

ANNUAL REPORT

OF THE

New Jersey State Hospital

TRENTON, N. J.

1921

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ANNUAL REPORT

OF THE

BOARD OF MANAGERS

OF THE

New Jersey State Hospital, *Trenton*

AT

TRENTON, N. J.

FOR THE

Year Ending June 30th

1921

TRENTON, N. J.

PUBLISHED BY THE STATE

1921

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**ANNUAL REPORT OF THE BOARD OF MANAGERS
OF THE NEW JERSEY STATE HOSPITAL
AT TRENTON.**

To the Honorable Burdette G. Lewis,

Commissioner of Institutions and Agencies:

SIR:—The Board of Managers of the New Jersey State Hospital at Trenton, respectfully submits this, its 74th Annual Report covering the period from July 1, 1920, to July 1, 1921, pursuant to law.

The reports of the Medical Director and Warden of the Institution made to the Board of Managers and covering the work of their respective departments, together with the detailed statements and statistical tables, will be found annexed to this report.

These reports, taken together, constitute in themselves a complete report of the progress of the Institution during the period above named and the Board's report will therefore be confined to a general summary of their contents.

THE WORK OF THE MEDICAL DEPARTMENT

The following summary of the Medical Director's report is submitted:

A total of 2,033 patients remained under care in the Hospital on July 1, 1921. Of these, 1,084 were men and 949 were women. The private patients in the Institution at the end of the year numbered 317, of which 129 were men and 188 were women. The number of indigent patients in the Institution at the close of the year was 1,716, which the Medical Director points out is an increase of but 27 over the number of indigent patients in the Institution in the year 1919, while there were 1,771 indigent patients in the Hospital on July 1, 1918. It is apparent that there were 55 less indigent patients in the Institution on July 1, 1921 than were there on July 1, 1918.

The Medical Director points out that had the number of indigent patients increased by 70 patients per year, (an increase below the average for 4 years prior to 1918) there would have been in the Hospital at the close of the current year 2,040 indigent patients instead of 1,716. That is to say, had the same conditions prevailed as prevailed prior to the year 1918, there should have been an increase of 324 indigent patients for the three years. On the other hand, the number of private patients admitted during the year has increased from 73 in 1916 to 349 in the year just passed.

In 1916 the private patient admissions were but eleven per cent of the total admissions; in 1918, seventeen per cent; in 1919, twenty per cent; in 1920, thirty per cent and in 1921, forty-five per cent.

The receipts from private patients during the past year exceeded the estimate by \$50,830, which sum has gone into the State Treasury. On the other hand, had the number of indigent patients increased in the average proportion for the year prior to 1918, the additional expense for maintenance of excess of indigent patients would have approximated \$116,000 for the year. The Medical Director therefore estimates that the total saving to the State during the past year is approximately \$167,000 which sum is found by adding the excess amount received for private patients to the amount saved by lack of indigent patients.

As the result of treatment in the last three years, over 1,000 patients classified in the functional group have been discharged. In the last year 25 of this number were re-admitted, but 8 of these have since been discharged after the inadequate work of former admissions was completed, leaving only seventeen of these re-admissions in the Hospital today and at least ten of these should finally recover. Of the number of re-admissions of this group (25) five were men and twenty women.

In the functional group there were admitted in the last year 194 men and 265 women, total of 459. There were discharged during the year from this group 147 men and 204 women, total 351. The proportion of discharges to admissions in this group is seventy-five per cent. This proportion of discharges, allowing ten per cent for cases which have not recovered and which is a large proportion, would give us sixty-five per cent recovered in the functional group against an average of thirty-seven per cent for ten years prior to 1918.

It is interesting to note that the alcoholics which averaged twenty-one per cent of the male admissions for a period of ten years dropped to seven per cent in 1920, and in 1921 they averaged only three per cent of the total male admissions.

The Medical Director discusses at length the various developments of the treatment used in the Institution during the past year, in his report. The Board begs leave to refer to the Medical Director's report in this particular.

THE WORK OF THE BUSINESS DEPARTMENT

The work of the Business Department during the past year is so fully set out in the Warden's Report, as to leave little for comment here. A noteworthy accomplishment of the department was the replacing of the joists, floors and ceilings of the old main building, which by reason of age had become so badly rotted as to be dangerous.

The Institution's property and buildings were kept in their usual excellent repair through the Warden's efforts and numerous minor improvements effected. Two such minor improvements were the building of a new blacksmith's shop, a refitting of the machine shop and woodworking shop with new machinery, by which the Warden was enabled to do the horse-shoeing and machine work and woodworking for the Institution, thus effecting a saving to the State.

The fire prevention and protection program was continued by the building of two fire stairways in the main building, fire proofing four stairways at the annex building, the building of a wall for the protection of the reservoir and the erection of a four-way Siamese hydrant.

A perusal of the Warden's Report of his operation of the Hospital convinces the Board that this department has been managed with its usual efficiency and economy during the past year.

NEW BUILDINGS

During the year the Psychopathic Hospital wing, forming an addition to the present Dix Building for female patients, was completed, as well as the Psychopathic Hospital for male patients. The three buildings will accommodate 150 patients and there is still need for another unit for the male department in order to bring the capacity of the Psychopathic Hospital buildings up to 200 patients, so that all cases admitted can be kept in these buildings sufficiently long for the administration of proper and adequate treatment.

The last Legislature appropriated \$250,000 for a congregate dining room and home for the male attendants and married couples, for which plans are now being drawn. When completed this building will supply one of the Institution's most pressing needs.

OAKLANDS DAIRY FARM

A noteworthy addition to the Institution's plant during the past year has been the purchase of the Oaklands Dairy Farm, situate near Trenton Junction. While the actual transfer of the farm to the State had not been made at the date of this report, all preliminary negotiations were completed and the acquisition of this property may well be treated as an achievement of the past year.

It has become evident to the Board that the development of the Institution will eventually compel the conversion of the farm land surrounding the Institution's main building into sites for buildings and into other uses not suited for farming. The Oaklands Dairy Farm came on the market during the past year and thus an opportunity was presented to purchase a well equipped dairy farm, lying adjacent to other lands of the Institution, at a very reasonable price. By the purchase of this tract of land the Board believes that the Institution is now in a position to continue the development of its present plant without crowding out any of the farming activities which the Board believes to be both profitable to the State and beneficial to the health of a large number of patients.

THE INSTITUTION'S FUTURE NEEDS

One of the Institution's most pressing needs is a staff house for the single members of the Medical Staff, with individual cottages for the married members of the Medical Staff. At the present time the housing and dining facilities of the Institution for its Medical Staff are entirely unsuitable.

Kitchen and dining room accommodations are also required at the Oaklands Farm. This is due to the fact that while the equipment there is quite complete, the buildings were not designed to accommodate any considerable number of people. In operating the farm for the Institution, it will be necessary to keep a number of patients there for whom the kitchen and dining room accommodations should be improved.

Another pressing need of the Institution is adequate fencing. This need has been dwelt upon in a number of past reports. An appropriation is now available to do part of this work, but it is the recommendation of the Board that wire fencing be continued until it entirely surrounds the Institution, both as a measure of safety to the public and of convenience for the Hospital authorities.

SCIENTIFIC PUBLICATIONS AND VISITORS

The Board desires to call especial attention to a number of papers published by the Medical Director, as well as the large number of lectures delivered by him in relation to the work of the Institution during the past year. In addition, the Board desires to express its gratification by reason of the number of distinguished visitors who have been attracted to the Institution during the past year by the work done there.

In concluding, the Board desires to take this opportunity of commending the work of the Medical Director and the Medical Staff during the past year and the work of the Warden and his department.

Dated, July 1, 1921.

Respectfully submitted,

ARTHUR D. FORST,

PAUL M. MECRAY,

WILLIAM A. KLEMANN,

MARY B. FOX,

GEORGE T. TRACY.

MEDICAL DIRECTOR'S REPORT

To the Board of Managers of the New Jersey State Hospital at Trenton:

GENTLEMEN:—I have the honor to present the seventy-fourth annual report of the operations of the State Hospital at Trenton. At the beginning of the fiscal year there were in residence 1,045 men, 873 women, a total of 1,918 patients. Of this number 1,670 patients were indigent, 229 private. Total admissions during the year were 912,—450 men and 462 women. Of this number, 607 were received on regular commitment papers and 269 were admitted as voluntary patients. Of those nominally admitted for discharge at the end of their four months' visit there were seven males and one female. The number of cases under treatment during the year was: men, 1495; women, 1335; a total of 2839 or 210 more than last year. Of this number there have been dismissed during the year 406 men and 377 women, totalling 783 or 73 more than last year.

The number of patients discharged as "recovered" or "improved" was 429,—229 men and 200 women. Fifty-four, comprising 17 men and thirty-seven women, were discharged as unimproved. Deaths during the year totaled 251,—133 men and 118 women, or 21 less than last year,—a noteworthy decrease since the number of patients under care was 210 more than the year before. Seventeen patients, 14 men and 3 women escaped.

The total number in the hospital on June 30, 1921,—at the end of the fiscal year—was 1084 men, 949 women, a total of 2033, and of this number 1,716 were indigent and 317 private patients. While our total population on June 30, 1921 was 2033, the indigent population was only 1,716 or fifty-five less than in 1918, when it was 1,771.

If we compute the normal increase, prior to 1918, as seventy indigent patients a year, there would be in the hospital today 2,040 instead of 1,716,—a decrease of 324 for the three years. From an economic standpoint this means a saving to the State in maintenance, during the fiscal year, of \$116,000. Our private patients have increased from an average of eleven percent of the admissions, in 1918, to forty-five percent this year. The number of private patients admitted in 1916 was seventy-three; in 1921, 349 were admitted. Receipts

from private patients earned in excess of the estimate were \$50,830. Therefore, the total saving to the State is found by adding the saving from maintenance to the excess returned to the State Treasury from private patients, or \$166,830.

DEATH RATE

The deaths during the year were twenty-one less than the year before, although the patients under care were 210 more than the year before. The death rate, based on the total number under care, was 8.8 percent, while the death rate for the previous year was 10.3 percent, so that the decrease in our indigent population, compared to 1918, cannot be ascribed to an excessive death rate.

RECOVERY RATE

The recovery rate, based on the proportion of discharges to admissions, during the ten year period prior to 1918, averaged forty-three per cent. The recovery rate for the last year was sixty-one per cent. In the so-called functional group the recovery rate, for a period of ten years, was thirty-seven per cent. In this classification are included Manic Depressive Insanity, Dementia Praecox, Paranoid Condition and the Psychoneuroses. In this group there were admitted last year 195 men, 265 women, a total of 459. From this group there were discharged as "recovered" and "improved" 138 men, 166 women, a total of 304. The recovery rate in this group, therefore, was sixty-six per cent,—an increase of twenty-eight per cent over the average for the ten years prior to 1918.

ALCOHOLIC PSYCHOSES

The admissions of alcoholic cases have shown a material decrease in the last two years. For the ten years prior to prohibition alcoholic insanity contributed twenty-one per cent of the total male admissions. In the year ending June 30, 1920, the proportion of alcoholics to total male admissions decreased to seven per cent, and in the year ending June 30, 1921, the proportion was further reduced to two per cent. This remarkable decrease in the alcoholic psychoses can be explained only by the fact that prohibition has had a material effect in decreasing this class of patients.

RESULTS OF TREATMENT

In the last three years, as a result of successful treatment, we have discharged over one thousand patients, classed in the so-called "func-

tional" group of psychoses. During the last year, of 119 readmissions to the hospital, only twenty-five belonged to the above group. Of this number, eight were found to have minor foci of infection, which had not been adequately eradicated, and were discharged after appropriate treatment and a short residence in the hospital, leaving only seventeen of these readmissions under treatment today. By conservative estimate at least ten of these will finally recover. Of the above twenty-five readmissions, treated since 1918, five were men and twenty women. It is interesting to note that of the 380 patients admitted in 1918, and classed as "functional" there are today only fifty remaining in the hospital, and of these nine are convicts. On the basis of our previous recovery rate in this group, thirty-seven per cent, only 140 would have been discharged. This would have left 240 still in the hospital instead of fifty as stated above.

In considering this large number of discharges during the last three years the question promptly, and properly arises as to how permanent are the recoveries. In comparing the readmissions for a period of ten years—1908 to 1918—prior to the inauguration of the new work, we find the readmissions averaged thirteen per cent of the total admissions. From 1918 to 1921 this ratio remained unaltered. This answers the question as to the permanency of the improvement.

During the last two months special survey has been made of the patients discharged during 1918 by the two social service workers. Of special interest was the condition of the cases discharged during 1918. At that time 459 cases were discharged, 360 as recovered, forty-four as improved and fifty-five unimproved. The field workers have made 381 calls, seen 314 patients, and letters have been written to eighty-three. The result of their investigation has been most satisfactory and the status of these discharged cases is as follows:

Recovered	370
Improved	19
Unimproved	14
Died	24
Returned to hospital.....	32

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It is interesting to know that out of the 32 cases returning to the hospital only twenty-three belong to the so-called functional group, and of the cases that have died since leaving the hospital only twelve were classified in this group. Four committed suicide. One was a woman suffering from alcoholic insanity, two were cases of Dementia

Praecox, and one case of constitutional inferiority. One case of Dementia Praecox who had recovered died a year later of acute indigestion and another case of Dementia Praecox who had recovered was killed in an accident. Out of the whole number of the functional group admitted in 1918, which was 360, only fifty of that number are still in the hospital today and nine are criminals. We feel well satisfied with this investigation for the three year period as it is certainly long enough to determine whether or not these cases have recovered. We have found that those we considered recovered are earning their living, taking care of families, and are normal in every respect.

The results of our efforts in the treatment of psychotic patients continue to be satisfactory. The work has been carried on for three years and while we cannot predict, from this period, what the final results will be, at the same time it is probable that the three year period gives a fairly accurate index of the value of the work. Among the many things accomplished so far it may be mentioned, first, that our indigent population, which was increasing at the rate of seventy per year, prior to 1918, while it has increased slightly during the last year, is still fifty-five less than it was in 1918; second, the State is maintaining 1,716 indigent cases instead of 2,040, or a difference of 324; third, that the financial saving to the State in the maintenance of these patients, in the past year, has been \$116,000.

