
Cirrhosis of the liver	113							
Acute nephritis	119							
Bright's disease	120							

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90	Not stated	Male.	Female.	United States.	Elsewhere.	Married	Single.	Widowed.	Not stated.
												1		1			1		
													1	1			1		
												2	4	6			6		
												2	2	4			4		
												4	2	6			6		
	1			1								6	2	7	1	2	6		
												3	2	5			5		
												1		1			1		
													1	1			1		
												1		1			1		
						1							1		1			1	
4	4	4	8	5	1	2	4	1				26	23	26	23	26	15	7	1
1			1									2	1	2		2	1		
												4	2	6			6		
			1										2	2			1	1	
		1						1					2	1	1	1		1	
						1						1			1	1			
				1	1	2	2	3	1			7	5	2	10	8	1	3	
						1	3					1	3		4	2		2	
				1	1		1						3		3	2		1	
			2										2	2		1	1		
						1	1						2		2	1		1	
1												1	32	2	32	1	3		
	1					1	1		1			3	1	2	2	1	1	2	
												1		1			1		
	1				1							2		2		1	1		
				1								1			1	1			
						1	1					1	6	7		7			
												2		2		2			
				2	2	2	7	4	2			9	10	5	14	12	1	6	
					1							1			1	1			
								1				1			1	1			
													1	1			1		
								1					1		1			1	
													1	1			1		
		1				1	3	1	1			3	5	3	5	4	1	3	
1			4	1	3	3	5	1	2			12	11	9	14	12	5	6	
						1		1					2	1	1			2	
					2	1	1		1			2	3	2	3	3			
							1	1	2			3	3	2	4		3	3	
					1		1	4				3	1		6	4			
1					1			2				7	9	12	4	2	12		
1		4	1	3	3		9	1	2			23	19	25	17	17	21	4	
									1				1		1			1	
							1						1		1			1	
												1		1			1		
			1									2		2		1	1		
							1					3	1	3	1	1	3		
										1		9	7	16			16		
													3	2	1		2	1	
						1							2		2		1	1	
			1									2		1	1	1			
	1			1	2		2	2				2	3	2	6	6		2	
1						1						2		2		2			
1	1	1	2	2	4	4	7	1	2			7	18	9	16	14	3	8	

TABLE 58.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN WEST HOBOKEN.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Other diseases of the kidneys and annexa.	122	...	...	...	...	...	...	...
Congenital malformations (stillbirths not included).	150	1	1	...	...	...	...	...
Congenital debility, icterus and sclerema.	151	12	4	...	...	...	...	...
Other diseases peculiar to early infancy.	152	1	...	...	...	...	...	...
Senility.	154	...	...	...	...	...	...	...
Suicide by poison.	155	...	...	...	...	...	1	...
Suicide by asphyxia.	156	...	...	...	...	...	...	...
Suicide by hanging or strangulation.	157	...	...	...	...	...	...	...
Other acute poisonings.	165	...	...	...	...	...	...	...
Burns (conflagration excepted).	167	...	...	...	...	...	...	...
Absorption of deleterious gases (conflagration excepted)	168	...	...	...	...	...	...	1
Traumatism by firearms.	170	...	1	...	...	...	...	...
Traumatism by fall	172	...	...	...	...	...	...	...
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	...	...	...	...	1	...	...
Cause of death not specified or ill-defined.	189	2	8	...	...	...	...	...

Total deaths, 397. Death-rate, 10.13.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913—Continued.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 00.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
							1						1		1			1	
												1	1	2			2		
												9	7	16			16		
												1		1			1		
							2					1	1		2	1		1	
												1		1		1			
	2					1	1					4			4	2		2	
						1	1					1	1	1	1	1		1	
			1									1		1		1			
						1	1					2			2	1		1	
				2	1	3	1					7	1		8	5	2	1	
												1		1			1		
			1			1	1					2	1		3	2		1	
		1										2			2		2		
												5	5	10			10		

TABLE 59.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN WEST NEW YORK.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Measles	6		1	2				
Scarlet fever	7			2	1			
Whooping cough	8		2					
Diphtheria and croup	9			1	7	1		
Including: Croup	9A		1	1				
Dysentery	14		1					
Erysipelas	18		1					
Tuberculosis of the lungs	28							
Tuberculous meningitis	30							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the peritoneum, intestines, rectum	41							
Cancer and other malignant tumors of the female genital organs	42							
Acute articular rheumatism	47				1			
Diabetes	50							
Leuchæmia	53			1				
Other general diseases	55							
Simple meningitis	61		2	1	1			
Including: Cerebrospinal fever	61A			1				
Locomotor ataxia	62							
Other diseases of the spinal cord	63							
Cerebral hæmorrhage, apoplexy	64							
Paralysis without specified cause	66							
Other diseases of the nervous system	74							
Acute endocarditis	78	1						
Organic diseases of the heart	79				1		1	
Diseases of the arteries, atheroma aneurysm, etc	81							
Embolism and thrombosis	82							
Acute bronchitis	89	1		1				
Chronic bronchitis	90							
Bronchopneumonia	91		5					
Pneumonia	92		4	3				
Pulmonary congestion, pulmonary apoplexy	94	1						
Ulcer of the stomach	102							
Other diseases of the stomach (cancer excepted)	103		2					
Diarrhœa and enteritis (Under 2 years)	104	3	7	2				
Diarrhœa and enteritis (2 years and over)	105							
Acute yellow atrophy of the liver	111						1	
Cirrhosis of the liver	113							
Simple peritonitis (nonpuerperal)	117							
Bright's disease	120							1
Puerperal hæmorrhage	135							
Other accidents of labor	136							
Other diseases of the skin and annexa	145							
Congenital malformations (stillbirths not included)	150	1	1					
Congenital debility, icterus and sclerema	151	6						
Other diseases peculiar to early infancy	152	2						
Lack of care	155		1					
Senility	154							
Suicide by poison	155							
Suicide by asphyxia	156							
Suicide by hanging or strangulation	157							
Burns (conflagration excepted)	167			2				
Absorption of deleterious gases (conflagration excepted)	168							
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175			1	1			
Homicide by other means	184					1		
Cause of death not specified or ill-defined	189		4					

Total deaths, 209. Death-rate, 12.03.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere	Married.	Single.	Widowed.	Not stated.
													3	3			3		
1													4	3	1	1	3		
												1	1	2			2		
												1	2	3			3		
													2	2			2		
												1		1			1		
												1		1			1		
2	5	2	4	2	2	1	1		1			18	2	11	9	12	4	4	
												1		1			1		
1			1		1		1					2	2	1	3	2	1	1	
					1			2					3		3	1		2	
			1				1	1					3	3		1		2	
													1	1			1		
				1			1	1				2	1		3	2		1	
	1											2		1	1	1	1		
	1												1	1		1			
												2	2	4			4		
													1	1			1		
				1	1							1	1	2		1		1	
					1								1	1				1	
		1			2	3	3	1				3	7	3	7	6		4	
							1	1					2	1	1	2			
		1										1			1	1			
		1		2			1	1	1			2	5	4	3	3	1	3	
1		2		1	3	2		1	1			10	3	5	8	6	5	2	
								1					1		1			1	
			1			1						2		2		1	1		
													2	2			2		
								1	1				2		2			2	
					1		1					4	7	10	1	2	9		
1		3	1	3	1	1	1	1	2			9	12	10	11	9	9	3	
												1		1			1		
			1				1					1	1	1	1	1	1		
							1					2	1	2	1		2	1	
												8	4	12			12		
	1											1			1	1			
												1		1			1		
				1			1	1				2	1	2	1	2		1	
				1									1		1			1	
					2	1	4	8	1			9	8	2	15	10		7	
	1												1		1	1			
1													1		1	1			
			1										1	1		1			
													2	2			2		
												5	1	6			6		
												2		2			2		
													1		1		1		
							1	2				1	2	1	2	1		2	
1												1		1		1			
1				2								3	1	1	3	2	2		
1				1								2		1	1	1		1	
												2		2			2		
						1							1		1		1		
												1	1	1	1		2		
												3	1	1			1		
														4			4		

TABLE 60.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES. THE YEAR ENDING

DEATHS IN WEST ORANGE.		AGE PERIODS.						
		Under one month.	Under 1 year, "not including under 1 mo."	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25
Whooping cough	8		2					
Diphtheria and croup	9		1	1				
Erysipelas	18							
Tuberculosis of the lungs	28			1				
Cancer and other malignant tumors of the buccal cavity	39							
Cancer and other malignant tumors of the stomach, liver	40							
Cancer and other malignant tumors of the female genital organs	42							
Cancer and other malignant tumors of the breast	43							
Cancer and other malignant tumors of other organs or of organs not specified	45						1	
Chronic rheumatism and gout	48							
Diabetes	50							
Anæmia, chlorosis	54							
Locomotor ataxia	62							
Cerebral hæmorrhage, apoplexy	64							
Acute endocarditis	78						1	
Organic diseases of the heart	79				1			
Angina pectoris	80							
Diseases of the arteries, atheroma aneurysm, etc	81							
Diseases of the larynx	87		1					
Acute bronchitis	89							
Bronchopneumonia	91		4					
Pneumonia	92		3	2				
Diarrhœa and enteritis (Under 2 years)	104	1	3	1				
Hernias, intestinal obstructions	109							
Bright's disease	120							
Cysts and other tumors of the ovary	131							
Congenital malformations (stillbirths not included)	150	2						
Congenital debility, icterus and sclerema	151	8	1					
Suicide by firearms	159							
Absorption of deleterious gases (conflagration excepted)	168						1	
Traumatism by fall	172							

Total deaths, 97. Death-rate, 7.55.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1913.

AGE PERIODS.												SEX.		NATIVITY.		SOCIAL CONDITION.			
25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.	Male.	Female.	United States.	Elsewhere.	Married.	Single.	Widowed.	Not stated.
												1	1	2			2		
												2		1	1		2		
							1						1	1				1	
4	2	1				1						8	4	9	3	6	6		
						1						1		1		1			
			1			1		1				3		3		2		1	
			1										1		1	1			
								1					1		1			1	
									1			1		1			1		
									1				1		1			1	
					1							1		1		1			
					1		1					1			1	1			
				1			2	1	1			3	2	3	2	4		1	
			1				2		1			1	4	4	1	2	2	1	
							5	1	1	1		5	4	5	4	6	1	2	
						1							1	1				1	
				1			1	1				1	2	1	2	1		2	
													1	1			1		
							1						1		1			1	
							1					2	3	4	1		4	1	
		1			1		3	2	1			4	9	9	4	4	6	3	
												2	3	5			5		
			1										1		1			1	
		1	1		2		1					1	4	5		5			
						1							1		1			1	
												1	1	2			2		
												5	4	9	1		9		1
		1										1							
												1			1		1		
	1											1		1		1			

List of Licensed Health Officers and Sanitary Inspectors.

Following is a list of the persons who have successfully passed the examinations provided for in the act approved April 8th, 1903:

HEALTH OFFICERS.

†Budd H. Obert.....Asbury Park.
Hiram Williams, M. D.....Passaic.
Alex. Marcy, Jr., M. D.....Riverton.
†Wm. S. Green, M. D.....Paterson.
Walter Taylor, M. D.....Jersey City.
Maria M. Vinton, M. D.....East Orange.
†Edward Guion, M. D.....Atlantic City.
†Fred W. Sell, M. D.....Rahway.
Howard L. Baumgartner.....Asbury Park.
Lewis L. Sharp, M. D.....Palmyra.
Ferdinand N. Sauer, M. D.....Jersey City.
†George T. Tracy, M. D.....Beverly.
†Chester H. Wells.....Montclair.
†Duncan W. Blake, Jr., M. D., Gloucester City.
Samuel D. Mayhew, M. D.....Bridgeton.
†John O'Brien, Jr.,.....Montclair.
‡James A. Exton, M. D.....Arlington.
Frank H. Streightoff.....Montclair.
G. W. Fithian, M. D.....Perth Amboy.
†Henry MacDonald.....Newark.
Leon R. Thurlow.....Plainfield.
†Edward B. Rogers, M. D.....Collingswood.
†J. I. Hoverder, M. D.....Atco.
W. U. Kurtz, M. D.....Asbury Park.
William W. Brooke, M. D.....Bayonne.
John K. Adams, M. D.....Orange.
†Thomas J. Duffield.....Asbury Park.
Henry D. Abbott, M. D.....Bayonne.
Eugene H. Sullivan.....Orange.
†J. Alex. Browne, M. D.....Paterson.
Perkins Boynton.....Little Falls.
Ellsmore Stites, M. D.....Bridgeton.
Marcus W. Newcomb, M. D.....Burlington.
Charles P. Eaton.....Jersey City.
†V. M. D. Marcy, M. D.....Cape May.
‡Milton L. Somers, M. D.....Atlantic City.
†Harry H. Petit, M. D.....Ridgewood.
†John T. Connolly.....Bayonne.
†Charles J. Larkey.....Bayonne.
†T. Lee Adams.....Ocean City.
†R. H. Parsons, M. D.....Mount Holly.
Jay E. Kilpatrick.....Montclair.
William Schuler.....Orange.
William G. Schauffler, M. D.....Lakewood.
†William H. Shipps, M. D.....Bordentown.
Morris W. Clouse, M. D.....Kearny.
†Joseph J. Craven, M. D.....Jersey City.
Selskar M. Gunn.....Orange.
Joseph Payne, M. D.....Midland Park.
†Jay G. Foose.....Montclair.
John J. Broderick, M. D.....Jersey City.
Henry H. Brinkerhoff, M. D., Jersey City.
†George W. Lawrence, M. D.....Lakewood.
†James J. Hagan.....Jersey City
†Charles S. Mills, M. D.....Riverton.
†Joseph Wantoch, M. D.....Carteret.
†William H. Iszard, M. D.....Camden.
Ralph O. Clock, M. D.....Burlington.
†E. Irving Cronk, M. D.....New Brunswick.
John L. Lund, M. D.....Perth Amboy.
†Charles McNabb.....Bound Brook.
J. C. Loper, M. D.....Bridgeton.
Henry C. James, M. D.....Mays Landing.
†A. M. Heron, M. D.....Lakewood.
George H. Taylor, M. D.....Maplewood.
L. F. Meloney, M. D.....Clifton.
†I. N. Griscom, M. D.....Ocean City.
†James L. Ollif.....Plainfield.
†Harriet O. Mattison.....Plainfield.
†Lester Hamblet.....Asbury Park.
†John H. Winslow, M. D.....Vineland.
Grant P. Curtis, M. D.....Town of Union.
Robert N. Hoyt.....Summit.
J Scott MacNutt.....Orange.
William D. Sayre, M. D.....Red Bank.
William A. Westcott, M. D.....Berlin.
E. W. Ingling, M. D.....Freehold.
Fred H. Stover.....Boston, Mass.
Nelson Elliott, M. D.....Passaic.
William M. Barnes, M. D.....Milburn.
John A. C. Tull, M. D.....Ventnor.
William C. Craig, M. D.....Ridgewood.
Charles B. Bleasby, M. D.....Garfield.
Josiah Meigh, M. D.....Bernardsville.
George T. Palmer.....Trenton.
Carl T. Pomeroy.....Plainfield.
Fritz M. Arnolt.....Hackensack.
†Joseph C. Saile.....Bloomfield.
†William J. Willsey.....New Brunswick.
†Frank A. Frederick, Sr.....West Hoboken.
Frank A. Frederick, Jr.....West Hoboken.
†Morris Farkas, M. D.....West Orange.
†A. S. Fell, M. D.....Trenton.
Alfred A. Mutter, M. D.....Arlington.
W. R. Rieck, M. D.....Arlington.
Max Colton.....New Brunswick.
†John G. Taylor.....Dover.
F. M. Hoffman, M. D.....New Brunswick.
George W. Finke, M. D.....Hackensack.
Talbot Reed, M. D.....Atlantic City.
†Frank J. Osborne.....Montclair.
†James E. Brooks.....Glen Ridge.
Richard Bew, M. D.....Atlantic City.
†Nathan A. Cohen, M. D.....Wildwood.
†William Morris.....Roselle Park.
†N. J. Randolph Chandler.....Plainfield.
Elias J. Marsh, M. D.....Paterson.
A. I. Goehrig.....Trenton.
†Edward P. Essertier, M. D...Hackensack.
†John N. Ryan, M. D.....Passaic.
Alexander Weir, Jr.....West Hoboken.
†T. Dudley Ballinger.....Princeton.
†Henry V. Amerman.....Kearny.
Emery Marvel, M. D.....Atlantic City.
William H. Schmidt, M. D...Atlantic City.