The saving for 1919 and 1920 amounted to \$125,000, so we can figure that a conservative estimate of the financial saving to the State for the last three years is \$241,000; fourth, that these 324 patients are now occupying their proper place in the community, in many cases not only self-supporting but often supporting their families as well, thus relieving the community of a large financial burden; fifth, that the permanence of the recoveries is indicated by the fact that in over one thousand cases, successfully treated in the last three years, only twenty-five were readmitted during the last year, and of this number eight, after the correction of incomplete work done during previous admissions, recovered and were discharged, leaving only seventeen in the hospital; sixth, that there has been no increase in the proportion of readmissions to the total number admitted in the hospital, which has averaged about thirteen per cent in the last thirteen years; seventh, that there has been no increase in the number of chronic patients in the hospital,—in fact the Dementia Praecox cases have been reduced by six.

The above facts materially support our viewpoint, given in greater detail in the Vanuxem lectures at Princeton University,—("The Defective, the Delinquent and the Insane," Princeton Press, 1921), that

a large proportion of the cases, admitted to the State Hospitals are suffering from a serious physical condition, due to unrecognized chronic infections. When these are eradicated the resulting mental disorders, if not of too long standing, are permanently arrested. Without such treatment sixty-three per cent of the "functional" group will become chronic and irreparably deteriorated.

MEDICAL STAFF

There have been several important changes in the Medical Staff during the year. Dr. James P. Sands, who returned to the hospital following his service in the Medical Corps of the Army during the war, resigned to take the position of "Clinical Director" in the Psychiatric Department in the Philadelphia Hospital (Blockley), Philadelphia, Pa. Dr. Sands' long experience in psychiatry, as well as his interest in our new work of eliminating focal infections, will especially fit him for his new position and we hope to see the same results there as are obtained here. Dr. Franklin G. Ebaugh, a graduate of the Johns Hopkins University, and who spent one year as resident physician in the Phipps Psychiatric Clinic at Hopkins, was appointed Junior Assistant Physician. Dr. Ebaugh comes especially well equipped to take up the work at this hospital as he has had a thorough training in the disorders of the glands of internal secretion. Dr. G. A. Young was also appointed as Junior Assistant Physician.

CONSULTING STAFF

We have been fortunate enough to enlist the interest of Dr. Charles F. Frazier of Philadelphia, who by his visits and advice has stimulated the further study of the thyroid gland in relation to the psychoses, and who has also operated upon certain specially selected cases. Dr. James Ewing of the Cornell Medical College continues as consulting pathologist. He has aided and encouraged us in the study of lesions found in the colon. Dr. John F. Anderson, attending bacteriologist, has actively furthered the work of standardization of the bacteriological research. His valuable aid and counsel has placed the work of the hospital Laboratory on a par with the best in the country.

Dr. John W. Draper continues as attending gastroenterological surgeon. Dr. Frederick A. Smith is consulting genito-urinary surgeon, Dr. Raymond Coburn consulting anaesthetist. Dr. Edward S. Pope

as attending rhinologist is making a special study of sinus disorders among our patients. We are greatly indebted to these men, as well as to the local physicians, who are members of our consulting staff and who have rendered valuable service to us during the year.

NURSING STAFF

In common with other institutions, we still find difficulty in obtaining sufficient female nurses for the work of the hospital. Fortunately there is little difficulty in obtaining male attendants of a good type. In order to offset this lack of pupil nurses we have been compelled to engage graduates as charge nurses.

The commencement exercises were held on July 14. Dr. D. J. McCarthy of Philadelphia gave the annual address to the graduating class. The following nurses received diplomas: Minnie A. Mettler, Roxie B. Mitchell, Dalene Rodgers and Paul B. Seiler.

Owing to the difficulty in obtaining sufficient pupil nurses to take the three year course, which now includes one year at the Mercer General Hospital in the city of Trenton, through cooperation with Miss Josephine M. Swenson of the Department of Institutions and Agencies, we are now running practically three separate courses. One is our regular training school course of three years, which includes the one year at Mercer. The second is a one year course for attendants, graduates from which will receive certificates. Our third course is a special one of six months for graduates from general hospitals who wish to obtain experience in psychopathic cases. The nursing associations, composed largely of general hospital graduates, are realizing more and more the necessity for graduate nurses to have had experience in mental cases and we hope, with the cooperation of these associations, to obtain the services of graduates for this six months' course.

Miss Edna I. Richardson, theoretical instructress at the Mercer General Hospital, acted in a similar capacity in this hospital during the past year and her services will be available for the coming year. Mrs. Willie Maye Harman was appointed anaesthetist and has been giving very satisfactory and efficient service. Miss Jessie M. Durstine continues as Superintendent of Nurses and through her efficient work has brought up the standard of the Training School for Nurses to that desired by the Department of Institutions and Agencies.

CENSUS OF HOSPITAL POPULATION

Beginning with our last annual report we now take an annual census of the types of mental diseases of patients in the hospital at

the end of the year. In this way we are able to tell what types constitute the largest proportion of the hospital population. The census this year shows no marked change. There is a marked increase in the number of cases of senile dementia, from eighty-seven to 108, and eleven more cases of general paresis. The cases of alcoholic insanity remain about the same. These are largely made up of chronic patients who have been in the hospital for several years.

DIAGNOSIS OF PATIENTS JUNE 30, 1921

DIAGNOSIS	MALE	FEMALE	TOTAL
Dementia Præcox	515	383	898
Manic depressive insanity	92	191	283
Constitutional defective	71	45	116
Paranoid condition	77	64	141
Mental deficiency	80	47	127
Alcoholic	49	7	56
Traumatic insanity	4	....	4
Hysterical insanity	1	3	4
Epilepsy	23	10	33
Drug habitue	2	4	6
Reactive depression	1	....	1
Psychoneurosis	13	8	21
General paralysis	47	13	60
Art. scl. brain disease	30	12	42
Idiocy	3	2	5
Involuntional depression	3	16	19
Senile dementia	34	74	108
Organic brain disease	6	4	10
Paralysis agitans	2	1	3
Neurasthenia	1	2	3
Sexual neurasthenia	1	....	1
Arrested development	1	....	1
Deaf mutism, with psychosis	1	....	1
Toxic del.	2	16	18
Psychasthenia	2	3	5
Infectious exh. psychosis	1	3	4
Alcoholic epilepsy	1	....	1
Syphilitic myelitis	1	....	1
Locomotor Ataxia	1	....	1
Cerebral syphilis .....	....	1	1
Psychopathic condition .....	....	1	1
Korsakoff's syndrone .....	....	1	1
Pseudo paralysis .....	....	1	1
Brain tumor .....	....	1	1
No psychosis, pulmonary tuberculosis	1	....	1
Unclassified	18	36	54
	1084	949	2033

TREATMENT OF PARESIS

There were admitted during the year forty-three men and seven women suffering from paresis. All these cases, with few exceptions, have been treated by means of salvarsanized serum administered either through lumbar puncture, intraventricular puncture, or, more recently, puncture of the cisterna. Through these various methods we have been able to discharge seventeen cases, thirteen men and four women, who were sufficiently improved to leave the hospital. A number of these patients have returned to their work, the men especially, and some continue to support their families.

As has been stated in former reports, many of these patients have multiple foci of infection due to the streptococcus and colon bacillus as well as to luetic infection of the central nervous system and it is highly probable that the improvement in the results of our treatment can be ascribed to the fact that all foci of infection have been eliminated before the anti-luetic treatment was given. In many of our patients suffering from paresis we have found badly infected teeth and tonsils and not infrequently infection of the gastrointestinal tract. It is just as necessary to eliminate these foci of infection in cases of paresis as in the so-called "functional" group, for if this is not done the results of treatment will be much less satisfactory than those just reported. We would again emphasize the fact that in the majority of indigent cases which come to the hospital, suffering from paresis, the involvement of the brain has been of too long duration for *any* treatment to be beneficial. We urge physicians to insist that these patients are sent to the hospital just as soon as symptoms develop.

METHODS OF TREATMENT

In previous reports and in publications in medical journals we have given in detail the methods of examination and treatment. We can best describe the work as that of a diagnostic clinic similar to those established in progressive medical centers. We do not consider a diagnostic survey of the patient complete without a thorough, systematic routine study with the aid of a clinical and roentgenological laboratory. Thus, only, can proper investigation of the gastrointestinal tract and the genito-urinary system, in both males and females, be made. All the latest approved methods of internal medicine must be enlisted. Such an investigation of each patient necessitates a large amount of work and a force of clinicians and laboratory technicians large enough to carry out this work. We would reiterate that

our methods are such as could be adopted by any well regulated hospital for the insane with sufficient equipment. As has been stated, our work has necessitated a well equipped laboratory for bacteriological and serological work, in addition to the ordinary pathological work usually carried out in state hospital laboratories. It is also necessary to have a well equipped X-ray outfit and a competent roentgenologist. Beside this a well equipped operating service with competent operating-room nurses and assistants is essential. When our new psychopathic buildings are occupied we shall have two complete operating services for the female side and one for the male side, and, as time goes on, this will probably have to be increased.

Aside from the above, it is needless to say, that a well equipped dental clinic, in charge of a competent resident dentist, is an absolute necessity. Every new patient should have a complete dental examination by the resident dentist after the X-rays have been taken. From the fact that hardly a patient comes into the hospital without evidences of infected teeth, which need immediate attention, the importance of this subject cannot be over emphasized.

The usual routine for new patients is as follows: As soon as the patient's teeth are X-rayed and examined clinically the infected ones are extracted and any infected bone removed. In spite of the contention of some dentists that infected teeth can be treated without extraction experience has shown that in our cases, at least, extraction is the only satisfactory method. In at least ninety per cent of our patients the tonsils are infected and these should be removed as soon as the patient has sufficiently recovered from the dental work. In some cases the tonsils are removed before the dental work is completed. As a rule, the dental infection is the first to be eliminated. Next is the examination of the stomach by means of the Rehfus fractional test. This can be done before the oral infection is eradicated, but it is better to complete it in order to eliminate the possibility of contamination from the mouth.

The analyses of the stomach contents will show in at least fifty per cent of the cases a serious gastric infection indicated by (a) reduction or absence of the hydrochloric acid content and (b) presence of pathogenic bacteria of the streptococcus and colon bacillus groups. The stomach test is also necessary to furnish the bacteria for the preparation of an autogenous vaccine, which in every case is made from cultures isolated from the stomach or duodenum. It is not infrequent to find four or five types of the streptococcus group and one or two strains of the colon bacillus group and it is very necessary that all the types be isolated in order that the vaccine may be efficient.

The gastrointestinal tract is further investigated by means of the X-ray. A barium sulphate meal is given and studies are made by means of a fluoroscope and plates. The patient should be fluoroscoped while the meal is being taken, fifteen minutes, and one-half hour later, then a six hour interval is allowed to elapse when records are again made, and after this the patient is fluoroscoped at twenty-four hour intervals. Usually at the forty-eight hour period a plate is made, as this period is a critical one in determining the pathology of the intestinal tract, especially of the colon. These studies are continued every twenty-four hours until the barium meal is eliminated. Of course the patient is not allowed to take cathartics during these tests, but if after five or six days there is a marked discomfort the studies are discontinued and the patient given a cathartic or enema. Following the studies of the test meal a barium enema is given to show the outline of the colon and to determine the presence of ileo-caecal leakage, filling defects, etc. A plate is made twenty-four hours after the barium meal to determine the degree and position of retention of the barium enema.

The pathological conditions found by means of the gastrointestinal X-rays are as follows: Abnormalities and filling defects of the stomach or duodenum; a disturbance of the peristaltic wave and failure of the stomach to empty in six hours. In the lower intestinal tract we may find sluggish terminal ileum where the meal is still retained after twenty-four hours. A retention of over forty-eight hours, especially on the right side (caecal region), we have found often to be associated with serious pathology, usually large or small chronic ulcerations, with flattening out of the rugae and destruction of the muscular coat.

Evidence of left-sided pathology is indicated by delay in the descending colon, sigmoid or rectum. Frequently an excessive length of sigmoid, with fixation of large loops deep in the pelvis is easily demonstrated by the barium enema. These conditions of the sigmoid may be both congenital and acquired, and, by causing a delay amounting to partial obstruction, predispose to infection. In a number of instances the sigmoid must be resected, although in a majority of cases the right side of the colon is the area involved and should be removed. In a very small percentage of cases, complicated by both right and left-sided involvement, usually an extensive and obstructive pericolic membranitis, with accompanying destruction of the bowel wall, the best results have been reached by total colectomy. Six operations of this type have been done without mortality, so that in competent hands this procedure may properly be looked upon as a conservative and preventive measure. Only about fifteen per cent of the

patients classed in the "functional" group have been found to require abdominal section for disease of the colon and of these only 8.5 per cent have required total colectomy, segmental resection, either of the right or left side, having been done in the remaining 91.5 per cent.

It may be that with increasing knowledge of this obscure and intricate problem this ratio may be somewhat altered. This research work should not be undertaken by novices or even by general surgeons but, until standardized, should be left in the hands of the highly specialized gastrointestinal surgeon. The X-ray records, combined with physical findings and a history of habitual constipation extending over many years, taken together, often indicate the necessity for exploratory laparotomy, followed usually by a resection of part, or very occasionally, of the entire colon.

Whether they have borne children or not, gynecological examination will reveal the presence of an infected cervix in at least sixty per cent of the female patients. We have found the best treatment for this condition to be a conical enucleation of the cervix by the Sturmdorff method. In a very small proportion of these cases the tubes and ovaries are so badly damaged by the spread of this infection as to necessitate removal, but enucleation of the cervix in the early stages has been found to prevent the infection from causing permanent damage to these important organs. Occasionally the fundus of the uterus is seriously infected, but as a rule this organ seems to possess a specific and marked resistance to infection and this is particularly true of the endometrium. In advanced cases removal of the infected uterus may be necessary to obtain results.

In the males, especially when the psychosis has been of long duration, it is not unusual to find the seminal vesicles infected. A number of patients did not recover until these infected organs were removed. As in the case of the cervix, the streptococcus and the colon bacillus were the pathogenic organisms found in the seminal vesicles.

Whenever indicated a cystoscopic study of the bladder should be made together with a determination of the functional efficiency of each kidney. A proctoscopic examination of the rectum should also be made.

SPECIFIC TREATMENT

In addition to eliminating the chronic infection in the teeth, tonsils, gastrointestinal tract and genito-urinary system, we have found it necessary to attack the infection by means of specific, autogenous vaccines and a specific serum. We now have a combined anti-strepto-

coccus and anti-colon bacillus serum made from the organisms isolated in our laboratory. Every patient receives routine treatments of autogenous vaccines and also receives ten doses of anti-streptococcus and anti-colon bacillus serum in ten c. c. doses with intervals of from three to four days. This treatment has given good results and has proven to be especially valuable in our surgical work. Formerly, the mortality from resection of the colon was about twenty-five per cent. In the last six months, after having adopted the above method of treatment, by this serum prior to operation, the mortality has been gratifyingly reduced. In the last forty-two consecutive resections of the colon only one patient has died as a direct result of the operation; two others died, one from post-operative pneumonia, one day following operation, and one from broncho pneumonia, four weeks post-operative. This decrease in the operative mortality, where the same technique has been employed as in the last three years, can be accounted for only by the potency of this serum.

While the serum will not correct the anatomical deformities or remove the lesion, or eliminate partial obstruction of the colon, it certainly has the effect of decreasing the infection, raising the patient's immunity, and preventing failure of union at the anastomosis, with resulting peritonitis, which formerly accounted for many deaths.

REPORT OF THE SURGICAL CLINIC

GASTROENTEROLOGICAL DIVISION

As in our last report, we would again emphasize the necessity for surgical procedures in eliminating chronic infection. Previous surgical work among the insane was of a very general character and not directed toward the removal of chronic localized infections. Unfortunately a great many ovaries were removed. Successful surgery must be directed toward the eradication of chronic infection. The more important operations conducted during the year have been on the lower gastrointestinal tract. Indications for exploratory laparotomy are in such cases a history of long standing constipation, a definite physical picture and X-ray findings as already described.

In seventy cases so examined resection of the right side of the colon was necessary in fifty-six cases. In six cases complete colectomy was performed and in eight cases resection of the sigmoid, or left side was necessary. In analyzing the cases of right-sided resection, or as we term it, "developmental reconstruction of the colon," of

the fifty-six cases, eleven recovered mentally, two were much improved, twenty improved and twelve not improved, eleven died. The mortality in this group was nineteen per cent—a considerable reduction over our former mortality. In the last six months, however, this mortality was further reduced by the administration of anti-streptococcal and anti-colon serum prior to operation, so that in the last forty cases we have had only one death, the direct result of operation.

The fact that in six cases complete colectomy was performed with no deaths is of considerable importance. A resection of the sigmoid was done in eight cases with no deaths. In thirteen cases there was immediate arrest of the mental symptoms, and within a month or so, these patients were discharged. Some of these had been diagnosed as manic depressive insanity—in a more or less chronic stage—and others were diagnosed as dementia praecox. Similarly some of the cases which have not recovered and are still unimproved belong to each of the above groups.

While we can report only thirteen cases recovered as the result of resection of the infected colon, we have demonstrated the presence of definite pathological lesions in the gastrointestinal tract, which occur in significant association with the psychosis. These lesions are usually of many years standing, in some cases they have existed since infancy. In one case (G.M.) the patient never had had a normal movement of the bowels, having had, since the first month of life, constantly to resort to cathartics and enemas. We are convinced that many of these cases of long standing constipation should be treated by preventive surgery long before the psychosis develops.

Of course we do not mean to imply that every case of chronic constipation will ultimately develop mental symptoms later in life, any more than we would say that all people with infected teeth would become insane. We do urge, as a preventive measure, that the patient should be relieved of all chronic infection of the teeth, tonsils and gastrointestinal tract for the benefit of his general, as well as his mental health. Why should he run the risk of developing a psychosis when, by eliminating all foci of infection, this danger may be minimized or avoided?

The reason for our failures, especially among the chronic types,—and failures have occurred in patients diagnosed as manic depressive insanity as well as dementia praecox,—lies in the fact that the infection and resulting toxæmia has been of such long duration that their continued action on the nervous system has produced permanent changes in the cortex. In quite a number of cases in which the colon had to be resected there had been previous operations for appendicitis, but

the colon had not been considered or treated. Such incomplete work undoubtedly accounts for the widespread failure of the promised post-operative recovery to materialize in so many cases of chronic intestinal invalidism. We are convinced that the thirteen patients who recovered following resection of the colon would not have recovered without such operation, because of the fact that they had reached the chronic but not yet deteriorated state of the psychosis.

In the summary of operations it is noticed that appendectomy was performed twenty-four times. This, however, was not the primary operation. It has been our custom, when there was evidence of chronic appendicitis, to remove it when operating for the other abdominal lesions, or when the left side of the colon was resected. In one case, appendicostomy was resorted to because the colon did not present enough evidence of infection to be removed. This patient belonged to the psychoneurotic group with daily outbreaks of agitation. She had a most severe rectal constipation which was cured by complete section of both rectal sphincters followed by restoration of normal mentality in about three months. This case is cited to show the necessity for the exercise of the most mature and deliberate judgment in the choice of the surgical procedures.

In seven cases herniotomy was performed, not with any particular reference to the psychosis but because of the necessity for such an operation. It is interesting to note that the removal of the gall bladder was indicated in but three cases in one hundred and twenty-five laparotomies. These were all cases of cholelithiasis. Cholecystitis, without stones, has not been demonstrated—a very important and significant clinical finding, since it is in accord with the rare occurrence of arthritis in psychotic patients, a fact already noted in our reports. Until disproved this may properly be looked upon as corroborative evidence regarding the selective nature of the pathogenic bacteria which account for the functional psychoses.

One of the most important results of the gastroenterological surgical researches has been the demonstration of living streptococci and colon bacilli in the enlarged mesenteric lymph glands. This has not only afforded proof of the infectious nature of the lesions in the bowel, but also has given a rational basis for treatment by means of specific serum as well as by operative intervention. Moreover, the glandular involvement is a useful indication as to the extent of resection necessary in any given case because it has been found to be a rather accurate index, not only of the location but also of the severity of the lesion in the epithelial and muscular coats. This is very helpful as these lesions do not usually show from the serous surface.

GYNECOLOGICAL DIVISION

Next in importance to the lesions of the gastrointestinal tract are those of the uterus and its adnexa. At least sixty per cent of the female patients admitted and classified in the functional group are found to have infection of the cervix whether or not they have borne children. These infections are not of a venereal type whatsoever, but are usually due to various strains of streptococci and colon bacilli. During the year enucleation of the cervix (Sturmdorff method) was done in forty-six patients, with the result that fourteen recovered, one was much improved, twenty-four improved and seven were not improved. In a number of patients, in whom all other available foci of infection had been removed, no arrest of the mental symptoms was noted until after the infected cervix had been enucleated. This operation is not attended by any mortality and the technique is comparatively simple. The infected cervix is a chronic focus that is all too frequently overlooked.

All the operations for this condition have been done by Dr. R. G. Stone, who is in charge of the female service, with the assistance of other members of the staff. In thirteen patients pan-hysterectomy was necessary because of the duration, extent, and distribution of the cervical infection. Mental recovery followed in three patients after this operation. Perineorrhaphy was necessary in eight cases and oophorectomy in four cases. Enucleation of the infected cervix preserves the tubes and ovaries as can be noted from the small number of oophorectomies compared to the forty-six cases of enucleation of the cervix. If, however, there is evidence that the tubes and ovaries are hopelessly infected, then there should be no hesitancy in removing them.

It is important to note the absence of venereal infection in these cases, especially that due to the gonococcus. Persistent search for the gonococcus in smears from the cervixes and bacteriological studies of the infection has failed to demonstrate any relations between chronic cervicitis and gonorrhoea. It is interesting to note the comparative infrequency of tumors, especially as associated with our gynecological work.

GENITO-URINARY CLINIC

Owing to the illness of Dr. Frederick Smith of New York, consulting genito-urinary surgeon, we have been able to carry on this valuable work only to a limited degree during the year. In the males, especially the patients with a chronic type of psychosis, about forty per cent are found to have seminal vesiculitis due to either streptococcus or

colon bacillus infection, pure or mixed. In practically no case have we found significant enlargement of the prostate gland. It is also interesting to note that in the recent cases, or in those with psychosis of short duration, the seminal vesicles are seldom involved. This seems to be part of a progressive later stage of a generalized infection. This phenomenon is also noticed in regard to the kidney in both sexes. Even with severe infection and toxæmia in the majority of patients admitted, the kidney has not yet become involved and the same is true of the heart. However, in our chronic patients with terminal conditions it is usually the cardio-renal lesions that finally cause death.

In spite of the late involvement of the seminal vesicles it is necessary to eliminate this source of infection in all cases. In one case (E.C.) there was quite a remarkable recovery following vesiculectomy in a patient whose psychosis was of long duration and who had been diagnosed as dementia præcox in one of the New York State Hospitals.

STUDIES IN ENDOCRINOLOGY

Through the interest of Dr. F. G. Ebaugh we have been able to study the relation of the disturbance of the endocrin system to the psychoses. Basal metabolism has been worked out on a number of cases which showed evidence of enlarged and toxic thyroids. Dr. Charles F. Frazier of Philadelphia visited the hospital on two occasions with his staff and performed thyroidectomy in six cases. The basal metabolism studies in these cases indicated that they were suffering from systematic toxæmia due to disorder of the thyroid gland. Only two of these cases, however, could be considered as improved following the operation. Two of them had definite lesions of the colon for which they were operated upon later. One of them died twelve hours, post-operative, of pneumonia and the other recovered mentally following complete colectomy.

While we are convinced that the disturbances of the endocrin system play an important role in the mechanism of the psychosis, we are of the opinion that not enough work has been done yet to show the definite character of the relationship. The work that has been done upon the relation of the endocrin disturbance to the psychoses is more or less contradictory and is yet far from convincing. The thyroid gland, by reason of the methods through which its lesions can be determined and the facility with which it can be reached and removed is the most promising field for fruitful research in endocrinology. At present it is practically the only gland, disturbance of which can be diagnosed and directly treated.

In the case of the other glands, pituitary, thymus, suprarenals and sex glands, the problem of approach is much more complicated and investigations have as yet failed to give any particular results. If we follow such men as Billings, Barker and others who have made extensive investigations in this field we must conclude that the disturbances of the endocrin system are, in all probability, secondary to chronic infectious processes in other parts of the body. In the majority of our cases elimination of these chronic foci of infection has appeared to cause the readjustment of the disordered endocrin system, and, as also reported by others, enlarged thyroids have been observed to recede following the removal of all chronic infection. If these changes take place in the accessible thyroid, it is logical to assume that similar changes occur in those glands less easily studied.

OPERATIONS

	MUCH		NOT		DIED	TOTAL
	RECOVERED	IMPROVED	IMPROVED	IMPROVED		
Developmental reconstruc- tion of colon	11	2	20	12	11	56
Enucleation of cervix	14	1	24	6	1	46
Colectomy	1	1	2	2	1	7
Sigmoidectomy	1	1	6	..	..	8
Pan-hysterectomy	3	..	6	..	4	13
Vesiculotomy .....	..	..	2	1	..	3
Appendectomy	3	1	8	6	6	24
Appendicostomy	1	..	..	..	..	1
Herniotomy .....	..	..	7	..	..	7
Thyroidectomy	2	..	1	2	1	6
Perineorrhaphy	2	..	5	1	..	8
Oophorectomy .....	..	..	3	1	..	4
Cholecystectomy .....	..	..	..	2	1	3
Turbinectomy	1	..	1	..	..	2
Tubal ablation	2	..	..	..	..	2
Myomectomy .....	..	..	..	1	..	1
Ileostomy .....	..	..	2	1	..	3
Reconstruction of ileum ..	1	..	..	..	..	1
Varicocele .....	..	..	2	..	..	2
Number of operations.	42	6	89	35	25	197

THROAT AND NOSE CLINIC

Every year we are more and more convinced of the importance of the tonsils as a primary focus of infection in the psychotic patient. During the past year it was necessary to enucleate the tonsils in 516 patients, over seventy per cent of the admissions. We have been fortunate in obtaining the services of Dr. Edward S. Pope of New York as attending rhinologist. He visits the hospital frequently, makes examinations of doubtful tonsils and supervises the general work in this

department. He has also made a thorough examination of new patients for antrum, mastoid and other sinus trouble. Fortunately he was disappointed in not finding these areas as much involved as had been anticipated. This he attributed to the elimination of the infection of the teeth and tonsils. The secondary sinus infections, which probably existed prior to these procedures, had disappeared. Occasionally the dentist on extracting upper molars has found that the antrum was involved, necessitating treatment.

Enucleation of the tonsils has been performed by Drs. Stone, Harman and Ebaugh, members of our staff, as it is impossible to secure the services of a consultant to do this large amount of work. This is done usually under a local anaesthetic and the efficiency of the work of the staff and their excellent technique can be judged from the fact that no mortalities have occurred during the year and no untoward complications have followed tonsillectomy. The necessity for removing the tonsils, even when only slightly infected, is shown by the fact that in our readmitted cases the usual cause for the return of the psychosis is found to be infected tonsils which had been overlooked at the first admission.

DENTAL CLINIC

Our dental work during the year, under the able direction of the resident dentist, Dr. F. J. Fischer, has lost none of its original importance. Dr. F. S. Bird, visiting dentist, has continued to render invaluable aid. The extent of the operative work conducted in this department can be seen from the following summary. No teeth were removed without ample justification.

DENTAL REPORT

Extractions	6472
Impactions	177
Uneruptions	5
Treatments	2923
Cysts removed	132
Antrum cases	12
Antrum treatments	31
Alveolectomy	4
Bone whirl removed	1
Cortical layer maxilla removed	7
Surgicals	170
Resection of maxillary division of trigeminal	1
Fractured mandible fistula	1
Resetting fractured mandible	1
Necrosis of maxilla	1
Rile operation	57
Vincent's Angina	1

X-RAY CLINIC

This department continues to be conducted by Dr. Joseph L. Gariss. A routine examination of the teeth of every patient is not considered complete without X-ray plates of the teeth. Two mistakes are usually made in regard to this work. The most common mistake is to assume that by looking into the patient's mouth the real condition of healthy looking teeth can be determined. In many such patients, especially among our younger cases, although the teeth may be apparently healthy, X-ray will demonstrate impacted third molars or other impacted teeth which would have been entirely overlooked without such an examination.