†In the service of the local board of health.
‡Deceased.

Fred A. Stetter.....Asbury Park.
Charles S. Brady, M. D...Town of Union.
†H. T. Partree, M. D.....Eatontown.
†John T. McClure.....Harrison.
Lewis O. Tayntor.....Montclair.
John J. Haley, M. D.....Gloucester City.
†John Hall.....Long Branch.
John S. Wilson.....Bridgeton.
Hyman I. Goldstein, M. D.....Camden.
Joseph V. Bergin, M. D.....Paterson.
Charles J. Merrell.....Bound Brook.
Gobin Stair.....Jersey City
Collis H. Case.....Plainfield.
Stanley H. Nichols, M. D.....Long Branch.
Roy G. Perham, M. D...Hasbrouck Heights.
†Frank H. Edsall, M. D.....Jersey City.
Ellen B. Smith, M. D.....Salem.
T. A. Clay, M. D.....Paterson.

SANITARY INSPECTORS OF FIRST CLASS.

†Fred W. Hering.....Jersey City.
†George W. Gilmore.....Newark.
†Fred C. Robertson, M. D.....Jersey City.
†John T. McClure.....Harrison.
†John G. Taylor.....Dover.
†Charles E. Bellows.....Bridgeton.
Albert E. Geissler.....Kearny.
Thomas Ainge.....Lansing, Mich.
Charles S. Voorhis.....Palmyra.
†Lewis E. Boutillier.....Newark.
†Joseph C. Saile.....Bloomfield.
†Casper Benz.....Newark.
Robert W. Meeker.....Plainfield.
†John K. Bennett, M. D...Gloucester City.
William H. Addis.....Plainfield.
William W. Heberton, M. D., South Orange.
Eric Ordell.....Newark.
John Greaves.....Jersey City.
John E. Rowe, D. V. S.....Summit.
George N. Smith.....Newark.
†Frank Dencklan.....Plainfield.
J. H. C. Hunter.....Dover.
Chauncey V. Bunnell.....Jersey City.
†Charles F. Conrad.....Newark.
Percy W. Sipp.....Newark.
†H. S. Winterhalter.....Bayonne.
Jay E. Kilpatrick.....Montclair.
W. J. E. Seder.....Newark.
†Alonzo Brower.....Freehold.
†Frederick E. Wilson.....Bayonne.
David R. Thompson....Delaware City, Del.
†Jay G. Foose.....Montclair.
†William H. Lowe, D. V. S.....Paterson.
Charles W. Harreys, M. D.....Ridgewood.
Joseph C. Bitler, M. D.....Hammonton.
†Lynford E. Tuttle, M. D. V. Bernardsville.
†James L. Ollif.....Plainfield.
J. J. Reason, M. D.....Carteret.
†Alfred C. Benedict, M. D...South Orange.
†John H. Winslow, M. D.....Vineland.
†Harry R. Ingalls.....Asbury Park.
Edward F. Flynn.....Newark.
†Elvia Scott.....South Orange.
Harris Day, M. D.....Chester.
A. I. Goehrig.....Trenton.
Harry E. Moffett.....Newark.
Irwin C. Dakin.....Newark.
William Gleuck, Jr.....Newark.
Fred S. Ball, M. D.....Lakewood.
†Felix McGee.....Millburn.
Charles E. Divine.....Newark.
†Charles McNabb.....Bound Brook.
James J. Waters.....Newark.
†John L. Lund, M. D.....Perth Amboy.
Edward Mulvaney, M. D.....Jersey City.
John J. Magner, M. D.....Jersey City.
Edward J. Devitt.....Jersey City.
†J. L. Ebbels.....Montclair.
H. G. Eakin.....Union Hill.
Joseph R. Bartlett.....Atlantic City.
Frank V. Wilkinson.....Newark.
Edwin E. Taber.....Long Branch.
†John A. Manson.....Dover.
†Lester J. Hamblet.....Asbury Park.
Clarence A. Lamont.....Asbury Park.
†Alex. M. Heron, M. D.....Lakewood.
Abram A. Lydecker, M. D.....Haledon.
Howard H. Huffert.....Newark.
†Sylvester Utter, M. D.....Paterson.
F. Wm. Stahuber.....Trenton.
†William Morris.....Roselle Park.
John W. Garey.....Atlantic City.
James P. McNair.....Paterson.
Thomas J. Steele.....Jersey City.
Walter B. Delaney.....Jersey City.
John C. Harnett.....Jersey City.
Henry A. Bonynge, M. D.....Ridgewood.
†C. H. W. Van Sciver.....Burlington.
†Frank S. Harris.....Salem.
Stanley S. Williams.....Newark.
Patrick J. Brogan.....Newark.
Samuel Bachman.....Newark.
†Sadie H. Layton.....Asbury Park.
†Frank A. Frederick.....West Hoboken.
Andrew Carney, Jr.....North Plainfield.
†John J. Belbey.....Morristown.
Gustavus E. Freideman.....Newark.
†Ralph L. Huttenloch.....Montclair.
William McKeon.....Paterson.
†H. W. Hartman, M. D.....Keyport.
†John T. McClure, Jr.....Harrison.
Adolph O. Elsasser.....Newark.
John Q. Larkin.....Jersey City.
H. L. Harley, M. D.....Pleasantville.
Frederick W. Nichols.....Newark.
†George C. Losey.....Washington.
Clarence I. Palmer.....Newark.
Fritz M. Arnolt.....Albany, N. Y.
B. F. Seaman, M. D.....Raritan.
George A. West.....Raritan.
C. P. Deyoe, M. D.....Ramsey.
J. Alonzo Beek, M. D.....Gloucester City.
Frederick A. Stetter.....Asbury Park.
Edward A. Cleary.....Newark.
Thomas P. Walsh.....Newark.
Thomas F. Boles.....Newark.
†William B. Palmer.....Orange.
Frank Brouwer, M. D.....Toms River.
Thomas J. Carter.....Newark.
†Charles A. Keating, M. D.....Paterson.
†Wm. C. Allen.....Trenton.
†Edward L. Titus.....Trenton.
Lloyd M. Van Ness.....New Brunswick.
Max J. Colton.....New Brunswick.
†Henry V. Amerman.....Kearny.
Edward H. Salmon, M. D.....Jersey City.
Myron J. Seely.....Montclair.
Wallace T. Eakins.....New Brunswick.
John S. Young, M. D.....Rahway.
Fred J. Dyer.....Grantwood.
Milton E. Baxter.....Jersey City.
†N. J. R. Chandler.....Plainfield.

†In the service of the local board of health.

John F. Boylan.....Bayonne.
Leavett F. Kelley.....Newark.
Chas. E. Messerschmidt.....Newark.
Samuel Denton.....Bayonne.
Thomas E. Reynolds.....Atlantic City.
Claudis E. McNenney, M. D....Jersey City.
Philip Morris, C. E.....Passaic.
James A. Woods.....Atlantic City.
Newton De Baun.....Hackensack.
Fred C. Harris.....Jersey City.
Richard Savage.....Orange.
Bernard F. O'Hara.....Jersey City.
Christian Petry.....Jersey City.
Garrett E. St. John.....Newark.
Henry F. Kneller.....Newark.
George C. Nicol.....Jersey City.
William A. Webber.....Orange.
George Scales.....Rahway.
John Levine.....Newark.
John A. Kelly.....Newark.
Nathan Aronson.....Newark.
Obadiah S. Cole.....Newark.
Herbert A. Stine.....Plainfield.
James Weldon.....Jersey City.
Dennis E. Gavin.....North Plainfield.
John A. Donavan.....Newark.
Eugene M. Syrett.....Montclair.

†Richard H. L. Osthoff.....Bogota.
M. William O'Gorman, M. D...Jersey City.
William D. Pelan.....Trenton.
Charles F. Martin.....Newark.
†George F. Shafer.....Hackensack.
Collis H. Case.....Plainfield.
A. C. Obergfell.....Atlantic City.
Charles S. Gall.....Paterson.
Harry E. Watt.....New Brunswick.
†Harry M. Hitchner.....Salem.
Richard Jackson.....Newark.
John P. Corrigan.....Newark.
Charles W. Feeny.....Paterson.
William Van Loo.....Paterson.
†John H. Concannon.....Woodbridge.
Fred J. Anderson.....Hoboken.
J. Frank Summers.....Salem.
Wallace M. Gill.....Perth Amboy.
Joseph Whalley.....Passaic.
John H. Rowland.....New Brunswick.
William F. Kearney.....Paterson.
Thomas A. Tonge.....Paterson.
Henry J. Seymour.....Roselle Park.
George R. Sees.....Atlantic City.
Harry K. Berry.....Paterson.
Ruth S. Sickler.....Salem.

SANITARY INSPECTORS OF SECOND CLASS.

†Charles Cunningham, M. D...Hammonton.
†Franklin P. Vanlier.....Woodstown.
†Joseph J. Clickenger.....Irvington.
†J. C. Shinn, M. D.....Jamesburg.
George Wildman.....Belmar.

John M. Bensel.....Pleasantville.
George S. Everett.....Linden.
Frederick J. Dyer.....Grantwood.
John C. Clayton, M. D.....Freehold.
Robert Ballagh.....Hackensack.

SANITARY INSPECTORS OF THIRD CLASS.

David Jamieson.....Gloucester City.
†Robert A. Hirner.....Woodbridge.
Robert Dickson.....Fair Haven.
T. Nelson Lillagore.....Ocean Grove.
William B. Smith.....Belleville.
Adrian Hommell.....Asbury Park.

William B. Davis.....Morris Plains.
†J. N. Fowler.....Port Norris.
Charles Butcher, M. D.....Heislerville.
John J. Bennett.....Belleville.
Joseph G. Coleman, M. D.....Hamburg.
†Fred. D. Hurley.....Asbury Park.

MEAT INSPECTORS.

†G. F. Harker, D. V. S.....Trenton.
†Richard W. Hewitt, D. V. S.....Camden.

Willet H. Cooper, D. V. S.....Trenton.
‡Albert T. Sellers, D. V. S.....Camden.

MILK AND DAIRY INSPECTORS.

†J. Wesley Maple.....Trenton.
Arthur McRoberts.....Jersey City.

†Harold E. Stearns, D. V. S.....Kearny.
Henry F. Kneller.....Newark.

MILK AND FOOD INSPECTORS.

Harold Mellen.....Hoboken.
Abe L. Teifeld.....Hoboken.

Louis J. Levy.....Hoboken.

PLUMBING INSPECTORS.

†Henry B. Francis.....Camden.
Joseph Sonnenberg.....Irvington.
Conrad Deuchler.....Newark.
Charles M. Whelan.....Trenton.
†William F. Brode.....Atlantic City.

†Thomas D. Clark.....Woodbury.
Edward J. Kelly.....Jersey City.
Thomas F. Harris.....Orange.
†G. H. Soult.....Ridgewood.
Henry A. W. Smith.....Ocean City.

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†In the service of the local board of health.
‡Deceased.

Hugh F. Parle.....Jersey City.
R. LeRoy Skillman.....Newark.
Andrew McGookin, Jr.....Newark.
Frederick W. Nichols.....Newark.
Luke J. Devine.....Elizabeth.
James Barnard.....Trenton.
Frank H. Fitzgeorge.....Trenton.
†George F. Shafer.....Hackensack.
Charles F. West.....Gloucester City.
Bernard B. Reiley.....New Brunswick.
P. W. Borrows.....Ridgefield Park.
Arthur G. Reeves.....Cape May City.
James H. Kiernan.....Jersey City.
Edward A. Sullivan.....Newark.
Gustave A. Albiez.....Newark.
William F. Specht, Jr.....Atlantic City.
Jacob Kull.....Newark.
Eugene Lau.....Newark.
Peter A. Degnan.....Newark.
David Entwistle.....Jersey City.
Tunis Looi.....Lodi.
James A. Marnell.....Hoboken.
Rudolph Riemenschneider..Town of Union.
W. J. Large.....Vineland.
Charles Steller.....Town of Union.
Martin D. Karl.....Garfield.
Adam J. Hammer.....Elizabeth.
Leavett F. Kelly.....Newark.
W. George Lambert.....Riverside.
Martin V. Driscoll.....Jersey City.
Herbert J. Mason.....Vineland.
Charles F. Shaw.....Collingswood.
William F. Ziegler.....West Hoboken.
Archibald A. Kafar, Jr.....Bordentown.
Edward A. Dugan.....Gloucester City.
Cornelius V. Carty.....East Rutherford.
Frederick J. Dyer.....Grantwood.
Frank S. Kievitt.....Passaic.
G. E. Bangs.....West Hoboken.
Jason H. Wildrick.....Washington.
Clarence B. Slack.....Trenton.
†Richard W. L. Osthoff.....Bogota.
Joseph M. Loeffler.....Newark.
George M. Crawley, Jr.....Newark.
Conrad C. Hoffmeier.....West Hoboken.
J. Elmer Deppe.....Newark.
Robert B. Murphy.....Ridgewood.
Newton DeBaun.....Hackensack.
Alex. Weir, Jr.....West Hoboken.
Richard T. Bagg.....Vineland.
Joseph Lendner.....West New York.
John Nolan.....Bayonne.
Vincent Ahlemeyer.....Jersey City.
Charles Munzing.....Jersey City.
Michael Saul.....Newark.
John J. Waters.....Jersey City.
R. C. Adamson, Jr.....Long Branch.
Irving J. Demarest.....Westwood.
Patrick J. Ryan.....Wallington.
Patrick J. Hennessy.....Jersey City.
Hubbard Ferguson.....Ridgewood.
Joseph P. Lee.....Jersey City.
B. H. Sooy.....Atlantic City.
Samuel Powell.....Roselle Park.
William Maloney.....Jersey City.
William C. Banta.....Ridgewood.
Fred Henniger.....Jersey City.
Robert J. Fair.....Gloucester City.
Michael A. Shanahan.....Jersey City.
Richard J. O'Crowley, Jr.....Newark.
Harry A. Wilkins.....Newark.
George S. Webb.....Wildwood.
Lewis Barnett.....Millville.
James C. Wegham.....Wildwood.
Sidney S. Craythorn.....Beverly.
George H. Northam.....Long Branch.
Charles J. Dignum.....West Orange.
James F. Mulhall.....East Orange.
Alfred T. England.....Haddonfield.
Charles Kunz.....West Orange.
Thomas J. Dowling.....Orange.
Anthony H. Sachs.....Carlstadt.
Oscar J. Verhoek.....Irvington.
Hugo W. Bobertz.....Elizabeth.
Harry L. McIntyre.....Hammontown.
John B. Reeves.....Haddon Heights.
Joseph Fleming.....West Orange.
Joseph Whalley.....Passaic.
Robert J. Walker, Jr.....Atlantic City.
Charles S. Wilmot.....Haddon Heights.
William S. Mooney.....Jersey City.
Robert Ewans.....Guttenberg.
Warren Mack.....East Orange.
Leslie H. Williams.....East Orange.
Joseph E. Keeton.....East Orange.
Herbert L. de Nourie.....East Orange.
George W. Lang.....East Orange.
Anthony S. Ruddy.....East Orange.
Joseph J. Norton.....East Orange.
Joseph F. Hourigan.....Hoboken.
Henry F. Metzer.....Jersey City.
John H. Kerr.....Perth Amboy.
John O'Shea.....West New York.
Herbert A. Buzzard.....Audubon.
William J Dorney.....Newark.
George T. Haines.....Ventnor.
Arthur A. Hulse.....South Amboy.
John L. Campbell.....Hammonton.
Charles Reeve.....Long Branch.
John Campbell.....Paterson.
Joseph P. Cochran.....Ventnor.
†Michael H. Healy.....Lyndhurst.

†In the service of the local board of health.

List of Sanitary Districts.

With names and addresses of officers and members.

CITIES.

Absecon, Atlantic county; population, 781. Dr. E. H. Madden, President; Dr. Samuel Johnson, Clerk.

Asbury Park, Monmouth county; population, 10,150. D. W. Sexton, President; B. H. Obert, Secretary and Registrar; F. A. Stetter, Jos. S. Ten Broeck, Sanitary Inspectors.

* **Atlantic City,** Atlantic county; population, 46,150. Commission Form of Government, Edward Guion, M. D., Health Officer.

Bayonne, Hudson County; population, 55,545. John McAdie, President; John T. Fitzgerald, Secretary; John T. Connelly, M. D., Health Officer; Frederick C. Grey, M. D., Bacteriologist; H. S. Winterhalter, John F. Boylan, Sanitary Inspectors.

Beverly, Burlington county; population, 2,140. Joseph W. Hahle, President; Harry Woolman, Clerk and Registrar.

Bordentown, Burlington county; population, 4,250. James S. Gilbert, President; Jos. R. Malone, Clerk and Registrar.

Bridgeton, Cumberland county; population, 14,209. Frank S. McKee, Jr., President; Sidney O. Williams, Secretary; Miss Julia Mauel, Registrar; C. E. Bellows, Sanitary Inspector; Dr. S. C. Tremaine, Meat Inspector.

Burlington, Burlington county; population, 8,336. F. S. Carter, President; Walter W. Marrs, Clerk and Registrar; C. H. W. Van Sciver, Inspector.

Camden, Camden county; population, 94,538. Henry H. Davis, M. D., President; Eugene B. Roberts, Clerk; Wm. D. Brown, Registrar; J. F. Leavitt, M. D., Health Inspector; H. B. Francis, Plumbing Inspector.

Cape May City, Cape May county; population, 2,471. Dr. A. L. Leach, President; Wm. Porter, Clerk; Thos. W. Millet, Registrar; Dr. V. M. D. Marcy, Health Officer; A. G. Reeves, Plumbing Inspector.

East Orange, Essex county; population, 34,371. R. H. Butterworth, President; Wm. T. Bowman, Health Officer and Secretary; George W. Lang, Plumbing Inspector.

Egg Harbor City, Atlantic county; population, 2,181. August A. Breder, President; William Morgenweck, Jr., Clerk and Registrar.

Elizabeth, Union county; population, 73,409. John W. Whelan, President; John F. Kenah, Clerk and Registrar; L. J. Richards, Health Officer; P. J. Connell, Assistant Health Officer; M. O'Leary, G. Meyer, L. J. Devine, J. H. Moriarty, J. J. Coughlin, Inspectors.

Englewood, Bergen county; population, 9,924. Wm. C. Tucker, C. E., President; Robert Jamieson, City Clerk and Registrar; John A. Manson, Inspector.

Gloucester City, Camden county; population, 9,462. Harlan S. Miner, President; Allan N. Redfield, Clerk; Jos. F. Lenny, City Clerk; J. Alonzo Beek, M. D., Health Officer.

* **Hoboken,** Hudson county; population, 70,324. Joseph Tucker, Clerk and Registrar.

Jersey City, Hudson county; population, 267,779. Frank H. Edsall, M. D., Commissioner of Public Health.

Lambertville, Hunterdon county; population, 4,657. James H. Reynolds, Clerk and Registrar; Louis C. Williams, M. D., President; Chas. S. Closson, Inspector.

Long Branch, Monmouth county; population, 13,298. Dr. Paul Kahn, President; W. R. Warwick, Clerk and Registrar; John Hall, Health Officer; P. C. Errickson, Assistant Health Officer; Geo. H. Northam, Plumbing Inspector.

* **Margate City,** Atlantic county; population, 129. James Boice, Clerk.

Millville, Cumberland county; population, 12,451. John W. Wade, President; L. H. Hogate, Clerk and Registrar; Frank Bullock, Inspector.

* No report received.

Newark, Essex county; population, 347,469. Dr. H. C. H. Herald, President; D. D. Chandler, Health Officer.

New Brunswick, Middlesex county; population, 23,388. Elmer J. McMurtry, Secretary and Registrar; James A. Morrison, President; J. F. Travers, Inspector.

Northfield City, Atlantic county; population, 866. A. R. Vickers, Clerk and Registrar; William Oxley, President.

Orange, Essex county; population, 29,630. B. M. Arnold, President; F. J. Osborne, Health Officer and Registrar; Thos. J. Dowling, Plumbing Inspector; Wm. P. Palmer, Deputy Registrar and Clerk; Richard Savage, Sanitary Inspector; Wm. A. Webber, Sanitary Inspector.

Passaic, Passaic county; population, 54,773. Mayor Geo. N. Seger, President; Z. A. Van Houten, City Clerk and Registrar; John N. Ryan, M. D., Health Officer; Philip Morris, Sanitary Inspector; Joseph Whalley, Plumbing Inspector; J. Payne Lowe, Veterinary Inspector.

Paterson, Passaic county; population, 125,600. Chas. S. Gall, President and Registrar; Thomas A. Tonge, Clerk; James Fitzpatrick, Wm. McKeon, Dr. Wm. S. Green, Wm. H. MacDonald, John Campbell, Inspectors; J. Alex. Browne, M. D., Health Officer.

Perth Amboy, Middlesex county; population, 32,121. A. R. A. Overgaard, President; Wilbur La Roe, Secretary and Registrar; William J. Willsey, Health Officer; John H. Kerr, Plumbing Inspector.

Plainfield, Union county; population, 20,550. Dr. T. S. Davis, President; N. J. Randolph Chandler, Health Officer; Harriet O. Mattison, Assistant Health Officer and Registrar; William Addis, Sr., Collis H. Case, John J. Casey, Inspectors.

Port Republic City, Atlantic county; population, 405. John W. Barton, President; D. B. Fielder, Clerk; W. C. Vansant, Registrar; M. H. Adams, Inspector.

Rahway, Union county; population, 9,337. Chas. H. Lambert, Clerk and Registrar; Dr. F. W. Sell, Health Officer; Jos. G. Smith, President.

Salem, Salem county; population, 6,614. Chas. E. Markley, President; Geo. Kirk, Clerk and Registrar; Harry Hitchner, Inspector.

Sea Isle City, Cape May county; population, 551. Robt. C. Scott, M. D., President; Irving Fitch, Clerk and Registrar.

Somer's Point, Atlantic county; population, 604. Wm. Heimbach, President; Walter A. Smith, Clerk and Registrar.

South Amboy, Middlesex county; population, 7,007. Louis S. Dill, President; Wm. R. Thompson, Clerk; Robert P. Mason, Registrar; Chas. S. Buckelew, Inspector.

Summit, Union county; population, 7,500. Dr. Wm. H. Lawrence, Jr., President; T. J. Duffield, Secretary, Registrar and Health Officer; T. J. Scott, Sanitary Inspector.

Trenton, Mercer county; population, 96,815. Board of Commissioners. Howard H. Ely, Registrar; Dr. A. S. Fell, Health Officer; Wm. C. Allen, Edw. L. Titus, Frank H. Fitzgeorge, Dr. G. F. Harker, J. Wesley Maple, Inspectors.

Ventnor City, Atlantic county; population, 491. Adolph E. Apel, President; James G. Scull, Clerk and Registrar.

Wildwood, Cape May county; population, ——. Commission Government. N. A. Cohen, Health Officer.

Woodbury, Gloucester county; population, 4,642. Henry B. Diverty, M. D., President; S. E. Sutton, Clerk; Arthur Starr, Registrar; Joshua Dawson, Inspector.

BOROUGHS.

Allendale, Bergen county; population, 937. G. H. Parkhurst, M. D., President; Ambrose K. Merrill, Clerk; V. J. Braun, Inspector.

Allenhurst, Monmouth county; population, 306. Chas. K. Savage, Clerk.

Allentown, Monmouth county; population, 634. H. P. Johnson, M. D., President; H. M. Anderson, M. D., Clerk; Wm. Forsyth, Registrar and Inspector.

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* No report received.

Alpha, Warren county; population, ——. Wm. H. Beatty, President; Cleveland M. Rhen, Clerk and Registrar; Whitfield Shipman, Inspector.

Alpine, Bergen county; population, 377. Wm. T. Opdyke, President; L. H. Tavernier, Clerk, Registrar and Inspector.

Andover, Sussex county; population, 884. W. E. Willson, Clerk and Registrar.

Atlantic Highlands, Monmouth county; population, 1,645. Dr. C. A. Reed, President; W. T. Franklin, Clerk and Registrar; John R. Snedeker, Inspector.

Audubon, Camden county; population, 1,343. John Yardley, President; Howard Callingham, Clerk and Registrar; R. M. Numsam, Inspector.

* **Avalon,** Cape May county; population, 230. E. O. Howell, Jr., Registrar.

Avon, Monmouth county; population, 426. Dr. F. G. Angeny, President; John Supple, Clerk and Registrar; H. E. Stanton, Inspector.

Barnegat City, Ocean county; population, 70. Howard Applegate President; Wm. H. Bailey, Clerk and Registrar; A. D. Applegate, Inspector.

Bay Head, Ocean county; population, 281. A. J. Eiseman, President; Julius Foster, Jr., Clerk; C. D. Worth, Inspector.

Beach Haven, Ocean county; population, 272. A. J. Durand, President; Herbert Willis, M. D., Clerk and Inspector; Samuel S. Andrews, Registrar.

Belmar, Monmouth county; population, 1,433. Dr. Fred V. Thompson, President; Chas. O. Hudnut, Clerk and Registrar; Britton M. Bennett, Inspector.

Bergenfield, Bergen county; population, 1,991. H. A. Baldwick, President; Robert Ellis, Secretary; John J. Huyler, Registrar; John W. Radford, Inspector.

Bloomsbury, Hunterdon county; population, 600. George Hawk, President; J. A. S. Stone, Clerk and Registrar; Dr. James Betts, Inspector.

Bogota, Bergen county; population, 1,125. Frank R. Wesley, President; John F. Hill, Clerk and Registrar; R. H. L. Osthoff, Inspector.

Bound Brook, Somerset county; population, 3,970. Hon. Geo. Packer, President; Wm. Schure, Clerk; Chas. McNabb, Registrar and Inspector.

Bradley Beach, Monmouth county; population, 1,807. W. W. Davis, President; C. F. Burney, Clerk and Registrar; Geo. W. Bostick, Inspector.