In edentulous patients another mistake is to consider that there is no alveolar involvement because the teeth have been extracted. The processes must be X-rayed to determine whether or not all infection has been removed in the process and to find out whether or not the roots have been left in by incomplete extraction. The routine studies of the gastrointestinal tract are necessary in a considerable number of our new patients and the great accuracy of this work has been of inestimable value in the development of the surgical side of this intricate problem. The extent of this work can be seen from the following summary for the year.

ROENTGENOLOGIST'S REPORT

Gastro-intestinal exposures	287
Dental exposures	5036
Miscellaneous	219
Fluoroscopic examinations	1434
Total	6976

LABORATORY REPORT

The work in the laboratory increases yearly. A routine examination of every case admitted entails a tremendous amount of technical labor. The blood and spinal fluid Wassermann tests are routine work as well as the cell count in the spinal fluid and testing of the globulin content. Examination of the stomach content, both chemical and bacteriological (by Rehfus method) is a routine measure and autogenous vaccines are given in every case when indicated. Bacteriological work of the gynecological disturbances, genito-urinary conditions, and of the mesenteric glands obtained at operation, is routinely carried out. The colons removed at operations are thoroughly studied macroscopically and microscopically and in the accurate furtherance we are

fortunate enough to have the assistance of Dr. John F. Anderson and Dr. James Ewing.

Drawings of unusual conditions found at operation and of sections of the colon are made by Mr. Henry E. Lehman, the medical illustrator, and these illustrations form permanent records of the work. A competent man to do micro-photographic work has been engaged for the coming year. The extent of the laboratory work is seen in the appended table:

Wassermann blood tests	1235
Wassermann fluid tests	979
Complement fixation tests	218
Cerebral-spinal fluid cells count	1104
Globulin	1066
Colloidal gold	139
Urine	563
Stomach and duodenum	511
Stomach	111
Tonsils	296
Teeth	348
Cervix	34
Sputum	32
Feces	29
Vaccines	47
Cultures	1041
Total	7763
Clinical specimens examined during the year	115
Autopsies performed within the past year	49

PREVENTION AND PROPHYLAXIS

We would again emphasize the importance of eliminating chronic foci of infection in patients suffering from mental disorders. If we are right in our belief that these are the principal causative factors in producing a psychosis then we are justified in considering that the proper measures could have prevented a psychosis in many of our patients. It is not only necessary to educate the general practitioner as well so that many of these conditions could be corrected long before the patients develop their psychoses. It is extremely important that the public should be informed in these matters for in the final analysis an intelligent understanding of the dangers of infected teeth, tonsils, gastrointestinal tract, etc., by the laity will permit them to obtain the proper treatment for these conditions which unfortunately has not existed in the past. Only by the proper publicity can such results be obtained. Therefore our work is of public interest and we would reiterate that there is nothing secret in this work, that the danger of chronic infection among the general population is re-

cognized by the best medical men of the country, there being a concerted effort today to eliminate these dangers as rapidly as possible. Our plea is simply for the general introduction of these modern medical methods among the insane.

OUT-PATIENT DEPARTMENT

For some years the hospital maintained an out-patient department for nervous diseases at the Mercer General Hospital in the city of Trenton. At first this clinic was well patronized, but after a few years, although the members of the staff attended the clinic regularly, the patients failed to avail themselves of this opportunity. Instead of seeking treatment at the Mercer Hospital they seemed to prefer to come directly to the State Hospital and during the year over 100 such patients have been examined by the Medical Director and members of the staff and treatment outlined. In many instances they were advised to come into the hospital for treatment. While such an arrangement may not be so efficient as a regular out-patient department, at the same time the ultimate results obtained are the same. By seeing these patients early at the time when they are willing to come to the hospital for treatment many such patients are thereby saved from serious mental trouble later on.

VOLUNTARY ADMISSIONS

We are glad to report that the number of voluntary admissions have shown remarkable increase during the year. Last year there were eighty-eight men, seventy-eight women, total 166 admitted on voluntary papers, and this year there were 130 men, 138 women, total of 268, an increase of 102 or 62 per cent. This is very gratifying for it shows that the community in general has confidence in the work of the hospital, and especially from the standpoint of treatment, as these patients are treated in the early stage of the disease, long before it has become necessary to commit them because of antagonisms, delusions, etc.

SCIENTIFIC PUBLICATIONS

The following papers have been published since 1918 relating to our work in focal infections and reprints are available for those interested.

"The Role of Focal Infections in the Psychoses." (New York Medical Journal. March 8 & 15, 1919.)

"The relation of Oral Infection to Mental Disease." (Journal of Dental Research, Vol. 1, No. 3, 1919.)

"The Relation of Focal Infection to Mental Disease." (New York Medical Journal April 17, 24, and May 1, 1920.) By Henry A. Cotton, M. D.

"Intestinal Pathology in the Functional Psychoses." (Medical Record, May 1, 1920.) By Drs. Henry A. Cotton, John W. Draper and Jerome M. Lynch.

"What is being done for the Insane by means of Surgery." (Transactions of Section on Gastroenterology and Proctology of the American Medical Association, 1920.) By Drs. Henry A. Cotton and John W. Draper.

"Fractional Gastric Analysis." (Transactions of Section on Gastroenterology and Proctology of the American Medical Association, 1920.) By Drs. Henry A. Cotton and G. Reese Satterlee.

Besides the above publications the Medical Director was honored by an invitation to deliver the Vanuxem Lectures at Princeton University in January, 1921. The title of these lectures is "The Defective, Delinquent, and Insane, The relation of focal infection to their causation, treatment and prevention." These lectures, with a foreword by Dr. Adolf Myer, will be published in book form by the Princeton Press.

The Medical Director has had the opportunity to present his work before various medical and dental societies during the year, among which were the Saranac Lake Medical Society, Saranac Lake, N. Y., the Central Dental Association of New Jersey, at Newark, N. J., and the American Academy of Applied Dental Science at Fort Dodge, Iowa. It has been gratifying to receive invitations from various hospitals for the insane, to visit such hospitals and to discuss with members of the staff the work and the practical details of examining patients in order to demonstrate the presence of focal infection. Among the hospitals visited were the Manhattan State Hospital, Ward's Island, New York, the Kings Park State Hospital, Kings Park, N. Y., the Norristown State Hospital, Norristown, Pa., and the Georgia State Sanitarium, Milledgeville, Ga.

At the last meeting of the American Psychiatric Society, at Boston, it was gratifying to learn that many of those engaged in this work who were extremely skeptical three years ago volunteered the information that they were attempting to carry on similar work in the institutions under their care. The great difficulty in getting this work started in most institutions is the entire lack of equipment and facilities for such work.

VISITORS

During the year we have had many distinguished visitors, both from other institutions and from men in general practice, especially the surgeons. Dr. Augustus Knight, Medical Director of the Metropolitan Life Insurance Company, a member of the Board of Managers of the State Hospital at Morris Plains, accompanied by Dr. Marcus A. Curry, Superintendent of that hospital, with members of the staff and Dr. C. E. Mills, their visiting surgeon, made us several visits in order to study our medical and surgical work. Dr. Brown, a member of the Board of Managers of the Norristown State Hospital, Pennsylvania, with Dr. Jessie Peterson of the female department and Dr. S. Metz Miller of the male department, have also been frequent visitors. Dr. Roger C. Swint and Dr. J. W. Mobley, of the George State Sanitarium, spent considerable time at the hospital investigating our methods. The Venezuelan Commission, accompanied by the Honorable John Barrett, former president of the Pan-American Union in Washington, and Dr. Gil Borges, through the courtesy of Mr. Barrett, made a special visit to Trenton in order to study the methods employed in this hospital. They were accompanied by Mayor Frederick W. Donnelly, Mr. E. C. Hill, and other prominent men in Trenton. Dr. C. F. Williams, Superintendent of the State Hospital, Columbia, South Carolina, Dr. W. D. Sheldon, neurologist at the Mayo Clinic, Rochester, Minnesota, Dr. George W. Hall, director of the psychopathic clinic, Chicago, Ill., Dr. Peter Bassoe, neurologist of Chicago, Dr. Wm. F. Drewry, Superintendent of the Petersburg State Hospital, Virginia, and Dr. E. H. Henderson, of Virginia, were also among those who visited the hospital and showed a special interest in the development of our work. Dr. George A. Peck, senior surgeon of the New Rochelle Hospital, New Rochelle, N. Y., also visited us and showed considerable interest in our methods. Dr. Leo Leonidas Stanley, Director of the San Quentin Prison, California, Dr. Wm. J. A. O'Hara, of Bridgeport, Conn., Dr. Martin J. Synnott and Dr. G. E. Scudder of Montclair, N. J. Dr. Mary Bowman of Letchworth Village, N. Y., Dr. D. J. McCarthy and Dr. Seymour DeWitt Ludlum, of Philadelphia, and Mr. A. L. Bowen, Superintendent of Charities of Illinois, also visited us.

We are extremely fortunate in having a visit from Dr. Adolf Meyer, Professor of Psychiatry, Johns Hopkins University, and Director of the Phipps Clinic, Johns Hopkins Hospital. He was especially interested in the methods in use and in the pathology of focal infections which we have demonstrated, especially in the intestinal tract. Members of the State Department of Institutions and Agencies, including Commissioner Burdette G. Lewis, have also been frequent visitors to the hospital.

PERCENTAGE TABLE	TOTAL		AGAINST PERSON		AGAINST LAW		AGAINST PROPERTY		MINIMUM SENTENCE		PREVIOUS RECORD		NATIVITY						
	1921	1920	1921	1920	1921	1920	1921	1920	1-5	5-10	10-20	20 plus	None	One	Two	Foreign	Black	N. White	
Psychoses	5	7	42	57	12	11	46	32	29	11	17	8	54	21	21	37	8	25	46
Const psych, state	6	4	61	59	3	12	36	29	61	11	11	7	32	21	25	25	36	18	55
Psychoneurosis	3½	3½	53	27	13	18	29	60	58	18	18	6	59	23	32	18	35	18	39
Constitutional defective	26	23½	12	25	7	10	81	65	74	33	33	1	60	12	13	18	33	18	64
Epilepsy	1	1	..	33	..	..	25	50	71	17	17	16	21	16	19	17	15	21	20
Drug addicts	3	1½	7	14	..	..	66	57	50	14	17	25	67	25	33	33	..	33	25
Chronic alcoholic	17½	16½	9	27	20	7	66	66	27	14	7	..	42	43	67	7	..	33	
No psychiatric condition	38	43	20	42	18	8	51	40	16	20	2	5	69	18	13	37	43	31	34

showing the same inter-relation in percentages and the comparison with percentages of the previous year's examinations. In analyzing Table No. 1, it will be seen that the greatest number of crimes committed were against property, the greatest number of sentences were one to five years, that over one-half of the cases examined had one or more previous prison record and that almost one-half of the entire number examined were native whites. There is an apparent increase in the number of cases with known previous records as compared with the last year's report and this is probably due to the fact that the Clinic now has better facilities for examining a man's past record.

In Table No. 2, it will be seen that twenty-four or five per cent of the total number of cases examined were psychotic. Of these twenty-four psychotic cases twenty-one were transferred to the State Hospital and three are still under observation. Ten or forty-two per cent of the psychotic cases committed crimes against person; three or twelve per cent committed crimes against laws and eleven or forty-six per cent committed crimes against property. Eleven or forty-six per cent have a minimum sentence of one to five years; seven or twenty-nine per cent have a minimum sentence of five to ten years; four or seventeen per cent have a minimum sentence of ten to twenty years and two or eight per cent have a minimum sentence of twenty plus years. Fourteen or fifty-eight per cent have no known previous record, five or twenty-one per cent have one known previous record and five or twenty-one per cent have two or more previous records. Nine or thirty-seven per cent were foreign born, two or eight per cent were black and thirteen or fifty-five per cent were native white. This Chart shows that a very large percentage of the psychotic cases committed crimes against person, that over fifty per cent of the cases had a minimum sentence of over five years and that over fifty per cent had no known previous record. There does not seem to be any important relation between the psychoses and the other factors.

Twenty-eight or fifteen per cent of the total cases examined were diagnosed as constitutional psychopathic state. Of this number seventeen or sixty-one per cent committed crimes against person; one or three per cent committed crimes against laws and ten or thirty-six per cent committed crimes against property. Seventeen or sixty-one per cent had a minimum sentence of one to five years; six or twenty-one per cent had a minimum sentence of five to ten years; three or eleven per cent had a minimum sentence of ten to twenty years and two or seven per cent had a minimum sentence of twenty plus years. Nine or thirty-two per cent had no known previous record; ten or

thirty-six per cent had one known previous record and nine or thirty-two per cent had two or more known previous records. Seven or twenty-five per cent were foreign born; ten or thirty-six per cent were black and eleven or thirty-nine per cent were native white. It will be seen that these cases correspond in a general way to those with psychoses.

Of the psychoneuroses there were seventeen or three and one-half per cent of the total number examined. Nine or fifty-three per cent committed crimes against person; three or eighteen per cent committed crimes against laws and five or twenty-nine per cent committed crimes against property. Ten or fifty-eight per cent had a minimum sentence of one to five years; three or eighteen per cent had a minimum sentence of five to ten years; three or eighteen per cent had a minimum sentence of ten to twenty years, and one or six per cent had a minimum sentence of twenty plus years. Ten or fifty-eight per cent had no known previous record; two or twelve per cent had one known previous record and five or thirty per cent had two or more previous records. Three or eighteen per cent were foreign born; three or eighteen per cent were black and eleven or sixty-four per cent were native white.

Of the constitutional defectives there were 128 or twenty-six per cent of the total number examined. Of these fifteen or twelve per cent committed crimes against person; nine or seven per cent committed crimes against laws and 104 or eighty-one per cent committed crimes against property. Ninety-five or seventy-five per cent had a minimum sentence of one to five years; twenty-two or seventeen per cent had a minimum sentence of from five to ten years; ten or eight per cent had a minimum sentence of ten to twenty years and one or one per cent had a minimum sentence of twenty plus years. Twenty-seven or twenty-one per cent had no known previous record; twenty-one or sixteen per cent had one known previous record and eighty or sixty-three per cent had two or more previous records. Twenty-two or seventeen per cent were foreign born; twenty-seven or twenty-one per cent were black and seventy-nine or sixty-two per cent were native white.