Branchville, Sussex county; population; 663. Dr. Edward A. Ayers, President; John A. McCarrick, Clerk and Registrar.

* **Brigantine City,** Atlantic county; population, 67. E. R. Smith, Registrar.

Butler, Morris county; population, 2,265. Wm. P. Thorne, M. D., President; Samuel K. Owen, Clerk; Allan Looker, Jr., Registrar, Bloomingdale.

Caldwell, Essex county; population, 2,236. Henry C. Steinhoff, President; William J. Gray, Clerk; John J. Van Order, Registrar; C. H. Wells, Inspector, Montclair.

Cape May Point, Cape May county; population, 162. A. B. Schellenger, President; Chas. Markley, Clerk; John W. Corson, Registrar; Edward Berrell, Inspector.

Carlstadt, Bergen county; population, 3,807. Louis Cuneo, President; Rudolph Rayner, Clerk and Registrar; Anthony Sachs, Inspector.

Chatham, Morris county; population, 1,874. Bert A. Prager, M. D., President; J. Thomas Scott, Clerk; J. J. McCormack, G. L. Kelley, Inspectors.

Chesilhurst, Camden county; population, 346. Clarence G. Glatterer, President; J. L. Humphries, Clerk and Registrar.

* **Clayton,** Gloucester county; population, 1,926.

Cliffside Park, Bergen county; population, 3,394. E. C. Hellsterce, President; O. R. McElwain, Clerk and Registrar; Fred Dyer, Inspector.

* **Clinton,** Hunterdon county; population, 836. Geo. Hall, Clerk and Registrar.

* **Closter,** Bergen county; population, 1,483. Alfred Anderson, Clerk and Registrar.

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* No report received.

Collingswood, Camden county; population, 4,795. Philip G. Knebel, President; C. C. Powell, Clerk; E. B. Rogers, and Edw. S. Sheldon, Inspectors.

Cresskill, Bergen county; population, 550. W. H. Brockmeyer, President and Registrar; Walter J. Dean, Clerk; George Taufer, Inspector.

Deal, Monmouth county; population, 273. Dr. Robert Offenback, President; James Carroll, Clerk and Registrar; Arthur Hennessy, Inspector.

Delford, Bergen county; population, 1,005. J. D. Hoffmire, President; W. G. Wray, Clerk; J. S. Voorhis, Registrar; Dr. S. A. Vandewater, Inspector, all of Oradell.

Demarest, Bergen county; population, 560. Watson J. Mosier, President; George V. Morton, Secretary and Registrar.

Dumont, Bergen county; population, 1,783. Dr. Geo. S. Clark, President; Fred Kleppe, Clerk and Registrar; Geo. F. Shafer, Inspector, Hackensack.

* **Dunellen,** Middlesex county; population, 1,990. Dr. Thomas J. Hogan, Clerk.

East Newark, Hudson county; population, 3,163. Zepla Knowles, President; E. J. McKenna, Clerk; J. A. McDonald, Registrar; John Keenan, Inspector.

East Rutherford, Bergen county; population, 4,275. Fred Taylor, President; R. Bischoff, Clerk and Registrar; C. V. Carty, Inspector.

* **Edgewater,** Bergen county; population, 2,655. Arthur J. Carleton, Clerk.

Elmer, Salem county; population, 1,167. Wm. H. Ward, President; M. S. Black, Clerk; Hiram Van Meter, Registrar.

Emerson, Bergen county; population, 767. R. Oberholser, President; M. J. Byrne, Clerk and Registrar.

Englewood Cliffs, Bergen county; population, 410. Wm. Wunsch, President; Emil Vyborny, Registrar; Dr. Jos. Huger, Inspector, Fort Lee.

* **Englishtown,** Monmouth county; population, 468. Elmer E. Christie, Clerk and Registrar.

Essex Fells, Essex county; population, 442. J. C. Sprigg, President; D. M. Wootton, Clerk and Registrar.

Fair Haven, Monmouth county; population, ——. G. B. Hodgman, President; D. O. Wolcott, Clerk; G. V. V. Warner, M. D., Registrar.

Fairview, Bergen county; population, 2,441. Owen O'Connor, President; Cliffside P. O., John S. Tracy, Clerk and Registrar.

Fanwood, Union county; population, 471. F. W. Westcott, M. D., President; Ray T. Munger, M. D., Clerk; S. W. McAneny, Registrar; William Addis, Inspector, Plainfield.

Farmingdale, Monmouth county; population, 416. Harry Huhart, Clerk.

Fieldsboro, Burlington county; population, 480. Frank Ferry, President; W. H. Errickson, Clerk and Registrar.

* **Flemington,** Hunterdon county; population, 2,693. Wm. E. Corcoran, Clerk.

* **Florham Park,** Morris county; population, 558. Wm. V. Tunis, Clerk and Registrar.

Folsom, Atlantic county; population, 232. Joseph Linback, President; Jacob Blazer, Jr., Clerk; Louis Schulze, Registrar; Henry Blazer, Inspector.

Fort Lee, Bergen county; population, 4,472. George Stabel, President; Alfred Junghaus, Clerk. Dr. Max Wyler, Sanitary Inspector; Fred Dyer, Plumbing Inspector.

* **Franklin,** Sussex county; population, ——. James R. Stephens, Secretary; Franklin Furnace.

Frenchtown, Hunterdon county; population, 984. M. F. Bellis, President; E. J. Stryker, Clerk; Preston Bloom, Registrar; Wm. S. Dalrymple, Inspector.

Garfield, Bergen county; population, 10,213. Harry Schmittroth, President; Louis Heinzman, Clerk and Registrar; Dr. Chas. B. Bleasby, Sanitary Inspector; M. D. Karl, Plumbing Inspector.

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* No report received.

Garwood, Union county; population, 1,118. Burton M. Galloway, Clerk and Registrar; Andrew Carney, Jr., Inspector, Plainfield.

Glen Ridge, Essex county; population, 3,260. H. C. Harris, M. D., President; James E. Brooks, Secretary, Registrar and Health Officer.

Glen Rock, Bergen county; population, 1,055. C. M. Viel, President; Geo. H. Lane, Clerk; H. C. Pennal, Registrar; James May, Inspector; Hubbard Ferguson, Plumbing Inspector; Dr. Harreys, Health Officer, Ridgewood.

* **Haddonfield,** Camden county; population, 4,142. E. F. Magill, Secretary and Inspector.

* **Haddon Heights,** Camden county; population, 1,452. Wm. H. Carney, Clerk.

Haledon, Passaic county; population, 2,560. Andrew Prignet, President; Theo. B. Kegelman, Clerk and Registrar; A. A. Lydecker, Health Officer.

Hampton, Hunterdon county; population, 914. W. Frank Fritts, President; Thos. J. Raber, Clerk and Registrar; Dr. Theo. B. Fulper, Inspector.

Harrington Park, Bergen county; population, 377. C. Ernshaw Cooper, President; C. J. Martin, Secretary; J. F. Hallenbeck, Registrar; C. A. Richardson, M. D., Inspector, Closter.

* **Harvey Cedars,** Ocean county; population, 33. J. L. Fenimore, Registrar.

Hasbrouck Heights, Bergen county; population, 2,155. Howard B. Vannote, President; Wm. J. Schweickert, Secretary and Registrar; D. M. Davidson, Plumbing Inspector, Rutherford; Roy G. Perham, Health Officer.

Haworth, Bergen county; population, 588. Geo. A. Hurd, President; Geo. E. Allen, Clerk and Registrar; Robt. S. Cleaver, Inspector, Hackensack.

Hawthorne, Passaic county; population, 3,400. P. A. Weiland, President; H. V. Teetsell, Registrar and Clerk, North Paterson; Jos. Payne, M. D., Inspector, Midland Park.

Helmetta, Middlesex county; population, 661. James Deming, President; Robt. J. Franklin, Clerk; J. C. Shinn, M. D., Inspector, Jamesburg.

High Bridge, Hunterdon county; population, 1,545. John Phillips, President; S. M. Buck, Clerk; A. S. Hummel, Registrar; Dr. E. Eastwood, Inspector.

Highland Park, Middlesex county; population, 1,517. A. P. Daire, President; W. H. Holman, Clerk and Registrar; Dr. E. I. Cronk, Inspector, New Brunswick.

Highlands, Monmouth county; population, 1,386. William H. Beige, President; William M. Hennessey, Clerk and Registrar; Jacob S. Hoffman, Inspector.

* **Hightstown,** Mercer county; population, 1,879. A. V. Pierson, Clerk and Inspector.

* **Hohokus,** Bergen county; population, 488. E. F. Keller.

Hopatong, Sussex county; population, 146. T. B. Atterbury, President; Chas. O. Rafer, Clerk and Registrar; Philip F. Reule, Inspector, all of Landing.

Hopewell, Mercer county; population, 1,073. Robt. P. Miller, President; Fred I. Sutphen, Clerk and Registrar.

* **Island Heights,** Ocean county; population, 313. W. T. McKaig, Clerk and Registrar.

Jamesburg, Middlesex county; population, 2,075. Geo. A. Shultz, President; J. Augustus Thompson, Clerk; J. L. Suydam, M. D., Inspector.

Kenilworth, Union county; population, 779. S. Ruth, President; John C. Heiny, Clerk; Chas. Knudson, Registrar.

Keyport, Monmouth county; population, 3,582. Gustave Maurer, President; C. F. Tuthill, Clerk and Registrar; H. W. Hartman, M. D., Inspector.

Lavalette, Ocean county; population, 42. N. Joseph Englebert, President, Clerk and Registrar; Joseph Patterson, Inspector.

Leonia, Bergen county; population, 1,486. J. B. Edwards, M. D., President; H. M. Thompson, Clerk and Registrar; J. T. Wyckoff, M. D., Inspector.

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* No report received.

Linden, Union county; population, 610. Philetus Smith, President; Clarence H. Smith, Clerk and Registrar; Dr. F. W. Sell, Health Officer.

Linwood, Atlantic county; population, 602. Harry H. Potter, President; James Farish, Clerk and Registrar; Philip S. Steelman, M. D., Inspector.

Little Ferry, Bergen county; population, 2,541. Joseph Sevc, President; Louis Brauer, Secretary and Registrar; Otto Schulz, Inspector.

Lodi, Bergen county; population, 4,138. J. W. Lane, President; G. H. Van Vorst, Clerk and Registrar; H. H. Brevoorst, Inspector.

* **Longport,** Atlantic county; population, 118.

Madison, Morris county; population, 4,658. W. H. Barton, President; E. P. Holden, Secretary; S. Fred Burnet, Registrar and Inspector.

Manasquan, Monmouth county; population, 1,582. Alonzo Mount, President; Robt. M. Marks, Clerk and Registrar; R. B. Campbell, Inspector.

* **Mantoloking,** Ocean county; population, —.

* **Matawan,** Monmouth county; population, 1,646.

Maywood, Bergen county; population, 889. Henry Heck, President; G. M. Fetzer, Clerk and Registrar; R. H. L. Osthoff, Inspector, Bogota.

* **Mendham,** Morris county; population, 1,129. E. J. Rood, Clerk, Registrar and Inspector.

Merchantville, Camden county; population, 1,996. Dr. Jos. D. Lawrence, President; W. B. Stewart, Clerk and Registrar; Wm. Linderman, Inspector.

* **Metuchen,** Middlesex county; population, 2,138. C. P. Hull, Clerk.

Middlesex, Middlesex county; population, ——. W. B. Kurtz, Secretary, R. F. D. No. 1, Bound Brook.

Midland Park, Bergen county; population, 2,001. C. P. Morgan, President; A. S. Rubin, Clerk and Registrar; Joseph Payn, M. D., Inspector.

Milford, Hunterdon county; population, ——. George R. Smith, President; Frank P. Vanderbelt, Clerk and Registrar; A. Arling Heil, Inspector.

Millstone, Somerset county; population, 157. Enoch M. Davis, President and Registrar; Wm. H. Polhemus, Clerk; O. B. Taylor, M. D., Inspector.

Milltown, Middlesex county, population, 1,584. Clifford Waddington, President; Milton Brindle, Clerk; Robert Harkins, Registrar; U. Forney, Inspector.

* **Monmouth Beach,** Monmouth county; population, 485. Richard West, Clerk.

Montvale, Bergen county; population, 522. J. V. De Groff, President; W. B. Lawson, Clerk and Registrar.

Moonachie, Bergen county; population, 638. Oscar Bartsch, President; Daniel Saviello, Clerk and Registrar, both of Woodridge, R. F. D.

Mountainside, Union county; population, 362. Frederick Gordon, President; Robert Laing, Registrar.

Mount Arlington, Morris county; population, 277. R. J. Chaplin, President; James Levie, Clerk; C. E. Cook, Registrar; F. H. Tappan, Inspector.

* **Mount Taber,** Morris county; population, ——. H. A. Chamberlaine, Clerk, Jersey City.

National Park, Gloucester county; population, 325. P. B. Milligan, President; Wm. E. Beers, Clerk and Registrar.

Neptune City, Monmouth county; population, 488. Wm. R. Stokes, President; Sharon F. Smith, Clerk and Registrar; Wm. S. Bennett, Inspector.

Netcong, Morris county; population, 1,532. John Grogan, President; J. P. Meade, Clerk and Registrar; T. H. Mahany, Inspector.

New Providence, Union county; population, 873. Louis Stahl, President; W. Summit; Wm. Woodruff, Clerk and Registrar, New Providence.

North Arlington, Bergen county; population, 437. Harry G. McKinlay, President; John H. Shields, Clerk and Registrar; Fred W. Riepe, Inspector.

North Caldwell, Essex county; population, 595. Wm. Kusmaul, President and Registrar; Thos. H. Peer, Clerk.

North Haledon, Passaic county; population, 749. Wm. J. Ellis, President; Frank A. Thornley, Clerk; Dr. A. A. Lydecker, Inspector.

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* No report received.

North Plainfield, Somerset county; population, 6,117. A. E. Kenny, President; Arthur H. Dundon, Clerk and Registrar; Jos. L. Ollef, Inspector.

Northvale, Bergen county; population, ——. Jacob Sherer, President; Emil Kober, Clerk, and Arnold Kober, Registrar.

* **North Wildwood,** Cape May county; population, 833. Chas. G. Glenn, Secretary, Ottens, P. O.

Norwood, Bergen county; population, 564. J. C. Palemon, President; John Gates, Jr., Registrar; Wm. Harra, Inspector.

Oakland, Bergen county; population, 568. Amos Hopper, President; Allen S. Page, Clerk and Registrar; E. W. Hamilton, M. D., Inspector.

Oaklyn, Camden county; population, 653. Harry Vandergrift, President; Richard D. Early, Registrar and Clerk.

Ocean City, Cape May county; population, 1,950. Commission Government. I. N. Griscom, Registrar; John Portiere, Inspector.

Ocean Grove, Monmouth county; population, ——. A. E. Ballard, President; Dr. H. B. Alday, Secretary, Registrar and Inspector.

Old Tappan, Bergen county; population, 305. Jacob Z. Bogert, President; Charles De Wolf, Clerk, Registrar and Inspector; all of Westwood, R. F. D. No. 1.

Palisade Park, Bergen county; population, 1,411. Henry E. Clark, President; W. G. Stevens, Clerk, Registrar and Inspector.

Park Ridge, Bergen county; population, 1,401. S. Alexander, President; T. G. Forbes, Clerk and Registrar; A. P. Post, Inspector.

Paulsboro, Gloucester county; population, 2,121. C. B. Stackhouse, President; Jacob Ballinger, Clerk, Registrar and Inspector.

Peapack-Gladstone, Somerset county; population, ——. W. D. Vanderbeek, President; F. H. Ludlow, Clerk and Registrar.

Pemberton, Burlington county; population, 797. A. J. Morris, President; J. J. Brander, Clerk, and Registrar.

Pennington, Mercer county; population, 722. Edgar Hart, M. D., President; Charles M. Titus, Clerk; Frank A. Blackwell, Inspector.

Penns Grove, Salem county; population, 2,118. A. H. Green, President; C. L. Fleming, M. D., Registrar and Inspector.

* **Pitman,** Gloucester county; population, 1,950. Richard Thompson, Secretary.

Pleasantville, Atlantic county; population, 4,390. H. C. Thomas, President; Thos. F. Crawford, Clerk and Registrar; H. L. Harley, M. D., Inspector.

Point Pleasant Beach, Ocean county; population, 1,003. C. W. Dampman, President; H. C. Shoemaker, Jr., Clerk and Registrar; Jos. Elberson, Inspector.

Pompton Lakes, Passaic county; population, 1,060. Chas. Lindsley, President; I. J. Sharr, Registrar; Dr. Gale, Inspector, Butler.

Princeton, Mercer county; population, 5,136. Joseph E. Raycroft, President; W. B. Howe, Clerk; T. Dudley Ballinger, Registrar and Inspector.

Prospect Park, Passaic county; population, 2,719. George Boer, President; Lambertus Touw, Clerk and Registrar; A. A. Lydecker, Inspector, Haledon.

* **Ramsey,** Bergen county; population, 1,667. H. R. Parvin, Clerk and Registrar.

Red Bank, Monmouth county; population, 7,398. Howard S. Higginson, Clerk and Registrar; Ernest A. Arend, President; Wm. D. Sayre, M. D., Inspector.

* **Ridgefield,** Bergen county; population, 966. Geo. W. Kenney.

Riverside, Bergen county; population, 736. A. J. Scrivers, President, No. Hackensack; Wm. V. Light, Clerk; River Edge; Jos. Weston, Registrar, No. Hackensack; Geo. L. Shafer, Inspector, Hackensack.

Riverton, Burlington county; population, 1,788. E. C. Stoughton, President; Charles S. Mills, M. D., Clerk and Inspector; Charles Y. Davis, Registrar.

* **Rockaway,** Morris county; population, 1,902. James B. May, Clerk.

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* No report received.

* **Rocky Hill,** Somerset county; population, 502. C. R. Baldwin, Clerk and Registrar.

Roosevelt, Middlesex county; population, 5,786. Edward J. Heil, President, Carteret; R. Joseph Murphy, Clerk, Chrome; C. C. Sheridan, Registrar; Carteret; Frank Bom, Inspector, Carteret.

Roseland, Essex county; population, 486. Dr. J. C. Conover, President; E. A. Williams, Secretary.

Roselle, Union county; population, 2,725. John I. Howe, President; E. S. Waller, Clerk; Wm. Morris, Registrar and Inspector.

Roselle Park, Union county; population, 3,138. W. E. McClatchy, President; A. M. Woodruff, Clerk and Registrar; Henry Seymour, Inspector.

Rumson, Monmouth county; population, 1,449. Geo. A. H. Churchill, President; V. A. Ligier, Secretary and Registrar; De Witt Scott, Inspector, latter two of Oceanic.

Rutherford, Bergen county; population, 7,045. Frank M. Buckles, President; H. Y. Blakiston, Clerk and Registrar; Geo. K. Thomas, Inspector; J. C. Sares, Secretary.

Saddle River, Bergen county; population, 483. Robert T. Wilson, President; James L. Ackerman, Clerk.

Seabright, Monmouth county; population, 1,220. Dr. D. H. Karp, President; John W. Eyles, Clerk and Registrar; Larry J. Fitchter, Inspector.

* **Seaside Heights,** Ocean county; population, ——. Clyde G. Marcey, Borough Clerk.

Seaside Park, Ocean county; population, 101. Frank Brockway, Registrar.

Secaucus, Hudson county; population, 4,740. Thos. C. Sproul, President; Louis G. Asmussen, Clerk, Registrar and Inspector.

Somerville, Somerset county; population, 5,060. Aaron L. Stillwell, President; Wm. R. Sutphen, Clerk and Registrar; George D. Totten, Inspector.

South Bound Brook, Somerset county; population, 1,024. Isaac R. Thatcher, President; Peter Merlett, Clerk and Registrar.

* **South Cape May,** Cape May county; population, 7. E. B. Martin, Clerk.

South River, Middlesex county; population, 4,772. Fred Suad, President; James B. Armstrong, Clerk; James Black, Registrar; John Van Norden, Inspector.

* **Spotswood,** Middlesex county; population, 623. Geo. W. De Voe, Clerk.

Spring Lake, Monmouth county; population, 853. Dr. S. R. Knight, President; D. H. Hills, Registrar and Clerk; Edward Remsen, Inspector.

Stanhope, Sussex county; population, 1,031. R. M. Lusch, President; J. J. Shaw, Clerk and Inspector.

* **Stockton,** Hunterdon county; population, 605. Chas. A. Smith, Clerk.

* **Surf City,** Ocean county; population, 40.

Sussex, Sussex county; population, 1,212. H. D. Van Gaasbeek, President; H. E. Wells, Clerk and Registrar; L. Jesse Fuller, Inspector.

Swedesboro, Gloucester county; population, 1,477. Dr. J. G. Halsey, President; W. H. Rieger, Clerk and Registrar; Dr. V. C. De Grafft, Inspector.

Tenafly, Bergen county; population, 2,756. J. J. Haring, M. D., President; J. M. Mac Kellar, M. D., Clerk; J. B. Lansing, M. D., Registrar and Inspector.

* **Totowa,** Passaic county; population, 1,130. Frank Atkins, Clerk.

* **Tuckerton,** Ocean county; population, 1,268. Nathan Atkinson, Secretary.

Upper Saddle River, Bergen county; population, 273. James D. Carlough, President; August Weiss, Secretary.

Verona, Essex county; population, 1,675. Judson W. Parker, President; Louis C. Miller, Secretary; Chas. T. Simonson, Registrar.

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* No report received.

Vineland, Cumberland county; population, 5,282. Louis Basso, President; Ferdinand Koetz, Clerk and Registrar; J. Hayes Winslow, M. D., Inspector.

Wallington, Bergen county; population, 3,448. James Brennan Secretary and Registrar.

* **Washington,** Warren county; population, 3,567. A. J. Craft, Registrar.

Wenonah, Gloucester county; population, 645. William C. Cattell, President; H. S. Leap, Clerk and Registrar; Jos. Chew, Inspector.

West Caldwell, Essex county; population, 494. Marcus S. Crane, President; Theo. M. Gray, Clerk.

West Cape May, Cape May county; population, 844. W. H. Smith, President; F. R. Hughes, M. D., Clerk; T. W. Reeves, Registrar.

West Long Branch, Monmouth county; population, 879. Frank A. Poole, President; R. R. Hughes, Clerk and Registrar; Chas. A. Clark, Inspector.

West Paterson, Passaic county; population, ——. John Duffghe, President; D. Leonard Hughes, Clerk and Registrar, Little Falls; Dr. T. A. Clay, Inspector, Paterson.

Westwood, Bergen county, population, 1,870. Dr. G. M. Levitus, President; N. Cleveland, Clerk and Registrar; George Shafer, Inspector, Hackensack.

Wharton, Morris county; population, 2,983. J. H. Williams, President; J. A. Bermingham, Clerk; John Kernick, Registrar; John McDonald, Inspector.

* **Wildwood,** Cape May county; population, 898. N. A. Cohen, M. D., Health Officer.

Wildwood Crest, Cape May county; population, 103. Richard Scampton, President; E. B. Fagan, Clerk and Registrar; Thos. Cross, Inspector.

Woodbine, Cape May county; population, 2,399. Dr. I. P. Behrman, President; J. Guthman, Clerk and Registrar; R. Zellermeyer, Inspector.

* **Woodcliffe,** Bergen county; population, 470. G. J. Wortendyke, Clerk and Registrar, Allendale, R. F. D. No. 2.

Woodlynne, Camden county; population, 500. Alfred Heppard, President; Christian Dupont, Clerk and Registrar; Claude N. Davis, Inspector.

Woodbridge, Bergen county; population, 1,043. Ernest Schuetter, President; Joseph F. Beck, Clerk and Registrar.

Woodstown, Salem county, population, 1,613. H. V. Foster, President, Wm. B. Foster, Clerk and Registrar; F. P. Vanlier, Inspector.

TOWNS.

Belleville, Essex county; population, 9,891. Herbert B. Vail, M. D., President; John H. Coeyman, Clerk and Registrar; W. Brand Smith, Sanitary Inspector; Hugh J. Maguire, Plumbing Inspector.

* **Belvidere,** Warren county; population, 1,764. George H. Weaver, Clerk and Inspector.

Bloomfield, Essex county; population, 15,070. J. J. Thompson, President; Dr. Joseph C. Saile, Clerk, Registrar and Inspector.

* **Boonton,** Morris county; population, 4,930. Frank N. Banta, Clerk and Registrar.

Clinton, Hunterdon county; population, ——. A. S. Leatherman, President; George A. Hall, Clerk and Registrar.

Dover, Morris county; population, 7,468. E. J. Riederer, President; Wm. H. Tonking, Clerk; Wm. G. Hummill, Registrar; John G. Taylor, Health Officer.

Freehold, Monmouth county; population, 3,233. E. D. Clayton, President; Alonzo Brower, Clerk, Registrar and Inspector.

Guttenberg, Hudson county; population, 5,647. Wm. F. Kuhl, President; George Petrie, Clerk; Robert Ewans, Plumbing Inspector.

Hackensack, Bergen county; population, 14,050. Alfred M. Powless, President; Robert Ballagh, Clerk; E. M. Johnson, Registrar; Dr. E. P. Essertier, Health Officer.

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* No Report Received.

* **Hackettstown,** Warren county; population, 2,715. A. G. Boettiger, Clerk.

Hammonton, Atlantic county; population, 5,088. R. G. Scudder, President; Dr. J. C. Bitler, Clerk and Registrar; Dr. Chas. Cunningham, Sanitary Inspector; J. L. Campbell.

Harrison, Hudson county; population, 14,498. John T. Malone, President; Eugene A. Riordan, Clerk; John T. McGlure, Inspector.

Irvington, Essex county; population, 11,877. Wm. Glorieux, Mayor; David H. Greene, Commissioner of Public Health; Jos. K. Clickenger, Inspector.

Kearny, Hudson county; population, 18,659. James W. Nagle, President, Arlington; Wm. F. Welsh, Clerk; George Howe, Registrar; Henry V. Amerman, Inspector; H. E. Sterns, Milk Inspector, Arlington.

* **Keyport,** Monmouth county; population, 3,554.

Montclair, Essex county; population, 21,550. Moses N. Baker, President; Edw. Winslow, Secretary; Chester H. Wells, Registrar and Health Officer; Lewis O. Taynton, Ralph L. Huttenloch, Eugene Syrett, Inspectors.

Morristown, Morris county; population, 12,507. J. R. Burr; President; Mary C. Wilday, Clerk; Dr. Francis H. Glazebrook, Registrar; John J. Belbey, Inspector.

Newton, Sussex county; population, 4,467. Dr. Warren H. Smith, President; A. V. B. Mackerley, Clerk; Ross McPeek, Inspector.

Nutley, Essex county; population, 6,009. Royal Langdon, President; Geo. Hawksworth, Clerk and Registrar; E. E. Farth, Inspector.

Phillipsburg, Warren county; population, 13,903. Oscar Bates, President; John Perdoe, Clerk and Registrar; Alma L. Williston, M. D., Inspector.

* **Raritan,** Somerset county; population, 3,672. J. J. Bourke, Clerk.

Town of Union, Hudson county; population, 21,023. Fred Zapp, President; Richard Specker, Clerk; Grant P. Curtis, M. D., Inspector.

* **Westfield,** Union county; population, 6,420. C. W. Harden, Clerk and Registrar.

* **West Hoboken,** Hudson county; population, 35,403. Frank A. Frederick, Clerk.

West New York, Hudson county; population, 13,560. Jules Baechburm, President; Wm. McDowell, Clerk; Rudolph Kunze, Inspector; John O'Shea, Plumbing Inspector.

VILLAGES.

Ridgefield Park, Bergen county; population, ——. Joseph Fletcher, President; Howard B. Ficken, Clerk and Registrar; C. A. Knox, M. D., Geo. F. Shafer, Inspector.

Ridgewood, Bergen county; population, 5,416. C. A. Demarest, Clerk; Wilbur Morris, Registrar; R. B. Murphy, Inspector; Dr. H. H. Pettit, Health Officer.