Of the total number of cases examined epilepsy was found in only six or one per cent. Of these two or thirty-three per cent committed crimes against person; none committed crimes against laws and four or sixty-seven per cent committed crimes against property. Three or fifty per cent had a minimum sentence of one to five years; one or seventeen per cent had a minimum sentence of five to ten years; one or seventeen per cent had a minimum sentence of ten to twenty years and one or sixteen per cent had a minimum sentence of twenty plus

years. Four or sixty-seven per cent had no known previous record; none of these cases had only one known previous record and two or thirty-three per cent had two or more known previous records. Two or thirty-three per cent were foreign born; two or thirty-three per cent were black and two or thirty-four per cent were native white.

Of the total number of cases examined fifteen or three per cent were found addicted to the use of drugs, either cocaine, morphine, opium or some derivative of opium. Of these drug addicts four or twenty-seven per cent committed crimes against person; one or seven per cent committed crimes against laws and ten or sixty-six per cent committed crimes against property. Ten or sixty-six per cent had a minimum sentence of one to five years; four or twenty-seven per cent had a minimum sentence of from five to ten years; one or seven per cent had a minimum sentence of ten to twenty years and none of these cases had a minimum sentence of twenty years or more. None of these cases had no known previous record; five or thirty-three per cent had one known previous record and ten or sixty-seven per cent had two or more known previous records. One or seven per cent were foreign born; five or thirty-three per cent were black and nine or sixty per cent were native white.

Of the chronic alcoholics there were eighty-five or seventeen and one-half per cent of the total number examined. Thirty-nine or forty-six per cent of these committed crimes against person; eight or nine per cent committed crimes against laws and thirty-eight or forty-five per cent committed crimes against property. Sixty-nine or eighty-one per cent had a minimum sentence of from one to five years; nine or ten per cent had a minimum sentence of from five to ten years; five or six per cent had a minimum sentence of ten to twenty years and two or three per cent had a minimum sentence of twenty plus years. Thirty-six or forty-two per cent had no known previous record; twenty-two or twenty-six per cent had one known previous record and twenty-seven or thirty-two per cent had two or more known previous records. Twenty-four or twenty-eight per cent were foreign born; seventeen or twenty per cent were black and forty-four or fifty-two per cent were native white.

Of the total number of cases examined 183 or thirty-eight per cent had no classifiable psychiatric condition and with the exception of a certain percentage which were found to be abnormal by the psychologist, they are considered normal from a psychiatric point of view. Of these fifty-four or twenty-nine per cent committed crimes against person; thirty-seven or twenty per cent committed crimes against laws and ninety-two or fifty-one per cent committed crimes against

property. One hundred and forty-two or seventy eight per cent had a minimum sentence of one to five years; twenty-nine or sixteen per cent had a minimum sentence of five to ten years; four or two per cent had a minimum sentence of ten to twenty years and eight or four per cent had a minimum sentence of twenty plus years. One hundred twenty-six or sixty-nine per cent had no known previous record; thirty-three or eighteen per cent had one known previous record and twenty-four or thirteen per cent had two or more known previous records. Fifty-seven or thirty-one per cent were foreign born; fifty-six or thirty-one per cent were black and seventy or thirty-eight per cent were native white.

In a comparison with the percentages found in last year's examinations and this year's examinations, it will be seen that the percentages are relatively alike in the total number of each group of diagnoses. The only marked difference in percentages is in those groups where only a few cases were found in each instance. The exceptions are, of the psychoses a larger percentage was found to have a minimum sentence of five to ten years and a lesser percentage found to have a minimum sentence of twenty plus years; a lesser percentage was black and a larger percentage native white. Of the constitutional psychopathic states a lesser percentage was found with no known previous record and a larger percentage with one or more known previous records; also a larger percentage was found to be black. Of the constitutional defectives a larger percentage was found who committed crimes against property and a lesser percentage was found who committed crimes against person. Of the chronic alcoholics a larger percentage committed crimes against property and a lesser percentage committed crimes against person; also a larger percentage had one or more known previous record and a lesser percentage had no known previous record. Of those found with no psychiatric condition a larger percentage was found who committed crimes against property and a lesser percentage who committed crimes against person; a lesser percentage who had no known previous record and a larger percentage who had one or more known previous records. Of the psychoneuroses, epileptics and drug addicts there were marked discrepancies in the percentages throughout and this can be accounted for by the small number of cases in each group.

It will be seen, therefore, that there is a fairly constant relation between the several diagnoses and the type of crime committed, and the number of previous records and necessarily the length of the minimum sentence. The variations which were found can easily be accounted for by the better facilities available during the past year in

obtaining histories of the cases through field workers' reports and court records.

At the State Home for Girls there was no regular schedule carried out by the psychiatrist in examining cases, owing to the fact that the work at the State Prison required most of the time available and as the physician at the State Home for Girls has had experience in psychiatry, only those cases were examined in the Clinic which required the psychiatrist in consultation. In this manner six cases were found at the State Home who were thought to require hospital treatment and were transferred to the State Hospital.

REPORT OF DR. FRANKLIN G. EBAUGH, PSYCHIATRIST

I beg to submit herewith report of the work done by the Psychiatric Clinic at the New Jersey State Home for Boys at Jamesburg for the fiscal year ending June 30th, 1921.

During the past year 316 boys have been examined and in addition the psychiatrist has had repeated interviews with many of these boys. The work at Jamesburg this year enjoyed the closest cooperation with Mr. Derrick, Superintendent of the State Home and Dr. Nemer, resident physician, and recommendations of the Psychiatric Clinic were in all cases considered and went into effect as soon as possible.

Early in the year all the new boys were immediately sent to reception cottage No. 1, remaining there for a period of one or two months for observation and study before they were distributed to the various cottages and assigned to a definite vocation. This enabled those in charge to determine the adaptability of each boy, as well as determining his special interest and aptitude. It also served to prevent any boys from being classified where they would be liable to create a disturbance and influence other types. It was a pleasure to cooperate with Dr. Doll and Mr. Derrick with the vocational reorganization which has taken place this year.

Interest in the examination of the 316 cases may be discussed as follows: First, Psychopathic Condition; Second, Physical Condition; Third, Factors, Etiology and Methods of Prevention of Delinquencies; Fourth, Recommendations given. From the point of view of the actual psychopathic condition, there have been a few definite psychoses out of the group examined. Of the cases examined only two were recommended to be sent to the State Hospital, one boy was diagnosed as psychopathic inferiority with features of dementia praecox and the other boy was an organic case of cerebral spinal syphilis.

Diagnosis of constitutional inferior was made in five per cent of the cases. Personality disorders, consisting of various neurotic traits and reactive affective states were enumerated in seven per cent of the cases. One case was diagnosed as hypomaniac. Many of the boys on admission presented features of reactive depression, characterized by psychomotor retardation and mood of depression centered around their home-sickness and inability to adjust themselves in the beginning of institutional life. These cases were mostly of transient duration and have little psychiatric significance. In two cases a diagnosis of hysteria was made. In addition twenty per cent of the boys were found to be mentally deficient and of this number many have been transferred to Vineland after joint examination with Dr. Doll and in close cooperation with Mr. Derrick.

The classification of delinquents has been extremely difficult. In reviewing the past year's work the following classifications are offered for your approval: First, Constitutional and Affective Group; Second, Mental defective Group; Third, Endocrine Group; Fourth Organic Group. I feel that these four groups will include all forms of psychopathy encountered in the examination.

In every examination I have considered the question of etiology and I have noted that the following conditions may be used as forms of prevention according to the principles of mental hygiene, and during the study of the Jamesburg boys they have been found and should be considered in the etiology of delinquencies. These are briefly as follows:

1. *Developmental Condition.*

- (a) Role of focal and chronic infection.
- (b) Role of endocrine defects.
- (c) Early illnesses with involvement of the central nervous system.
- (d) Heredity.
- (e) Innate characteristics—the nervous, active, dramatic type.
- (f) Stimulants; excessive use of coffee.

2. *Environmental Influences.*

- (a) Environmental maladjustment.
- (b) Lack of parental correction.
- (c) Home conditions—friction between parents, brother and sister, etc. Hygienic condition—fresh air—eating and sleeping arrangements, etc.
- (d) Influence of bad companions.
- (e) Incongruity between home conditions and ability.

3. *Habits and Instinctive Maladjustments.*

- (a) Mental conflict—early secret experiences—reaction to immoral experiences with lying, etc.
- (b) Faulty habit formation—lack of parental correction.
- (c) Mal-development of inner life—sex ruminations, etc.
- (d) Lack of accurate sex knowledge.

In each case examined a careful physical examination has been done both by Dr. Nemzer and myself. It is interesting that in these cases, in spite of the youth of the case examined, focal infections have played a very definite role. Approximately seventy-five per cent of the cases examined have been found to have infected tonsils and bad teeth. It is of interest to note that of the later admissions many boys have had their tonsils removed previous to admission, as well have had good dental work. Many other physical conditions have been found of similar interest, mainly chronic catarrhal otitis media and nasal obstruction due to hypertrophied turbinates. Many boys were found to have refractive errors and were advised to have an examination by a competent eye specialist. Several boys were found to have definite edocrine defects mostly of pituitary type. One case of hyperthyroidism was found. In conjunction with Dr. Nemzer, we plan to do complete endocrine study during the coming year.

All recommendations of the Psychiatric Clinic in regard to teeth and tonsils have been acted upon during the past year. An operating room has been built adjoining the hospital and several tonsillectomies are done each week under the direction of Dr. Nemzer. Dental work is also being done by a competent dentist.

The recommendations of the Psychiatric Clinic have been made to aid the people in charge of the institution in the classification of each boy according to his special interest and aptitudes. They have been of help in the vocational reorganization under Mr. Derrick, and we now have the closest cooperation and everything has been done to further the work of the Clinic. All suggestions were readily adopted and recommendations of transfer of cases to Vineland were immediately acted upon. In the weekly meetings the reports of the Psychiatric Clinic are used to help out with various institutional problems. Recommendations in regard to clearing up focal infection of teeth and tonsils have been acted upon immediately.

The hospital plans to install a complete X-ray laboratory in the near future, as well as basal metabolism and complete bacteriological equipment. Blood Wassermanns were taken by Dr. Nemzer on practically every case. These were sent to both the State Hospital laboratory and

the State laboratory. Spinal fluid examinations were made in cases in which this procedure was indicated clinically.

The prospect for Psychiatric work for the next year appears extremely bright and it is with great pleasure that I wish to thank Mr. Derrick, Superintendent of the State Home for Boys and Dr. Nemzer, resident physician, for their great interest and help in the work of the Psychiatric Clinic.

REPORT OF DR. R. G. STONE, PSYCHIATRIST

I herewith submit my annual report of psychiatric work done at the New Jersey Reformatory at Rahway for the fiscal year ending June 30th, 1921.

During the first half of the year psychiatric and physical examinations were made on all cases admitted during that time. The second half, psychiatric and physical examinations were made only on cases referred by the psychologist. It is evident that a clearer insight may be gained by special study of those cases that have particularly attracted the attention of the psychologist.

The number of cases examined was 272, average age twenty years.

The following percentages are based on the number of cases:

PHYSICAL EXAMINATIONS

Infected Teeth.....	57%
Unerupted Third Molars.....	58%
Impacted and Partially Erupted.....	13½%
Infected Tonsils.....	76%
Habitually Constipated.....	16½%
Endocrine Cases.....	6%

MENTAL EXAMINATIONS

Unstable Cases.....	18 1/3%
Psychotic (various psychoses).....	2 1/5%

Recommendations have been made in all cases examined, and as a result of the physical recommendations there have been thirty-four tonsillectomies performed and 195 dental extractions. Of the total number of cases examined six have been recommended for transfer to the New Jersey State Hospital at Trenton, four of which have been transferred.

The work has been most interesting from the standpoint of focal infections, as it is known that these various focal conditions are the etiological factors in a great many cases for the individual's position and condition.

It has not been possible for the institution to fully carry out recommendations made by me, owing to the absence of X-raying facilities, absence of funds with which to employ an anaesthetist, and the refusal on the part of the relatives and others in granting permission for the work to be done. Were it possible for the work to be fully carried out, results as gratifying as those obtained at the New Jersey State Hospital at Trenton, in my opinion, would be attained.

REPORT OF MR. E. A. DOLL, PSYCHOLOGIST

The following is a summary report of the activities of the psychological section of the Psychiatric Clinic. Detailed reports of the work in each institution have been prepared, or at once will be prepared and submitted to the respective heads of the institutions. The following statement is an attempt to give a general view of the work and of the problems and needs for the coming year.

The psychological work has been so heavy this year with only Mr. Ellis and myself to carry it out, that we have followed various devices for increasing the efficiency of the work. The first step in this direction was a definite separation of the activities of Mr. Ellis and myself, whereby it was agreed that Mr. Ellis should do all of the work at the Rahway Reformatory, subject only to my general supervision and should also do all routine examining at the State Prison, subject to my assistance on special cases and special surveys. This arrangement gave Mr. Ellis much the heaviest burden of routine examining and left my time comparatively free for developing psychological examining in the other correctional institutions and for making the necessary contacts with the central department and with the Psychiatric Clinic as a whole. Under this arrangement I assumed responsibility for examining in the two State Homes and at Clinton Farms, as well as the general direction of all the psychological examining.

In order to still further increase the efficiency of our work we found it necessary to schedule ourselves to definite daily programs, in order that we might share the services of the stenographer assigned to the psychological section. We also standardized the examining procedures and methods of reporting in the several institutions in such a way as to reduce the examining time and the time allowed for

reporting. This was accomplished with an actual increase in the character of the examining and also of the reporting.

Toward the close of the fiscal year, about March, 1921, the State Board of Control created the Division of Education and Classification and Commissioner Lewis appointed me as Acting Director of this division. This was a logical step in the developing of the psychological work and will, in the course of time result in a very much broader view of the activities of the Psychiatric Clinic in the institutions and a closer application of the results of the examinations conducted by the Clinic. By placing classification in the hands of a member of the Psychiatric Clinic and at the same time linking this with the educational activities of the several institutions, I am sure you will see a much broader and more intensive use for this work. While these new duties have been willingly undertaken because of the increased service, they have, nevertheless, so multiplied my own responsibilities that my own time for actual examining in the institutions was practically wiped out and my plans for development of the psychological work in several institutions were made ineffective.

On the other hand I have been able to carry on a rather more important advance by the contacts which have been established with the central department and by the executive relations established with the several institutions. With Professor Johnstone of the Training School at Vineland as consultant in the Department and being in close contact with Mrs. Meytrott, Director of the Division of Paroles and Domestic Relations, I have been in a position very greatly to advance our work, our ideas and our program. In particular I have spent a great deal of time at work on the educational applications of the work of the Psychiatric Clinic in the institutions and have consulted freely with heads of institutions regarding their educational programs. In carrying on this work we have had the advantage of close cooperation with Mrs. Meytrott who has permitted us to use some of her office space as headquarters for these activities. This arrangement enabled me to spend a great deal of time in the State House where most of this work had to be done.

It was evident last year that the proper development of the psychological work called for the immediate appointment of two additional assistants and provision was made in the budget of the State Home for Boys for a resident psychologist, subject to the general supervision of the Psychiatric Clinic. Provision was also made in the Psychiatric Clinic budget for an additional assistant psychologist. In both of these provisions we are fortunate in having the advantage of Commissioner Lewis' personal knowledge of the work and his appreciation

of its values. His sympathetic backing has been a constant encouragement and aid. Since January I have been actively soliciting candidates for these positions and have finally succeeded in obtaining a number of good applications. As you know, Mr. Jackson has been appointed as assistant psychologist on the Staff of the Psychiatric Clinic for the coming year. A man has not yet been appointed at the State Home for Boys, due to the difficulty of obtaining a suitable candidate and due also to Civil Service restrictions regarding salary. In both of these appointments it soon became evident that no satisfactory psychologist could be obtained at the salary available, namely \$2,400.00. Psychologists generally of the grade we desire are not obtained at less than \$3,000.00, frequently for a ten months year. This should be considered in further attempts to expand the work through other appointments and should not be lost sight of in forming the budget for the coming year. If we take a psychologist of inferior grade at less than \$3,000.00, we shall retard the development of the work rather than accelerate it, because it would be necessary to train these men for the work under immediate supervision of one of the men now employed. Experienced psychologists cannot be obtained at less than about \$250.00 per month. They are difficult to obtain even at this price, as I have advice from many of the Universities stating that they themselves are unable to obtain instructors and professors in this line of work, due to the heavy drafts made by industries on this group of professional workers.

With the organization of the Division of Education and Classification, the field of activities of the Psychiatric Clinic, particularly of the psychological section, was expanded so as to cover all State institutions and agencies and accordingly I have spent some time, though not very much, in some of the non-correctional institutions of the State and have consulted in various ways with members of the central department regarding the psychological aspects of various types of work in these institutions. Particularly at the State Institution at Vineland I have examined perhaps two dozen cases at the request of Mr. Thorn, for the purpose of diagnosis of borderline cases. These examinations have been the means of obtaining the transfer of psychopathic feeble-minded types to the Hospital for treatment. They have also been the means of permitting parole of other girls and the better institutional treatment of many. I have consulted repeatedly with Mr. Thorn regarding psychological examinations at this institution and I believe that it is probable that a resident psychologist may be appointed during the coming year at this institution, subject to the general supervision of the Psychiatric Clinic.

Similarly I have examined special cases at the Village for Epileptics and have consulted with Dr. Weeks regarding the possibility of psychological work in that institution. I have also spent a good deal of time in conference with Mrs. Meytrott for the development of community service and discussed ways and means for developing local Psychiatric Clinics throughout the State. I have also examined numerous special cases at the request of local physicians or welfare agencies and at the request of the Board of Children Guardians, and as you know have examined over twenty cases in Monmouth County. It seems to me that the development of this community service and local clinics is of the utmost importance for the State at large. This work may be expected to draw very heavily upon my time for the coming year.

During the year I have also given considerable attention to the purchase of psychological equipment and apparatus in the several institutions. Our greatest need at the present time is to obtain satisfactory examining space, furniture and apparatus. In view of the large number of examinations being made in some of the institutions, we are seriously handicapped by the lack of adequate facilities for conducting the work in a satisfactory manner. We are obliged to carry our examining equipment with us and to make use of such examining quarters as may be had. In the State Prison, however, and at the State Home for Boys we have permanent quarters with partial equipment. During the next year every effort must be made to overcome these difficulties. In anticipation I have made lists of the equipment immediately needed in each institution and am expecting to urge the purchase of this equipment out of the current appropriation.

The work in general in the several institutions may be described as follows:

STATE PRISON

Mr. Ellis has conducted practically all of the routine examinations in this institution. This includes an entrance examination of every new man admitted during the year and a parole examination of every man applying for parole to the Board of Managers and a number of special cases have also been examined upon request, some for general purposes of placement and others for the Court of Pardons. About 650 men have been so examined throughout the year, including about 500 admissions and 150 paroles. The work of industrial analysis at the Prison which proved so important last year has been practically at a standstill owing to the very large number of routine examina-

tions and my own absence from the prison work. However, at the request of the Warden a special survey was made of the prison print shop during October and November. At this time we developed a specification card showing the detailed requirements for each job in the print shop with respect to mental, physical, educational and industrial requirements. Each job in the shop was then studied and described. We also developed a man qualification card showing in detail the various industrial, educational, mental and physical capabilities of each man. I personally examined all of the men then at work in the print shop and studied the conditions in the shop as a whole. A detailed report of this investigation was made to you and Commissioner Lewis, showing the necessity for serious reorganization of this shop. These recommendations were practically all put into effect by the Principal Keeper, with the result that the prison print shop is now one of the most effective shops in the prison.

Following this lead we began a system of reporting all new men by means of a card system showing the industrial classification of each man. This card system was cross indexed so as to show the individuals who were suitable for employment in each of the prison occupations. By means of this card index the assigning officer is now able immediately to assign a man to a job, or to find a job for a man as the case may be. We have, therefore, introduced scientific management into the industrial and educational placement of each man in the prison and this system has worked out with great satisfaction to all concerned. This type of service is of the utmost importance to the prison and should be expanded as much as possible. It should also be carried out in each of the other correctional institutions as quickly as possible. This type of work, however, requires a good deal of time in order to obtain satisfactory results. However, the importance of the work fully justifies the time expended. In our work at the State Prison we have been exceptionally fortunate in having the active and sympathetic cooperation of Dr. Means. Mr. Ellis, Dr. Means and I have kept in close touch with each other regarding individual prisoners and general examining policies at the prison. The personal and professional association has been particularly gratifying and beneficial and has undoubtedly improved the quality of the examinations for the prison particularly with reference to borderline psychopathic cases. Mr. Ellis and Dr. Means have established a means of referring cases whereby suspected psychopathic cases and definitely insane cases are recognized rather more quickly than heretofore. This has been the means of improving the standing of this work with the prison authorities.

From the standpoint of the progress and development the prison work has been practically at a standstill, except for the special efforts in the direction of industrial classification and recommendations. If we are to continue a progressive development of the examining at the prison, it will be necessary to have a man assigned for that work on full time. I recommend that the full services of the new assistant psychologist be made available for work at the prison with particular emphasis upon the development of the industrial activities. Fortunately the man appointed has had a good deal of practical experience in this direction in the army. We are particularly anxious to emphasize the educational aspects of vocational training at the prison. If this work is satisfactorily carried out we may expect a year of exceptional progress.

RAHWAY REFORMATORY

The examining at the Reformatory has been almost entirely in the hands of Mr. Ellis. I have kept in touch with the work by conferences in the office and have visited the Reformatory on several occasions to examine special cases. Mr. Ellis has examined a total of over 500 cases, comprising all new admissions at this institution. No attempt has been made to examine parole cases, except in a few instances on request. No attempt has been made to make an industrial analysis of the shops, which is, however, of vital importance for the further development and practical application of the psychological work at this institution. It is hoped that by relieving Mr. Ellis of the principal examining at the Prison he will have more time for industrial work at Rahway. Mr. Ellis has been at particular pains to follow up special cases at the Reformatory and has done good work on the problem of individual feeble-minded cases. He has also worked in close cooperation with Dr. Stone with gratifying results. In this way he has been able to call Dr. Stone's attention to many of the more difficult cases, thus relieving Dr. Stone, with his approval, of the necessity of examining non-psychopathic subjects. This relief has been appreciated by Dr. Stone, owing to the very large number of men to be examined at the Reformatory by him. It is gratifying to state that Dr. Moore has shown a continued and earnest appreciation of the efforts of the psychiatric clinic at the Reformatory. Owing to the small amount of time which Mr. Ellis has been able to give, it has not been possible to demonstrate fully to Dr. Moore the many uses to which the examination results might be put. I understand, however, that Dr. Moore is eager to expand the work next year and will view with favor the proposed plan to give Mr. Ellis more time for that institution. During

the year Mr. Ellis has particularly improved the character of his examinations so that the quality of the work is now much more satisfactory than formerly at this institution. However, we need permanent examining space, office equipment and apparatus. I believe that if Mr. Ellis is given more time for this institution these facilities will be quickly provided.

STATE HOME FOR BOYS

Examination was resumed at the State Home for Boys about October, 1920, soon after Mr. Derrick became Superintendent. From that time until about April 1st a total of approximately 250 boys were examined. In order to conduct this work satisfactorily I trained Miss Bacon in the use of giving and scoring various group mental tests and also some clinical tests. The services of Miss Bacon in this direction were of the utmost value and made possible a system of examining which could not have otherwise been developed. After a few months of experimentation we finally developed a very satisfactory form of examination, whereby each boy was examined for at least two hours, while my own examining time for each boy was reduced to thirty minutes. We also developed a special form of psychological report which has certain unique features and has been heartily endorsed by Mr. Derrick and by several to whom I have submitted it for criticism. Unfortunately my own time at Jamesburg was so entirely taken with conducting the examinations that I had practically no opportunity to develop the numerous uses of the results in the institution. At this institution we have had the great advantage of the support of Mr. Derrick in all particulars. Unfortunately this support has been limited by lack of facilities and funds, but it is expected that these difficulties will be overcome in the next year. For the coming year a resident psychologist is provided for at the State Home for Boys, but we have difficulty in obtaining a satisfactory candidate for the appointment. Now that satisfactory candidates are available, I am informed by Mr. Derrick that the appointment may be made impossible because of Civil Service restrictions regarding salary. Psychological work at this institution cannot possibly be undertaken in a large measure unless a psychologist is in residence. This is more important in this institution than in any other institution and every effort should be made to support Mr. Derrick in his demands for a suitable salary to insure the appointment of a competent psychologist. My own examining at this institution practically ceased about the beginning of April because of the heavy pressure of duties in the Department as Director of Education and Classification. How-

ever, I was able to enlist the interest of Professor Brigham of Princeton who accepted the position as temporary resident psychologist at Jamesburg, for the purpose of conducting research and for the purpose of standardizing a satisfactory examination and procedure. Professor Brigham will work at the institution during July and August during which time he ought to be able to develop a suitable program of examination and have the work in good condition for a permanent appointee to continue. At the State Home for Boys we meet with our greatest measure of success in obtaining the transfer of feebleminded cases. Fifteen stable feebleminded boys were transferred to the Training School at Vineland through the cooperation of Professor Johnstone.

STATE HOME FOR GIRLS

Regular examining was resumed at the Girls' home at the request of Dr. Harris at the beginning of February, 1921. I had been unable to examine at that institution because of other duties and because the examinations conducted by Miss Munger had made my services at that institution unnecessary. However, Dr. Harris desired me to resume work and I was able to do this on a satisfactory basis by applying the procedures developed at the State Home for Boys. In this work again I had the advantage of the assistance of Miss Bacon in conducting the group tests and in scoring them. Miss Bacon's assistance enables me to increase the examining time for a subject without increasing my own examining time and in this way we have been able to examine a total of about fifty girls up to the first of June. At this institution I have also spent a good deal of time studying the educational possibilities for the purpose of improving the psychological recommendations regarding assignment to work or study. The services of a woman psychologist are needed at this institution and at Clinton. I do not recommend the appointment of a resident psychologist at either of these institutions, except for service in both institutions. If a psychologist can be appointed as resident on part time at both institutions, this might be desirable. I am satisfied that a male psychologist can conduct this work suitably, but a woman psychologist is desired by the institutions and would offset many criticisms which are advanced against this work being done by a man. Miss Atkinson, daughter of Dr. Atkinson of Trenton, has volunteered to work as examiner at this institution during the coming year if arrangements can be made. I hope this plan can be carried out. At this institution we need a permanent examining room with suitable equipment and apparatus.

CLINTON FARMS

The examining at Clinton Farms has been rather irregular owing to the difficulty of reaching that institution and the other demands upon my time. In the course of the year I have visited the institution on four different occasions and examined a total of about 50 girls with the group tests and individually. Miss Robson, Superintendent of the Women's Reformatory has developed a policy of referring special cases to me for diagnosis. My plan is to give the group test to all the girls and then examine these special cases. This institution should be visited at least once a month regularly. It is not absolutely necessary to obtain permanent equipment because the number of cases to be examined is comparatively small.

SUMMARY

The most satisfactory aspect of the psychological examining at the close of the year is the continued persistent demands being made by the several institutions for the continuance and expansion of the service. In practically all of the institutions it is felt that the service is not as intensive as it should be and in some of them not as regular as it should be. From my own point of view we are particularly handicapped by the lack of opportunity to explain the uses to which the psychological results may be put and to see that they are carried into effect. The additional assistance provided for the coming year should make it possible to follow up the leads developed during the past year, thereby creating still further demands for the work itself because of its practical usefulness. During the coming year it will be particularly important to maintain close contact with the Division of Parole and Domestic Relations for the purpose of assisting in the development of local facilities for welfare work for which in most communities some form of psychological service will be indispensable. The type of work done by the psychiatric clinic in its clinic days in Monmouth County should be expanded and carried out in other counties as a means of stimulating the development of psychiatric and psychological work through the State at large.

In particular the psychiatric clinic is now in a position to materially advance the standardization and improvement of work in the several state institutions by assisting in the scientific classification of institutional wards. The memorandum prepared for Commissioner Lewis on the classification of defective delinquents must certainly be considered

a long step in this direction. If the Psychiatric Clinic can be the means of reclassifying for transfer those cases which are not in the proper classification in the several institutions, its value to the state will be very much increased. In the hospitals for the insane, for example, there are some feeble-minded who should be in an institution for feeble-minded and similarly in the institutions for feeble-minded there are some insane who should be receiving treatment in the state hospitals. This is one of the most important problems which the psychiatric clinic might undertake to solve.