South Orange, Essex county; population, 6,014. Mefford Runyon, M. D., President; J. Budd Smith, Secretary; A. C. Benedict, Registrar and Inspector.

TOWNSHIPS.

Acquackanonk, Passaic county; population, 11,869. Richard Berry, President and Registrar; Edo M. Yereance, Clerk; all of Clifton; James F. Sutton, Inspector, Lake View.

Alexandria, Hunterdon county; population, 1,045. Wm. V. Bloom, President, Little York; Wm. B. Wean, Clerk, Milford, R. F. D. No. 2; Dr. F. S. Grim, Inspector, Baptisttown.

Allamuchy, Warren county; population, 642. Wm. Grover, President, Great Meadows; John S. Till, Clerk, Allamuchy; Dr. L. Cook Osmun, Inspector, Hackettstown.

Alloway, Salem county; population, 1,533. John Crowley, President, Alloway; H. M. Loveland, Clerk and Registrar, Bridgeton, R. F. D. No. 8.

Andover, Sussex county; population, 521. C. N. Kinney, President; Wm. Iliff, Clerk and Registrar, Newton, R. F. D. No. 3.

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* No report received.

Atlantic, Monmouth county; population, 1,205. Edward Taylor, President; Frank E. Heyer, Freehold.

Bass River, Burlington county; population, 685. William T. Cramer, President; C. S. Cramer, Clerk and Registrar, New Gretna.

Bedminster, Somerset county; population, 2,375. Jacob Powelson, President; H. McMurtry, Clerk and Registrar; Somerville, R. F. D. No. 3.

Berkeley, Ocean county; population, 597. J. Lester Yoder, President, Toms River; Marcus B. Allen, Clerk, Bayville; Devine Butler, Registrar, Bayville; Dr. O. A. Wood, Inspector, Forked River.

Berlin, Camden county; population, 1,611. Dr. W. C. Raughley, President; X. F. Ottiger, Clerk and Registrar; Dr. F. D. Stern, Inspector, all of Berlin.

Bernards, Somerset county; population, 4,608. Frank B. Allen, President; Jos. B. Kronenberg, Secretary and Registrar; Dr. J. Meigh, Inspector, all of Bernardsville.

* **Bethlehem,** Hunterdon county; population, 980. William C. Riddle, Clerk, West Portal.

* **Beverly,** Burlington county; population, 2,337. Joseph B. Carter.

Blairstown, Warren county; population, 1,718. L. M. Wilson, President, Blairstown; Jos. A. Dugan, Clerk and Registrar, Vail; H. A. Carhart, M. D., Inspector, Blairstown.

* **Boonton,** Morris county; population, 428. Edmund H. Stikle, Clerk and Registrar, Boonton.

Bordentown, Burlington county; population, 608. C. D. Mendenhall, President and Inspector; Samuel Johnson, Clerk and Registrar; both of Bordentown.

Branchburg, Somerset county, population, 970. E. C. Vanderbeek, President; August McCullough, Clerk and Registrar; Henry V. Davis, M. D., Inspector; all of North Branch.

* **Brick,** Ocean county; population, 2,177. John A. Dorsett, Clerk and Registrar. W. Point Pleasant.

Bridgewater, Somerset county; population, 1,742. J. Albert Schneider, Martinville; John Slattery, Clerk and Registrar, Raritan; Dr. B. T. Seaman, Inspector, Raritan.

Buena Vista, Atlantic county; population, 2,723. Orville E. Searle, President and Registrar; Vineland, R. D.; Douglas Reed, Clerk, Newfield, R. D.

* **Burlington,** Burlington county; population, 1,220. Thomas B. Gandy, Clerk, Registrar and Inspector, Burlington.

Byram, Sussex county; population, 1,055. Geo. P. Hart, President; Stanhope; Geo. M. Prickett, Clerk and Registrar, Landing.

Caldwell, Essex county; population, 704. Henry Myers, President; Theo. Vincent, Clerk, Caldwell.

* **Cedar Grove,** Essex county; population, 2,409. H. B. Whitehorne, M. D., Clerk, Verona.

Centre, Camden county; population, 3,200. Joseph E. Haines, President, Mt. Ephraim; John H. Jackson, Clerk, Magnolia; Dr. Leslie C. Lyon, Inspector, Magnolia.

Chatham, Morris county; population, 812. Edward Blazier, President, Green Village; J. Herbert Bebout, Clerk and Registrar, Chatham.

Chester, Burlington county; population, 5,069. Wm. B. Lippincott, President; Frank G. Stroud, M. D., Clerk and Inspector; George W. Heaton, Registrar; all of Moorestown.

Chester, Morris county; population, 1,251. John W. Dourk, President; Charles Rinehart, Clerk and Registrar; Harris Day, Inspector; all of Chester.

Chesterfield, Burlington county; population, 1,130. Charles M. Bunting, President; Wm. Wallan, Clerk and Registrar; Aaron E. Johnson, Inspector, all of Crosswicks.

Cinnaminson, Burlington county; population, 1,266. Benj. Lippincott, President; Riverton; George C. Frank, Clerk; Cinnaminson; Dr. J. D. Janny, Inspector, Riverton.

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* No report received.

Clark, Union county; population, 469. Andrew Gibson, President; Rahway, R. F. D. No. 1; Wm. J. Thompson, Clerk; Rahway, R. F. D. No. 1.

Clementon, Camden county; population, 2,794. T. S. Fox, President; Laurel Springs, R. D.; Geo. W. Evans, Clerk and Registrar, Lindenwold; F. B. Cook, Inspector, Laurel Springs.

Clinton, Hunterdon county; population, 2,108. Wm. Gano, President; Bergen B. Berkaw, Clerk and Registrar; Chas. G. Boyer, M. D., Inspector; all of Annandale.

Commercial, Cumberland county; population, 2,604. Harrison Hollinger, President; Walter L. Sharp, Clerk and Registrar; Jos. N. Fowler, Inspector; all of Port Norris.

Cranbury, Middlesex county; population, 1,424. Jos. C. Chamberlain, President, Cranbury; C. Raymond Wicoff, Clerk; Registrar and Inspector, Cranbury.

Cranford, Union county; population, 3,641. John W. Heins, President; Alfred H. Miller, Clerk and Inspector; Frank R. Swackhamer, Registrar; all of Cranford.

Deerfield, Cumberland county; population, 3,311. E. R. Parvin, President; Registrar and Inspector; H. L. Cooper, Clerk; all of Deerfield.

Delaware, Camden county; population, 1,706. W. B. Graff, President and Registrar; W. B. Jennings, Clerk and Inspector, Haddonfield.

Delaware, Hunterdon county; population,*1,740. Wm. L. Dobbins, President; Sergeantsville; Harry Johnson, Clerk and Registrar, Rosemont; Dr. G. N. Best, Inspector, Rosemont.

Delran, Burlington county; population, 1,031. Wm. F. Krauder, President; George Friday, Clerk and Registrar, Bridgeboro.

Dennis, Cape Cay county; population, 1.751. James G. Stiles, President, Dennisville; I. S. Townsend, Clerk and Registrar, Clermont; Eugene Way, M. D., Inspector, Dennisville.

Denville, Morris county; population,——. Walter Shanger, President; Dover, R. F. D. No. 1; Joseph Ellsworth, Registrar, Denville.

Deptford, Gloucester county; population, 2,524. Jessie Hendrickson, President; Sewell, R. F. D. No. 4; Carroll C. Headley, Clerk, Registrar and Inspector, Westville, R. F. D. No. 1.

Dover, Ocean county; population, 2,452. Lucien B. Gravatt, President and Registrar; Theodore Fischer, Clerk; Dr. Frank Brouwer, Inspector, all of Toms River.

Downe, Cumberland county; population, 1,519. A. B. Campbell, President; Shep. Campbell, Clerk; Dr. Husted, Inspector, all of Newport.

Eagleswood, Ocean county; population, 550. O. C. Cramner, President; Philip R. Sprague, Clerk, West Creek.

Eastampton, Burlington county; population, 508. S. P. Comegys, President, Smithville; J. Oatman, Clerk and Registrar, Smithville; Dr. Vandeveer, Inspector, Mt. Holly.

East Amwell, Hunterdon county; population, 1,203. D. S. Lowe, President, Ringoes, R. D. No. 2; John J. Horn, Clerk and Registrar, Hopewell, R. D. No. 1; Dr. P. C. Young, Inspector, Ringoes.

* **East Brunswick,** Middlesex county; population, 1,602. Henry Warnsdorfer, Clerk and Registrar; New Brunswick, R. F. D. No. 2.

East Greenwich, Gloucester county; population, 1,406. William E. Cook, President; Mt. Royal; James C. Dauson, Clerk and Registrar, Mickleton; Samuel Stetser, Inspector, Clarksboro.

East Windsor, Mercer county; population, 941. Geo. H. Wyckoff, President, Hightstown; S. L. Mount, Registrar, Etra; Dr. C. M. Franklyn, Inspector, Hightstown.

Eatontown, Monmouth county; population, 2,076. Wm. J. Darby, President; Perry B. Cook, Clerk; Wm. T. Taylor, Registrar; Dr. H. T. Partree, Inspector, all of Eatontown.

Egg Harbor, Atlantic county; population, 1,110. R. H. Steele, President, Idlewood; Wm. Hanenstein, Clerk and Registrar, Absecon; Dr. Ernst Zille, Inspector, Scullville.

Elk, Gloucester county; population, 1,022. Edward E. Miller, President; Harry C. Ivins, Clerk and Registrar, Aura.

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* No report received.

Elsinboro, Salem county; population, 419. J. L. Smith, President; Franklin T. Ayares, Clerk; Wm. D. Griscom, Registrar, all of Salem, R. D. No. 3.

Evesham, Burlington county; population, 1,408. Elmer Read, President; Dr. B. K. Brick, Secretary; William F. Powell, Registrar, all of Marlton.

Ewing, Mercer county; population, 1,889. Wm. C. Cook, President; Prospect Heights, R. D. No. 1; Walter Lanning, Clerk and Registrar, Trenton; Dr. E. B. Allen, Inspector, Trenton.

Fairfield, Cumberland county; population, 1,629. Jas. B. Mulford, President; Chas. H. Nichols, Clerk; James B. Mulford, Registrar; Harry E. Lore, M. D., Inspector, all of Fairton.

Fanwood, Union county; population, 1,616. I. G. Walker, President; Geo. H. Johnston, Clerk and Registrar, both of Scotch Plains; Dr. F. W. Wescott, Inspector, Fanwood.

Florence, Burlington county, population, 4,731. Frank Absalam, President; Byron Carty, Clerk and Registrar; Dr. David Baird, Inspector, all of Florence.

Frankford, Sussex county; population, 1,004. Victor Compton, President; Branchville, R. D. No. 2; Jesse W. Fountain, Clerk, Branchville; R. D. No. 2; George W. Smith, Registrar, Augusta, R. D. No. 1.

* **Franklin,** Bergen county; population, 1,954. Daniel Snyder, Clerk and Registrar, Midland Park.

Franklin, Gloucester county; population, 2,603. Rev. Chas. C. Ewan, President, Newfield; Chas. H. Lincoln, Clerk and Registrar, Newfield, R. F. D.; Henry Smith, Inspector, Newfield.

Franklin, Hunterdon county; population, 1,099. John W. Rinehart, President, Hamden; Elwood Nixon, Clerk and Registrar, Quakertown; Dr. Morris Leaver, Inspector, Quakertown.

Franklin, Somerset county; population, 2,395. Van N. Voorhees, President; Bound Brook; R. F. D., No. 2; Cornelius Cadmus, Clerk and Registrar; Middlebush; Dr. J. H. Cooper, Inspector, East Millstone.

Franklin, Warren county; population, 1,585. Walter B. Godfrey, President, West Portal; Chas. H. Hoagland, Clerk, Asbury.

Fredon, Sussex county; population, 457. Jesse M. Budd, President; Newton, R. D. No. 1; Peter Garris, Clerk, Newton, R. F. D. No. 2; W. N. Westbrook, Registrar, Newton, R. D. No. 1; Dr. E. W. Sandis, Inspector, Stillwater.

Freehold, Monmouth county; population, 2,329. C. Arthur Burke, President Freehold, R. F. D., R. V. Lawrence, Clerk, and Registrar; Dr. John C. Clayton, Inspector, all of Freehold.

Frelinghuysen, Warren county; population, 1,074. A. N. Wildrick, President; Blairstown; J. E. Bowman, Clerk and Registrar, Blairstown; Dr. F. Rorbach, Inspector, Johnsonburg.

Galloway, Atlantic county; population, 1,976. Richard Sooy, President; Oceanville; Chester Conover, Registrar, Oceanville; C. C. Allen, M. D., Inspector, Absecon.

Glassboro, Gloucester county; population, 2,821. George M. Keebler, President; Burris T. Tomlin, Clerk and Registrar; George Benninger, Inspector, all of Glassboro.

Gloucester, Camden county; population, 2,380. Charles Fell, President; Laurel Springs, R. F. D. No. 1; Joseph R. Powell, Clerk and Registrar; Sicklerville, R. F. D. No. 1; Dr. J. A. Smith, Inspector, Blackwood.

Green, Sussex county; population, 888. E. E. Cooper, President, Tranquility; I. L. Labor, Clerk and Registrar, Tranquility; J. C. Clark, Inspector, Andover.

Greenwich, Cumberland county; population, 1,145. Ethan P. Glaskey, Assessor; Dr. S. M. Snyder, Inspector, both of Greenwich.

Greenwich, Gloucester county; population, 874. Walter Mullen, President, Gibbstown; Jacob M. Allen, Clerk and Registrar, Gibbstown; Robert A. Reeves, M. D., Inspector, Paulsboro.

Greenwich, Warren county; population, 904. Jacob R. Rush, President; Stewartsville; William Sherrer, Clerk and Registrar, Bloomsbury; F. W. Curtis, M. D., Inspector, Stewartsville.

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* No report received.

Haddon, Camden county; population, 1,465. Alfred M. Matthews, President, Westmont; James St. C. Williams, Clerk and Registrar, Westmont; Edw. B. Rogers, Inspector, Collingswood.

Hamilton, Atlantic county; population, 2,271. John E. Iszard, President; Thompson G. Hoover, Clerk; Harry Jenkins, Registrar; Henry C. James, M. D., Health Officer, all of Mays Landing.

Hamilton, Mercer county; population, 7,899. F. B. Zandt, M. D., President, Hamilton Square; W. C. Rockhill Hart, Clerk, Trenton; Harry M. Rogers, Registrar, Hamilton Square; James N. Reed, Inspector, Trenton.

Hampton, Sussex county; population, 671. I. D. Williams, President; Baleville; J. W. Thompson, Clerk and Registrar; Swartswood; H. E. Ridell, M. D., Branchville.

Hanover, Morris county; population, 6,228. Dr. R. V. D. Totten, President; Stanley H. Lyon, Clerk, Registrar and Inspector, all of Morris Plains.

Hardwick, Warren county; population, 405. Jacob Bugle, President; John Yetter, Clerk; Marcus C. Hill, Registrar; Dr. H. O. Carhart, Inspector, all of Blairstown, R. F. D. No. 2.

Hardyston, Sussex county; population, 5,210. Thos. D. Edsall, President; Hamburg; Nicholas Farber, Registrar, Hamburg; Dr. Thomas L. Pellett, Inspector, Hamburg.

* **Harmony,** Warren county, population, 1,490. Freeman Schuler, Registrar, Phillipsburg, R. F. D. No. 2.

Harrison, Gloucester county; population, 1,682. W. R. Skinner, President, Glassboro; Eli Heritage, Registrar, Richwood.

Hillsboro, Somerset county; population, 2,313. Cornelius Conover, President; Belle Mead; J. E. Anderson, Clerk, Neshanic; H. A. Van Nuys, Jr., Registrar and Inspector, Millstone.

Hillsdale, Bergen county; population, 1,072. George W. Saul, President; A. L. Fritz, Clerk; George R. Stegman, Registrar, all of Hillsdale, George F. Shafer, Inspector.

Hillside, Union county; population, ——. Frank Baker, President; Elizabeth, R. F. D. No. 1; John Leyser, Clerk, Lyons, Farms; Dr. F. H. Lovell, Inspector, Newark.

Hohokus, Bergen county; population, 1,881. Frank Z. Dator, President; Mahwah; Albert Winter, Clerk and Registrar, Mahwah; C. P. De Yoe, Inspector, Ramsey.

* **Holland,** Hunterdon county; population, 1,699. H. B. Vansyckel, Clerk and Registrar, Mt. Pleasant.

Holmdel, Monmouth county; population, 1,058. C. Edward Tilton, President, Holmdel; Wm. M. Ackerson, Clerk and Registrar, Hazlet; Dr. Harvey W. Hartman, Inspector, Keyport.

Hope, Warren county; population, 1,119. Chas. H. Hartmann, President, Hope; C. S. Bartow, Clerk and Registrar, Great Meadows; Dr. W. Storm, Inspector, Hope.

Hopewell, Cumberland county; population, 1,818. B. Frank Sharp, President, Bridgeton, R. F. D.; C. E. Bowen, Clerk, Shiloh.

Hopewell, Mercer county; population, 3,171. Isaac B. Scudder, President, Titusville; Jos. R. Burroughs, Clerk, Pennington, R. F. D. No. 1; Dr. J. W. Richards, Pennington.

Howell, Monmouth county; population, 2,703. Benjamin M. Cooper, President, Lakewood; James H. Butcher, Clerk and Registrar, Freehold, R. F. D.; Walter P. Havens, Inspector, Farmingdale.

* **Hudson county;** population, 537,231. James L. Lynch, Secretary.

Independence, Warren county; population, 867. A. B. Leigh, President; Great Meadows; F. W. Haggerty, M. D., Clerk, Vienna; E. Y. Williams, Assessor, Great Meadows.

* **Jackson,** Ocean county; population, 1,325. George C. Hankins, Clerk, Vanhiseville.

Jefferson, Morris county; population, 1,303. Horace L. Cook, President, Lake Hopatcong; Charles Chamberlain, Clerk and Registrar, Wharton, R. D. No. 2; Dr. Joseph R. Riggs, Inspector, Oak Ridge, R. F. D.

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* No report received.

Kingwood, Hunterdon county; population, 1,265. Wm. J. Hoagland, President; Wm. W. Case, Clerk and Registrar; F. S. Grim, M. D., Inspector, all of Baptisttown.

Knowlton, Warren county, population, 1,556. Edward Dutt, President, Delaware, R. F. D. No. 1, W. B. Gilbert, Clerk and Registrar, Columbia.

Lacey, Ocean county; population, 602. Dr. G. E. Wallace, President and Inspector, Forked River; B. F. Mathews, Clerk and Registrar.

Lafayette, Sussex county; population, 683. Edward Ackerson, President; Wm. S. Vought, Clerk, Registrar, all of Lafayette.

* **Lakewood,** Ocean county; population, 5,149. Geo. Hurlburt, Secretary; A. M. Heron, M. D., Health Officer, both of Lakewood.

Landis, Cumberland county; population, 6,435. Dr. L. F. Hatch, President and Inspector; Vineland; Ernest E. Howe, Clerk and Registrar, Vineland, R. D. No. 3; R. Q. Bogg, Plumbing Inspector, Vineland.

Lawrence, Cumberland county; population, 1,746. Ernest L. Mulford, President; J. Wayne, Mulford, Clerk; Furman Sheppard, Registrar; Dr. E. B. Peace, Inspector, Cedarville.

Lawrence, Mercer county; population, 2,522. John C. Hill, President, R. F. D. No. 4, Princeton; Frank Pierson, Clerk and Registrar, Lawrenceville; E. K. Fee, M. D., Inspector, Lawrenceville.

Lebanon, Hunterdon county; population, 2,179. Geo. Allegar, President, Califon; Geo. H. Castner, Clerk and Registrar, Califon, R. F. D. No. 1.

Linden, Union county; population, 1,988. John S. Mesler, President, Linden; Frank S. Stimson, Clerk and Registrar, Linden; Dr. J. S. Young, Inspector, Rahway.

Little Egg Harbor, Ocean county; population, 388. B. Frank Holman, President, Parkertown; Jay C. Parker, Clerk and Registrar, Parkertown; Chas. H. Conover, M. D., Inspector, Tuckerton.

Little Falls, Passaic county; population, 3,750. Chas. Booth, President; Wm. M. Zeliff, Clerk and Registrar, both of Little Falls.

Livingston, Essex county; population, 1,025. F. M. Hoffman, President, Livingston; Wm. Rathbun, Clerk and Registrar, Livingston; Dr. E. E. Peck; Inspector, Caldwell.

* **Lodi,** Bergen county; population, 693. Ferdinand Kallminger, Secretary, Little Ferry.

Logan, Gloucester county; population, 1,523. Wilbur F. Beckett, President, Swedesboro, R. F. D.; S. B. Platt, Clerk and Registrar, Bridgeport; P. E. Stillwagan, Inspector, Bridgeport.

* **Long Beach,** Ocean county; population, 109. Charles E. Sherborne, Clerk, Long Branch.

* **Lopatcong,** Warren county; population, 766. Frank Cline, Registrar, Shimers.

Lower, Cape May county; population, 1,188. George Dickinson, President, Erma; J. Hollis Hoffman, Clerk and Registrar, Cold Spring; Dr. W. A. Lake, Inspector, Erma.

Lower Alloways Creek, Salem county; population, 1,252. Lewis F. Smith, President, Hancock's Bridge; Edward Hancock, Registrar, Hancock's Bridge.

* **Lower Penns Neck,** Salem county; population, 1,544. Ellsworth L. Irelan, Clerk and Registrar, Salem.

Lumberton, Burlington county; population, 1,768. Louis Baumbach, President, Lumberton; E. C. Davis, Clerk, Registrar and Inspector Haines-port.

Madison, Middlesex county; population, 1,621. E. Bowne, President, Matawan, R. D. No. 1; James Fountain, Clerk, Old Bridge, R. D. No. 1; D. H. Brown, Registrar, Old Bridge, R. D. No. 1; Ed. Barker, Inspector, Matawan, R. D. No. 1.

Manalapan, Monmouth county; population, 1,375. Edw. Hendrickson, President; G. B. Conover, Clerk; W. Denise Herbert, Registrar, all of Englishtown.

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* No report received.

Manchester, Ocean county; population, 1,112. E. F. Larrabee, President; Harold Pittis, M. D., Clerk and Inspector; E. T. Beers, Registrar, all of Lakehurst.

*** Mannington,** Salem county; population, 1,606. Jonathan B. Grier, Clerk and Registrar, Salem.

Mansfield, Burlington county; population, 1,526. A. H. Patterson, M. D., President and Inspector, Georgetown; Jos. H. Armstrong, Clerk and Registrar, Columbus.

Mansfield, Warren county; population 1,238. Wm. P. Boylor, President, Washington, R. D.; John C. Beaty, Secretary, Pt. Murray R. D.; Wm. Lance, Inspector, Pt. Murray, R. D.

Mantua, Gloucester county; population, 1,529. Isaac Dilkes, President; Sewell; W. S. Hurff, Registrar, Sewell; E. J. Hillegas, Inspector, Mantua.

*** Marlboro,** Monmouth county; population, 1,754. J. D. Ely, M. D., Clerk, Marlboro.

Matawan, Monmouth county; population, 1,472. John D. Ivins, President, Cliffwood; Daniel Martin, Clerk, Matawan; Richard Heuser, Registrar, Matawan, R. F. D.; Nathan Erwin, M. D., Inspector, Matawan.

Maurice River, Cumberland county; population, 2,124. Raymond Henderson, President, Port Elizabeth; Henry Reeves, Clerk and Registrar, Leesburg.

Medford, Burlington county; population, 1,903. Joshua S. Wills, President; Wm. M. Potts, Clerk and Registrar, both of Medford.

Mendham, Morris county; population, 792. Wm. C. Thomas, President, Mendham; Frank Dean, Clerk, Brookside; F. H. Garabrant, Registrar, Brookside; Dr. W. A. McMurtree, Inspector, Mendham.

Middle, Cape May county; population, 2,974. Edwin G. Hewitt, President; Cape May Court House; V. N. Erricson, Clerk and Registrar, Dias Creek; J. Morgan Dix, Inspector, Cape May Court House.

Middletown, Monmouth county; population, 6,653. Antonius Gibson, President, Port Monmouth; Howard W. Roberts, Clerk, New Monmouth; Owan Sickles, Registrar, Navesink; Dr. O. W. Budlong, Inspector, Belford.

Midland, Bergen county; population, 1,480. Otto Weisgerber, President; Ridgewood, R. D. No. 1; John D. Bogert, Clerk and Registrar, Ridgewood, R. D. No. 1; Frank Freeland, M. D., Inspector, Maywood.

Millburn, Essex county; population, 3,720. Ernest L. Smithers, President, Old Short Hills Road; Charles R. Reeve, Clerk and Registrar, Wyoming; Felix McGee, Inspector, Millburn.

Millstone, Monmouth county; population, 1,461. A. B. Chamberlin, President, Perrineville; Geo. J. Ely, Clerk and Registrar, Cranbury, R. F. D.

Monroe, Gloucester county; population, 3,015. Herman Sutz, President; John W. McClure, Clerk and Registrar, all of Williamstown.

Monroe, Middlesex county; population, 1,723. John D. Butcher, President, Cranbury, R. F. D.; Robert R. Vandenbergh, Clerk, Prospect Plains.

Montague, Sussex county; population, 621. George Hooker, President; Geo. McCarty, Clerk and Registrar, Port Jervis, R. D. No. 1, N. Y.; Dr. G. O. Pobe, Inspector, Port Jervis, N. Y.

Montgomery, Somerset county; population, 1,637. Wm. I. Robinson, President, Belle Mead; Jacob Boice, Clerk, Harlinger; C. B. Allshouse, Registrar, Skillman.

Montville, Morris county; population, 1,944. Frank H. Starkey, Clerk; Fred Van Duyne, Registrar, both of Montville.

Morris, Morris county; population, 3,161. Thos. T. Sands, President, Registrar and Inspector; Paul Jamieson, Clerk, Morristown.

Mount Laurel, Burlington county; population, 1,573. Edward L. Godfrey, President; Benj. M. Haines, Clerk and Registrar; Dr. F. G. Stroud, Inspector, Moorestown.

Mount Olive, Morris county; population, 1,160. Elmer Lozier, President, Stanhope; Hez. Smith, Clerk and Registrar, Flanders; John N. Miller, Inspector, Netcong.

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* No report received.

* **Mullica,** Atlantic county; population, 811. John D. Carver, Clerk, Elwood.

Neptune, Monmouth county; population, 5,551. Leonard Hulit, President; J. L. Thompson, Clerk; Fred D. Hurly, Registrar, all of Asbury Park.

New Hanover, Burlington county; population, 948. Howard Allen, M. D., President, New Egypt; Chas. Remine, Sr., Clerk, Wrightstown; Howard Allen, M. D., Inspector, New Egypt.

* **New Providence,** Union county; population, 526. Chas. J. Drake, New Providence.

Northampton, Burlington county; population, 5,652. Wm. H. Mason, President; M. H. Girven, Clerk and Registrar; Dr. R. H. Parsons, Inspector all of Mt. Holly.

North Bergen, Hudson county; population, 15,662. A. E. Asmus, President; James Nolan, Clerk; Thomas Dubelheiss, Registrar; August Berberich, Inspector, all of North Bergen.

* **North Brunswick,** Middlesex county; population, 990. Michael Anderson, Jr., Clerk, New Brunswick.

* **North Hanover,** Burlington county; population, 696. Benjamin Harker, Jr., Clerk Wrightstown.

North Plainfield, Somerset county; population, 886. W. de La R. Anderson, President; Francis E. Bodin, Clerk; Theo. H. A. Luerssen, Inspector, all of Watchung.

Ocean, Monmouth county; population, 1,377. Borden A. Jeffrey, President; Elberon; Harry G. Van Note, Clerk and Registrar, Oakhurst; Dr. Stanley Nichols, Inspector, Long Branch.

Ocean, Ocean county; population, 397. P. W. Warren, President; W. B. Wilkins, Clerk; H. S. Brown, Inspector, all of Waretown.

Oldmans, Salem county; population, 1,364. Harvey Gaventa, President; Geo. S. Justice, Clerk and Registrar; Dr. H. T. Johnson, Inspector, all of Pedricktown.