NEW BUILDINGS

During the year the psychopathic unit which forms an addition to our present Dix Building for female patients has been completed, also one unit of the psychopathic building for the male department. These were constructed at a cost of \$300,000 for the two new units, while the first unit completed and occupied in 1917 cost only \$60,000. These three buildings will accommodate 150 patients. There still remains another unit to be erected for the male department. When completed this group will accommodate 200 new admissions so that all cases will be kept in these buildings sufficiently long for the administration of proper and adequate treatment. It is to be hoped that money will be made available through the new bond issue to complete this psychopathic building for male patients.

We would also request that suitable quarters be provided for the members of the medical staff. Individual cottages should be provided for the married members of the staff and a suitable staff house for the single members. The last Legislature appropriated \$250,000 for a congregate dining room and home for the male attendants and married employes, plans for which are now being drawn by the state architect. This building will supply a much needed want of our employes whose housing quarters are at present wholly inadequate.

CONCLUSIONS

I would especially commend to you the valuable and efficient work of members of the staff. As seen by the reports of the various departments there is an ever-increasing amount of work to be done on each individual case, both in examination and in treatment. The work of the assistant physicians is much more intensive and comprehensive than formerly.

I would also commend to you the efficient work of the supervisors of the various departments and the nurses and attendants who have rendered loyal service during the year.

We are indebted to the Warden and his staff for their valuable assistance to the medical department.

Finally I desire to express to the Board of Managers my appreciation for the encouragement, cooperation and valuable suggestions received from them during the past year, as well as for their continued confidence in the medical work of the hospital.

Respectfully submitted.

Henry A. Cotton, M. D.,
Medical Director.

August 11, 1921.

GENERAL STATISTICS FOR THE YEAR

	MALES	FEMALES	TOTAL
Patients in hospital July 1, 1920	1045	873	1918
Admitted within the year	450	462	912
Viz. By commitment	298	309	607
By voluntary admission	130	138	268
By transfer	12	14	26
From escape	9	....	9
*From visit	1	1	2
Whole number of cases within the year	1495	1335	2830
Dismissed within the year	406	377	783
Discharged as recovered	177	164	341
Discharged as improved	60	46	106
Discharged as unimproved	9	27	36
Transferred	5	5	10
Escaped	14	3	17
On visit	8	14	22
Died	133	118	251
Patients remaining in hospital July 1, 1921	1084	949	2033
Viz. As indigent patients	726	743	1469
As private patients	129	188	317
As criminals	77	11	88
As convicts	152	7	159
Number of different persons within the year	1495	1335	2830
Number of different persons admitted	450	462	912
Daily average number of patients	1052	915	1967

*Seven (7) males and one (1) female nominally admitted for discharge.

Report of Business Department

June 30, 1921.

TO THE BOARD OF MANAGERS OF THE NEW JERSEY STATE HOSPITAL
AT TRENTON.

GENTLEMEN:

In compliance with the laws of the State of New Jersey, I beg to submit the annual report of the business department,—including report of extraordinary repairs; treasurer's report; statement of the earnings and expenses of the institution for the year; value of personal property; tabulated statements of products of the farm, garden, dairy, piggery and bakery; amount of vegetables canned, preserved and pickled; work done in the industrial shops, including dressmaking department, upholstery and tailor shops.

EXTRAORDINARY REPAIRS AND RECOMMENDATIONS

We have made repairs to the following wards on the West side, Main building, consisting of new joists, floors and ceilings, including mason work, painting etc., to wards 7, 8, and 9, crosshalls 7, 8 and 9, sections 11-A and 12-A.

The following repairs were made at the Medical Director's residence,—window cut through library, porch repaired, roofs repaired and house painted complete.

Alterations were made to tower on front of Annex Building, which consisted of taking out windows, closing up same with slate and pointing up all brick work.

Three toilet rooms were enlarged in Annex Dormitories. This consisted of a new partition, new concrete floors, changing of bath tub, installing new closet, etc.

Exterior of Annex Buildings painted two coats. New Garage built at Medical Director's residence. New paint shop, 40 x 60, erected of brick and concrete. New blacksmith shop built, which will enable us to do our own horseshoeing. New shelving in cellar of storeroom built, for the purpose of storing crockery and other supplies in suitable form. New Machinery was purchased for machine shop and store-room remodelled for storing small fittings for plumbing and steam-fitting.

Our fire protection work consisted of the building of two fire stairways at the Main Building and fireproofing four stairways at the Annex, building of wall for protection to reservoir and the erection of a four-way Siamese hydrant.

As the State has purchased the Oakland Farms, consisting of 385 acres, for the purpose of producing milk and eggs, it will be necessary to keep on the farm a number of patients. We have a house very well fitted for this purpose, with the exception of kitchen and dining room accommodations. I would therefore recommend that an appropriation be asked for to cover same. We also have considerable fencing to erect and many of our buildings need painting. We should have some extra moneys to do this work.

TREASURER'S REPORT—RECEIPTS AND DISBURSEMENTS FOR FISCAL YEAR ENDING JUNE 30, 1921

RECEIPTS

Received from State Treasurer for payrolls of officers and employees	\$251,598.99	
Received from sundry counties for support and clothing of indigent patients	197,659.25	
Received from sundry persons for support and clothing of non-indigent patients...	\$128,882.92	
Less refunds	7,939.97	
	<hr/>	
Check (Soffel) protested	112.92	
	<hr/>	120,830.03
Received for sale of farm products, etc...		4,506.06
Received for interest on deposits (Mechanics National Bank)		214.49
Received from State Treasurer for Petty Cash expense fund		1,000.00
		<hr/>
		\$575,808.82

DISBURSEMENTS

Receipts transmitted to State Treasurer.....	\$323,209.83	
Petty Cash refunded to State Treasurer.....	1,000.00	
Salaries and wages of officers and employees paid.....	251,598.99	
	<hr/>	\$575,808.82

STATEMENT OF EARNINGS FOR FISCAL YEAR ENDING JUNE 30, 1921

Receipts from sundry counties for support and clothing of indigent patients:		
Atlantic County	\$922.27	
Bergen County	497.79	
Burlington County	963.60	
Camden County	675.00	
Cape May County	4,100.56	
Cumberland County	1,382.68	
Essex County	1,864.83	
Gloucester County	9,003.91	
Hudson County	2,981.78	
Hunterdon County	14,645.16	
Mercer County	49,467.67	
Middlesex County	37,890.47	
Monmouth County	31,709.51	
Morris County	222.95	
Ocean County	11,002.93	
Salem County	6,477.48	
Passaic County	961.56	
Somerset County	12,449.05	
Union County	849.98	
Warren County	9,562.26	
Sussex County	27.81	
	<hr/>	\$197,659.25

Received from sundry persons for support and clothing of non-indigent patients...	\$128,882.92		
Less refunds	\$7,939.97		
Less protested check (Soffel)	112.92	8,052.89	120,830.03
Received from miscellaneous sales			4,506.06
Interest on deposits (Mechanics National Bank)			214.49
Total earnings		\$323,209.83	
Budget estimates of receipts for 1921		285,000.00	
Receipts in excess of estimate			\$38,209.83

The average daily number of patients for the year ending June 30, 1921 was 1974; the average cost of maintenance per capita for the year was \$368.65, the average cost per week \$7.09.

Deducting the receipts, \$323,209.83 (which is \$38,209.83 in excess of budget estimate) from the total expenses, \$727,716.64, leaves \$404,506.81 a net cost per capita to the State per year of \$204.92, or \$3.94 per week.

As the total operating expenses for the year was \$27,148.56 less than the amount appropriated, and the receipts exceeded budget estimate by \$38,209.83, the cost of operating expenses is less than the amount estimated by \$65,358.39.

STATEMENT OF APPROPRIATIONS AND EXPENSES—VOUCHERED FOR PAYMENT—FISCAL YEAR ENDING JUNE 30, 1921

OPERATING EXPENSES

Appropriation		\$754,865.00
Expenses—Vouchered for payment invoices and payrolls:		
Salaries and wages	\$251,598.99	
Food	145,356.58	
Clothing	28,320.22	
Fuel, light and power	83,979.87	
Household supplies	44,304.67	
Farm, stable and grounds	47,962.78	
Medical and surgical	19,798.10	
Printing and office supplies	2,548.35	
Current repairs	28,387.42	
Traveling expenses	19.26	
Telephone and telegraph	1,798.26	
Postage	478.40	
Amusements	1,234.70	
Funeral expenses	859.00	
Newspapers and magazines	273.50	
Returning runaways	237.37	
Insurance	3,416.21	
Religious services	265.00	
Freight and express	912.46	
Tobacco	3,475.33	
Incidentals	1,151.26	
	\$666,377.73	
Requisitions and purchase orders outstanding ..	61,338.91	
		\$727,716.64
Expenses less than appropriation		\$27,148.36

PSYCHIATRIC CLINIC

Appropriation		\$12,500.00
Expenses—Vouchered and paid:		
Salaries and wages	\$10,767.86	
Traveling expenses	780.14	
Printing and office supplies	908.01	
Requisitions outstanding	43.99	
		12,500.00

WALLS AND FIREPROOF STAIRS

Appropriation		\$25,000.00
Expenses—Vouchered for payment, etc.:		
Advertising	\$20.80	
Contract (Poinsett)	24,925.00	
Requisitions outstanding	54.20	
		25,000.00

AUTO TRUCK

Appropriation		\$2,500.00
Lapsed	\$2,500.00	
		2,500.00

EXTRAORDINARY REPAIRS

Appropriation		\$34,000.00
Expenses—Vouchered and paid:		
Salaries	\$16,804.63	
Building materials and supplies ..	16,941.03	
Requisitions outstanding	254.34	
		\$34,000.00

INVENTORY

The annual appraisement of the personal property of the institution was made during the month of June, and the values of different products on hand were as follows:

	1921	1920
Food	\$ 35,726.63	\$ 16,751.09
Clothing	32,427.90	33,209.85
Fuel, Light and Power	12,272.64	7,440.13
Household Supplies	233,505.56	204,121.97
Farm and Garden	62,034.05	37,107.53
Stable and Grounds	18,234.05	24,029.08
Medical and Surgical	34,404.78	19,399.16
Current Repairs	36,698.64	29,674.83
Miscellaneous	9,971.15	10,339.81
Printing and Office Supplies	520.33	721.53
	\$475,795.73	\$382,794.98

The inventory was taken by Messrs. John W. Hendrickson and Chas. F. Stout, who were appointed by the Board of Managers to assist the Warden in making the appraisement.

LIBRARY FUND

Investments, receipts and disbursements for the fiscal year ending June 30, 1921.

INVESTMENTS

Bonds and Mortgage (Fishberg)	\$ 3,500.00	
Bonds and Mortgage (Skillman)	1,500.00	
Liberty Bonds	1,000.00	
		\$6,000.00

RECEIPTS

Cash Balance in Bank		213.44
Interest on Mortgage (Fishberg)	87.50	
Interest on Mortgage (Skillman)	37.50	
Interest on Liberty Bond	21.25	
Interest on Liberty Bond	21.25	
Interest on Mortgage (Fishberg)	87.50	
Interest on Mortgage (Skillman)	37.50	
		292.50
		\$6,505.94

DISBURSEMENTS

American Medical Association	\$ 5.00	
C. L. Traver	76.98	
Journal of Nervous and Mental Diseases	8.00	
The Year Book Publishers	1.50	
The Johns Hopkins Press	5.00	
The MacMillan Company	1.34	
Paul B. Hoeber	3.50	
F. A. Davis Co.	12.00	
The Rockefeller Institute	5.00	
New Era Printing Co.	9.15	
The Modern Hospital Pub. Co.	3.00	
Princeton University Press	1.58	
G. P. Putnam Sons	6.85	
The American Journal of Nursing	3.00	
The Rockefeller Institute	5.00	
The Journal of Infectious Diseases	5.00	
The Boston Medical and Surgical Journal	6.00	
Bayard Holmes, Treas.	10.00	
American Medical Association	6.00	
Journal of Bacteriology	5.00	
The Johns Hopkins Press	1.25	
Association for the Study of Internal Secretions .	7.50	
W. B. Saunders Co.	12.00	
C. L. Traver	74.02	
Oxford University Press	50.00	
Oxford University Press	48.50	
Journal of Nervous and Mental Diseases	10.00	
American Medical Association	6.00	
	388.17	
		\$6,117.77

SEWING ROOM REPORT FOR THE YEAR ENDING JUNE 30, 1921.