Orvil, Bergen county; population, 970. H. D. Mills, President; Chas. H. Henion, Clerk and Registrar, all of Waldwick.

* **Overpeck,** Bergen county; population, 4,512. Howard B. Ficken, Registrar, Ridgefield Park.

Oxford, Warren county; population, 3,444. Charles R. Carson, President; Michael Mountain, Clerk and Registrar, both of Oxford.

Pahaquarry, Warren county; population, 205. Ernest Von Hagar, President, Dunfield; J. G. Spangenburg, Clerk, Mill Brook; Hiram Zimmerman, Assessor.

Palisade, Bergen county; population, 1,141. Frederick Heine, President, New Bridge; George Gengenagel, Clerk and Registrar, New Milford; Chester A. King, M. D., Inspector, Oradell.

Palmyra, Burlington county; population, 2,801. James E. Russell, President; John Shade, Clerk and Registrar; Frederick Blackburn, Inspector, all of Palmyra.

* **Passaic,** Morris county; population, 2,165. Walter J. Swenson, Clerk and Registrar, Stirling.

Pemberton, Burlington county; population, 1,679. W. E. Woolston, President; Mt. Holly, M. W. Hargrove, Clerk, Brown's Mills; Barclay Seeds, Registrar, Pemberton; Dr. E. Hollingshead, Inspector, Pemberton.

* **Pensauken,** Camden county; population, 4,169. Harry E. Horner, Clerk and Registrar, Merchantville.

Pequannock, Morris county; population, 1,921. F. M. Prescott, President, Riverdale; Alfred Gilland, Clerk and Registrar, Pompton Plains; C. D. V. Romundt, Inspector, Pompton Plains.

Pilesgrove, Salem county; population, 1,786. W. C. Richman, President; M. W. Buzby, Registrar; F. P. Vanlier, Inspector, Woodstown.

* **Piscataway,** Middlesex county; population, 3,523. George W. Coriell, Registrar, New Market.

* **Pittsgrove,** Salem county; population, 2,394. George Schalick, Clerk and Registrar, Centreton.

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* No report received.

Plumsted, Ocean county; population, 1,123. Harley Henderson, President; George Hartshorn, Clerk and Registrar; Dr. J. Wm. Bichler, Inspector; all of New Egypt.

* **Pohatcong,** Warren county; population, 3,202. W. I. Jacoby, Finesville.

Pompton, Passaic county; population, 4,044. E. W. Wheeler, President; J. C. Beam, Clerk and Registrar; D. N. Shippee, M. D., Inspector, all of Midvale.

Princeton, Mercer county; population, 1,178. Dr. E. H. Bergen, President and Inspector; J. H. Warren, Clerk and Registrar, all of Princeton.

Quinton, Salem county; population, 1,091. Wm. Radel, President; Andrew S. Harris, Clerk and Registrar, both of Quinton.

Randolph, Morris county; population, 2,307. John Pugsley, President; Dover; Ellison Coe, Clerk, Registrar and Inspector, Mt. Freedom.

* **Raritan,** Hunterdon county; population, 1,310. Theo. H. Dilts, Clerk and Registrar, Three Bridges.

Raritan, Middlesex county; population, 2,707. Wm. R. Drake, President, Stelton; W. R. Woodward, Clerk, New Brunswick; Wm. T. Woener, Registrar and Inspector, Metuchen.

Raritan, Monmouth county; population, 1,583. J. L. T. Webster, President, Hazlet; Herman L. Lehr, Clerk, Registrar and Inspector, Keansburg.

Readington, Hunterdon county; population, 2,569. Calvin C. Huff, President, Three Bridges; W. T. Hoffman, Clerk and Registrar, White House Station; Dr. F. L. Johnson, Inspector, Stanton.

Riverside, Burlington county; population, 4,011. Jacob Theurer, President; Chas. Heiss, Clerk and Registrar; Dr. C. B. Lambert, Inspector, all of Riverside.

Rivervale, Bergen county; population, 450. Dr. Jos. Kucher, President and Inspector; Percy A. Post, Clerk and Registrar, all of Westwood.

Rockaway, Morris county; population, 4,835. James Orstead, President, Wharton, R. F. D. No. 1; William Winters, Clerk and Registrar, Hibernia.

* **Roxbury,** Morris county; population, 2,414. E. W. Kilpatrick, Clerk and Registrar, Landing.

Saddle River, Bergen county; population, 3,047. Adam Hopper, President; Isaac A. Hopper, Clerk and Registrar, both of Fair Lawn.

* **Sandyston,** Sussex county; population, 855. D. A. A. Ranson, Clerk and Inspector, Layton.

Sayreville, Middlesex county; population, 5,783. Frank Hartman, President; Thomas Creamer, Clerk and Registrar; John Keegan, Inspector, all of Sayreville.

* **Shamong,** Burlington county; population, 483. J. W. B. Jennings, Assessor, Indian Mills, No Board.

Shrewsbury, Monmouth county; population, 3,238. Harry G. Borden, Registrar and President, Shrewsbury; George H. Lippincott, Clerk, Little Silver; Dr. B. F. King, Inspector, Shrewsbury.

Southampton, Burlington county; population, 1,778. John W. Brushwood, President; Charles G. Naylor, Clerk and Registrar; J. C. Brown, M. D., Inspector, all of Vincentown.

South Brunswick, Middlesex county; population, 2,443. Charles R. Cox, President; Wm. Perkins, Clerk, Registrar and Inspector, both of Cranbury.

South Harrison, Gloucester county; population, 694. Mathew Allen, President; Mullica Hill, R. F. D; D. C. Lippincott, Clerk and Registrar, Harrisonville; Samuel H. Ashcraft, M. D., Inspector, Mullica Hill.

South Orange, Essex county; population, 2,979. Frederick A. Runyon, President; Edward R. Arcularius, Clerk; Wm. G. Miller, Registrar; Dr. G. Herbert Taylor, Health Officer, all of Maplewood.

Sparta, Sussex county; population, 1,579. Wm. Huffman, President; Aaron Munson, Clerk and Registrar, both of Sparta.

Springfield, Burlington county; population, 1,278. Howard Letts, President, Jobstown, R. D.; Aaron H. Burtis, Clerk and Registrar, Mt. Holly R. D. No. 2; Dr. L. G. Hollingshead, Inspector, Pemberton.

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* No report received.

Springfield, Union county; population, 1,246. Jos. Koch, President; Lewis L. Terry, Clerk and Registrar; Dr. P. H. Dingler, Inspector, all of Springfield.

Stafford, Ocean county; population, 934. C. H. Cramer, President; Geo. F. Pharo, Clerk and Registrar; W. B. Sprague, Inspector, all of Manahawken.

Stillwater, Sussex county; population, 796. Chas. R. Westbrook, President, Middleville; O. Van Horn, Clerk and Registrar, Stillwater.

Stowe Creek, Cumberland county; population, 880. B. B. Ogden, President, Greenwich, R. D. No. 1; Wm. H. Davis, Clerk, Bridgeton R. D. No. 3.

* **Tabernacle,** Burlington county; population, 487. George H. Wisham, Clerk, Vincentown, R. F. D. No. 2.

Teaneck, Bergen county; population, 2,082. Robert A. Shaw, President; Englewood, R. F. D.; James B. Armstrong, Clerk and Registrar, Englewood; Geo. F. Schafer, Inspector, Hackensack.

Tewksbury, Hunterdon county; population, 1,742. F. L. Lindabury, President; Lebanon, R. D. No. 2; Hezehiah Philhower, Clerk and Registrar, Califon; F. A. Apgar, M. D., Inspector, New Germantown.

Union, Bergen county; population, 4,076. Alfred H. Crankshaw, President; H. Leroy Dikeman, Clerk; Henry Stagmier, Inspector, all of Lyndhurst.

Union, Hunterdon county; population, 930. William Best, President; Morris Stockton, Clerk and Registrar; A. J. Hahn, Inspector, all of Pattenburg.

Union, Ocean county; population, 982. John W. Chew, President; M. M. Olnowich, Clerk and Registrar; Dr. Howard Conover, Inspector, all of Barnegat.

Union, Union county; population, 3,419. D. H. Beach, President; Fred Stone, Clerk, Registrar and Inspector, both of Union.

Upper, Cape May county; population, 1,483. Harry Young, President; Beesleys Point; Jesse T. Young, Clerk, Beesleys Point; S. C. G. Stephens, Registrar, Tuckahoe; Randolph Marshall, Inspector, Tuckahoe.

Upper Freehold, Monmouth county; population, 2,053. Jos. C. Johnston, President, Allentown; John Y. Sinton, Clerk, Imlaystown; William Quicksall, Registrar, Hornerstown.

Upper Penns Neck, Salem county; population, 744. David W. Wright, President; Willard Layton, Clerk and Registrar; Dr. C. L. Flemming, Inspector, all of Pennsgrove.

Upper Pittsgrove, Salem county; population, 1,754. John Wiltsee, President, Monroeville; R. A. Robinson, Clerk and Registrar, Monroeville; Geo. W. Fitch, Inspector, Daretown.

Vernon, Sussex county; population, 1,675. Lewis F. Kinney, President; McAfee Valley; N. P. Ryerson, Registrar, Glenwood; E. P. Uptegrove, M. D., Inspector, Vernon.

Voorhees, Camden county; population, 1,174. W. I. Tomlinson, President, Kirkwood; S. H. Gardiner, Clerk and Registrar, Ashland; Wm. A. Wescott, M. D., Inspector, Berlin.

Wall, Monmouth county; population, 3,817. Joseph H. Brown, President, Lake Como;; Geo. E. Rogers, Clerk, Registrar and Inspector, Belmar.

Walpack, Sussex county; population, 286. Eugene Rosenkrans, President; Flatbrookville; J. W. Bunnell, Registrar, Walpack Center; L. B. Smith, Inspector, Bushkell, Pa.

Wantage, Sussex county; population, 2,077. Jasan House, President; S. M. Parcell, Clerk and Registrar; H. D. Vangaasbeck, M. D., Inspector, all of Sussex.

* **Warren,** Somerset county, population, 1,036. Geo. Bowers, Secretary, Warrenville.

Washington, Bergen county; population, 100. J. Henry Thomas, Assessor, Westwood.

Washington, Burlington county; population, 597. Thos. K. Sooy, President; A. E. Koster, Assessor; Green Bank, Myrtle; Frank M. D., Inspector, Egg Harbor City.

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* No report received.

Washington, Gloucester county; population, 1,396. Charles Nicholson, President, Sewell; G. R. Hurff, Clerk and Registrar, Turnersville.

Washington, Mercer county; population, 1,090. Chas. H. Conover, Hightstown; E. B. Yard, Clerk; C. N. Hutchinson, Registrar, Robbinsville; F. M. Arthur, M. D., Inspector, Hamilton Square.

Washington, Morris county; population, 1,900. J. D. Bum, President; Califon, R. D.; G. H. Sliker, Clerk and Registrar, Pt. Murray; C. A. S. Gullik, Inspector, Beatystown.

Washington, Warren county; population, 1,023. D. M. Wyckoff, President and Inspector; E. C. Snyder, Clerk, Registrar and Inspector; O. H. Perry, Inspector; Chas. Creveling, Inspector, all of Washington, R. F. D. No. 1.

Waterford, Camden county; population, 1,484. F. C. Schleinkofer, President; Theo. Schleinkofer, Clerk and Registrar; Dr. J. I. Hoverder, Inspector, all of Atco.

Wayne, Passaic county; population, 2,281. H. L. Hammond, President; Mt. View; Larry Berdan, Clerk, R. F. D. No. 1, Paterson; Thos. D. Ryerson, Registrar, Wayne; Aaron Lawane, Inspector, R. F. D. No. 1, Paterson.

Weehawken, Hudson county; population, 11,228. Emile W. Granert, President; Henry C. Hansen, Clerk; John G. Meister, Registrar, all of Weehawken.

* **Westampton,** Burlington county; population, 564. Harvey J. Gaskill, Secretary, Mt. Holly, R. D. No. 1.

West Amwell, Hunterdon county; population, 866. Chas. A. Slack, President; Lambertville, R. D. No. 2; Geo. H. Carr, Clerk and Registrar, Lambertville, R. F. D. No. 2; F. W. Larison, M. D., Inspector, Lambertville.

West Deptford, Gloucester county; population, 2,057. Joseph A. Moore, President; Thorofare; James Carter, Clerk and Registrar, Thorofare; Dr. James Hunter, Inspector, Westville.

West Milford, Passaic county; population, 1,967. Walter Vreeland, President; Macopin; John M. Weaver, Clerk and Registrar, Newfoundland.

West Windsor, Mercer county; population, 1,342. Jacob R. Wyckoff, President; Princeton Junction; Hiram A. Cook, Clerk, Dutch Neck; H. J. Coleman, Registrar, R. F. D. No. 2, Trenton.

Weymouth, Atlantic county; population, 899. A. Campbell President; Tuckahoe; F. R. McKeague; Clerk and Registrar, Tuckahoe; R. Marshall, Inspector, Dorothy.

White, Warren county; population, ——. Dr. G. W. Cummins, Belvidere; D. S. Spangenberg, Clerk, Belvidere.

Willingboro, Burlington county; population, 562. Jos. Wills, Jr., President, Burlington, R. D., Howard J. Hart, Clerk, Rancocas; Dr. E. D. Prickett, Inspector, Mt. Holly.

Winslow, Camden county; population, 2,919. Frederick Briestley, President, Elm; John F. Leed, Clerk, Waterford; James T. Russell, Registrar; Cedar Brook, Dr. Cunningham, Inspector, Hammonton.

Woodbridge, Middlesex county; population, 8,948. B. J. Dunigan, President and Assessor, Woodbridge; Jos. L. Gill, Clerk, Port Reading; John H. Concannon, Inspector, Woodbridge.

* **Woodland,** Burlington county; population, 475. W. J. Buzby, Clerk, Chatsworth.

Woolwich, Gloucester county; population, 1,136. Benj. Shoemaker, President, Swedesboro; C. H. Brown, Clerk and Registrar, Swedesboro; V. E. De Grofft, M. D., Inspector, Swedesboro.

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* No report received.

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