MATERIAL USED

660 spools white cotton	\$0.07 $\frac{2}{3}$	\$50.60
2,112 spools white cotton .....	.06 11/12	146.08
5 boxes stay binding	1.00	5.00
8 boxes stay binding .....	.70	5.60
27 gross No. 22 bone buttons .....	.50	13.50
21 gross No. 27 bone buttons .....	.60	12.60
58 gross porcelain buttons .....	.08 $\frac{1}{2}$	4.83
1 gross pearl buttons .....	.40	.40
1 gross pearl buttons .....	.75	.75
24 spools black darning cotton .....	.02 1/12	.50
12 thimbles .....	.0361	.43
1 paper pins .....	.08 $\frac{1}{2}$	.08
5 papers sewing needles .....	.07 $\frac{1}{2}$	.38
5 papers darning needles .....	.05	.25
1 box sewing machine needles	1.30	1.30
4 bottles 3 in 1 oil .....	.35	1.40
3 pieces webbing .....	.50	1.50
6 dozen napkins	2.50	15.00
2,405 $\frac{3}{4}$ yards 4/4 unbleached muslin .....	.3218	774.17
2,959 $\frac{1}{4}$ yards 4/4 unbleached muslin .....	.33 $\frac{1}{2}$	991.35
4,789 $\frac{1}{2}$ yards 4/4 unbleached muslin .....	.1295	620.24
605 $\frac{1}{2}$ yards 4/4 unbleached muslin .....	.33	199.82
3,383 yards 7/4 unbleached muslin .....	.6298	2,130.61
2,035 $\frac{3}{4}$ yards 7/4 unbleached muslin .....	.65	1,323.24
852 $\frac{3}{4}$ yards 7/4 unbleached muslin .....	.5213	444.54
1,152 $\frac{1}{4}$ yards 7/4 unbleached muslin .....	.323	372.18
2,009 $\frac{1}{4}$ yards 8/4 unbleached muslin .....	.65	1,306.01
108 yards 60 inch unbleached muslin ..	.48	51.84
256 $\frac{3}{4}$ yards 10/4 bleached muslin .....	.80	205.40
1,279 $\frac{1}{4}$ yards 7/4 bleached muslin .....	.58	741.97
1,549 $\frac{1}{2}$ yards 4/4 bleached muslin .....	.2568	397.91
36 yards 4/4 bleached Indian Head ..	.45	16.20
100 yards 4/4 bleached Indian Head ..	.36	36.00
53 yards 42 inch bleached Indian Head ..	.28	14.84
3,707 $\frac{3}{4}$ yards canton flannel .....	.38	1,408.95
3,137 yards canton flannel .....	.42 $\frac{1}{2}$	1,333.22
732 $\frac{1}{4}$ yards bleached canton flannel .....	.31 $\frac{1}{2}$	230.66
2,650 yards bath toweling .....	.24 $\frac{1}{2}$	649.25
1,400 yards white toweling .....	.27 $\frac{1}{2}$	385.00
12 yards white toweling .....	.39	4.68
1,200 yards crash toweling .....	.21	252.00
837 yards huck toweling .....	.32	267.84
1,215 yards crash toweling .....	.18	218.70
16 yards table linen	1.65	26.40
21 yards table linen	1.01	21.21
84 $\frac{1}{2}$ yards table linen .....	.77 $\frac{1}{2}$	65.49
36 yards ruching .....	.229	8.24
207 yards cheviot .....	.38 $\frac{1}{2}$	79.69
11 yards ticking .....	.26	2.86
Cost of material used		\$14,840.71
Wages of three (3) employees		1,280.00
Board of three (3) employees		740.00
Maintenance of four (4) patients		720.00
5% of material for overhead expense		742.04
Total cost		\$18,322.75

FINISHED PRODUCTS

109	hospital shirts	\$1.45	\$158.05
103	hospital shirts .....	.57	58.71
1,083	men's shirts	1.35	1,462.05
565	men's shirts .....	.50	282.50
317	men's undershirts	1.40	443.80
86	men's undershirts	1.25	107.50
186	men's undershirts	1.20	223.20
125	women's undershirts	1.25	156.25
266	women's undershirts	1.40	372.40
378	women's undershirts	1.20	453.60
100	women's chemise	1.25	125.00
368	women's chemise	1.35	496.80
426	women's chemise .....	.45	191.70
254	women's aprons .....	.50	127.00
142	women's aprons .....	.32	45.44
108	women's nightgowns	1.25	135.00
464	women's petticoats	1.25	580.00
537	women's petticoats	1.20	644.40
18	surgeon's gowns	1.86	33.48
12	laboratory gowns	1.50	18.00
60	laboratory gowns	1.85	111.00
451	men's drawers	1.45	653.95
358	men's drawers	1.30	465.40
100	men's aprons .....	.60	60.00
186	men's aprons (blue) .....	.55	102.30
24	burial robes	2.00	48.00
24	burial skirts	1.25	30.00
24	burial chemise	1.25	30.00
25	baker's gloves .....	.15	3.75
72	napkins .....	.20	15.00
2,129	bath towels .....	.38	809.02
914	bath towels .....	.22	201.08
222	roller towels .....	.90	199.80
134	roller towels .....	.55	73.70
1,433	attendant's towels .....	.38	544.54
12	laboratory towels .....	.45	5.40
884	bleached towels .....	.42	371.28
1,246	unbleached towels .....	.28	348.88
1,627	unbleached sheets	1.80	2,928.60
376	unbleached sheets	1.45	545.20
1,404	unbleached sheets	2.00	2,808.00
460	unbleached sheets	1.00	460.00
719	bleached sheets	1.65	1,186.35
88	bleached double sheets	2.20	193.60
1,199	unbleached pillow cases .....	.50	599.50
1,069	unbleached pillow cases .....	.20	213.80
546	unbleached pillow cases .....	.46	251.16
223	bleached pillow cases .....	.35	78.05
12	large bleached pillow cases .....	.80	9.60
36	42 inch bolster cases .....	.52	18.72
6	bread covers	2.50	15.00
4	table cloths	6.85	27.40
4	table cloths, 2 yards each	2.25	9.00
6	table cloths, 2 yards each	1.95	11.70
6	table cloths, 2½ yards each	2.75	16.50
6	table cloths, 3 yards each	2.90	17.40

2	table cloths, 3¾ yards each	3.60	7.20
2	table cloths, 4 yards each	4.25	8.50
4	table cloths, 4½ yards each	4.35	17.40
2	table cloths, 9½ yards each	9.25	18.50
3	canvas bath hammocks	3.90	11.70
Total value of articles produced			\$19,640.86
Total expense of articles produced			18,322.75
Amount saved by institutional production			\$1,318.11

DRESSMAKER'S REPORT FOR THE YEAR ENDING JUNE 30, 1921

FINISHED PRODUCTS

83	gingham dresses	\$3.05	\$253.15
111	plaid gingham dresses	3.85	427.35
230	stripe gingham dresses	3.75	862.50
222	eden gingham dresses	3.05	677.10
11	cheviot dresses	3.05	33.55
3	percale sacques	1.15	3.45
172	percale dresses	3.25	559.00
345	cheviot dresses	3.85	1,328.25
2	waists	1.00	2.00
442	women's drawers .....	.50	221.00
Value of products			\$4,367.35

MATERIALS USED

59½	yards unbleached muslin, 4/4	\$0.30335	\$18.05
163½	yards unbleached muslin, 4/4 .....	.3218	52.61
259	yards unbleached muslin, 4/4 .....	.33½	86.76
1,066½	yards unbleached muslin, 4/4 .....	.1295	138.11
79	yards percale .....	.30	23.70
917¾	yards percale .....	.35	321.21
498	yards gingham .....	.22½	112.05
1,159¾	yards eden gingham .....	.22½	260.94
668	yards plaid gingham .....	.36	240.48
1,386	yards stripe gingham .....	.34	471.24
187	yards cheviot .....	.32½	60.78
1,005	yards cheviot .....	.37½	376.88
569¼	yards cheviot .....	.38½	219.16
425	dozen white colonial buttons .....	.083	35.28
44	dozen black bone buttons .....	.04	1.76
156¾	dozen black bone buttons .....	.04 1/6	6.53
38	dozen white bone buttons .....	.08½	3.17
6	dozen pearl buttons .....	.03½	.20
13	dozen pearl buttons .....	.06¼	.81
9½	dozen hooks and eyes .....	.042	3.30
84	spools white cotton .....	.0393	4.30
600	spools white cotton .....	.06 11/12	41.50

Cost of material	\$2,474.92
Salary and support of dressmaker	660.00
Maintenance of three (3) patients	510.00
10% of material for overhead expense	247.49
Total cost	3,892.41
Amount saved by institutional production ...	\$474.94

REPORT OF FRUITS AND VEGETABLES CANNED, JELLIES, ETC.,
MADE FOR THE YEAR ENDING JUNE 30, 1921

15,060 quarts red tomatoes	\$0.16	\$2,409.60	
244 quarts apple jelly .....	.40	97.60	
1,268 quarts yellow tomatoes .....	.25	317.00	
5,800 quarts string beans .....	.32	1,856.00	
21,664 quarts peaches .....	.25	5,416.00	
9 quarts gooseberries .....	.30	2.70	
80 quarts cherries .....	.30	24.00	
2,440 quarts huckleberries .....	.25	610.00	
635 quarts blue plums .....	.45	285.75	
236 quarts green plums .....	.45	106.20	
47,436 Total number of quarts			\$11,124.85

BAKERY REPORT FOR YEAR ENDING JUNE 30, 1921

PRODUCTS

748,480 pounds bread	\$0.07 $\frac{3}{4}$	\$58,007.20	
5,817 $\frac{2}{3}$ dozen rolls .....	.12	698.12	
1,592 dozen sugar jumbles .....	.22	350.24	
5,992 pounds molasses cake .....	.12	719.04	
1,302 pounds pound cake .....	.16	208.32	
Value of products			\$59,982.92

INGREDIENTS USED

2,839 pounds yeast	\$0.27 $\frac{1}{2}$	\$780.73	
3,143 pounds yeast .....	.25	785.75	
744 pounds sugar .....	.26	193.44	
453 pounds sugar .....	.24	108.72	
408 pounds sugar .....	.20 $\frac{1}{4}$	82.62	
1,252 pounds sugar .....	.19	237.88	
696 pounds sugar .....	.1110	77.26	
1,481 pounds sugar .....	.0813	120.41	
300 pounds sugar .....	.07875	23.63	
2,516 pounds sugar .....	.0849	213.61	
1,776 pounds lard .....	.28	497.28	
599 pounds lard .....	.21 $\frac{1}{4}$	127.29	
2,700 pounds lard .....	.22	594.00	
758 pounds lard .....	.1671	126.66	
2,873 pounds lard .....	.1547	444.45	
1,073 pounds malt syrup .....	.10	107.30	
690 pounds malt syrup .....	.09 $\frac{1}{2}$	65.55	
3,640 pounds salt .....	.0109	39.68	
4,237 pounds salt .....	.01 $\frac{1}{4}$	52.96	
720 pounds salt .....	.0128	9.22	
97,630 pounds wheat flour .....	.0755	7,371.07	
163,720 pounds wheat flour .....	.074234	12,153.59	
7,930 pounds wheat flour .....	.04337	343.92	
58,600 pounds wheat flour .....	.05551	3,252.89	
18,200 pounds wheat flour .....	.03656	665.39	
17,168 pounds wheat flour .....	.0456	782.86	
103,430 pounds wheat flour .....	.04553	4,709.17	
1,746 pounds cake flour .....	.0428	74.73	

35 pounds butter .....	.47	16.45	
98 pounds butter .....	.4698	46.04	
160 pounds butter .....	.379	60.64	
1,090 eggs .....	.04625	50.41	
1,260 eggs .....	.0241	30.37	
90 5/16 pounds bi-carbonate of soda ...	.04	3.61	
23 pounds ginger .....	.16	3.68	
4 pounds cinnamon .....	.17	.68	
12 $\frac{1}{2}$ pounds ammonia .....	.26	3.25	
2 pounds ground allspice .....	.07 $\frac{1}{2}$	.15	
10 $\frac{1}{8}$ pounds cream of tartar .....	.60	6.08	
2 pounds lemon extract	1.50	3.00	
1 $\frac{1}{2}$ pounds vanilla extract .....	.94	1.41	
15 pounds raisins .....	.19	2.85	
784 quarts molasses .....	.18	141.12	
415 quarts milk .....	.08 $\frac{1}{2}$	35.28	
Cost of ingredients			\$34,447.08

Expenses

Fuel	\$662.53
Bakers' salaries	1,720.00
Bakers' board	208.00
Patients' board	720.00
Insurance	6.00
Electric light and power	51.00
Depreciation on machinery, buildings, etc., \$7,000.00 at five per cent (5%)	350.00
Interest on buildings, machinery, \$7,000.00 at five per cent (5%)	350.00
Cost of delivery system: Driver's time, gaso- line, oil, tires, etc., ten per cent (10%) of \$962.11, value of auto truck	453.18
Total expense	\$38,967.79

Amount saved by institutional production \$21,015.13

GARDEN REPORT FROM MARCH 1, 1920 TO FEBRUARY 28, 1921

RECEIPTS

Inventory value of real estate, stock and equip- ment—March 1, 1921	\$17,229.58
6 baskets apples	\$0.40 2.40
45 bunches asparagus .....	.14 $\frac{1}{2}$ 6.53
60 bunches asparagus .....	.18 10.80
85 bunches asparagus .....	.20 17.00
180 bunches asparagus .....	.25 45.00
65 bunches asparagus .....	.35 22.75
705 bunches asparagus .....	.38 267.90
2,106 bunches asparagus .....	.40 842.40
630 bunches asparagus .....	.50 315.00
413 bunches asparagus .....	.60 247.80
180 bunches asparagus .....	.65 117.00
85 bunches asparagus .....	.75 63.75
3 baskets lima beans .....	.65 1.95
110 baskets lima beans .....	.75 82.50

80	baskets lima beans	1.00	80.00
17	baskets lima beans	1.25	21.25
10	baskets lima beans	2.20	22.20
99	baskets string beans	.50	49.50
267	baskets string beans	.55	146.85
158	baskets string beans	.65	102.70
170	baskets string beans	.75	127.50
321	baskets string beans	1.00	321.00
193	baskets string beans	1.20	231.60
148	baskets string beans	1.30	192.40
3,793	bunches beets	.04	151.72
670	bunches beets	.05½	36.86
650	bunches beets	.08	52.00
300	baskets beets	.40	120.00
84	baskets beets	.45	37.80
350	baskets beets	.50	175.00
30	baskets beets	.55	16.50
60	baskets beets	.60	36.00
174	baskets beets	.65	113.10
28	baskets beets	.70	19.60
33½	barrels cabbage	.75	25.13
10	barrels cabbage	.85	8.50
16	barrels cabbage	.90	14.40
110	barrels cabbage	1.00	110.00
16	barrels cabbage	1.12	17.92
112	barrels cabbage	1.15	128.80
16½	barrels cabbage	1.25	20.63
32	barrels cabbage	1.35	43.20
17½	barrels cabbage	1.40	24.50
91	barrels cabbage	1.50	136.50
17½	barrels cabbage	1.65	28.88
30	barrels cabbage	2.00	60.00
16½	barrels cabbage	2.50	41.25
16	barrels cabbage	4.00	64.00
16	barrels cabbage	4.50	72.00
54	bunches carrots	.03½	1.89
45	bunches carrots	.04	1.80
192	bunches carrots	.06	11.52
14	bunches carrots	.07½	1.05
60	bunches carrots	.08	4.80
6	baskets carrots	.30	1.80
69	baskets carrots	.35	24.15
54	baskets carrots	.40	21.60
110	baskets carrots	.45	49.50
102	baskets carrots	.50	51.00
14	baskets carrots	.55	7.70
6	baskets carrots	.65	3.90
6	baskets carrots	.70	4.20
31	heads cauliflower	.15	4.65
76	heads cauliflower	.30	22.80
101	heads cauliflower	.35	35.35
22	heads cauliflower	.40	8.80
515	bunches celery	.12	61.80
738	bunches celery	.17	125.46
2,528	bunches celery	.18	455.04
5	bunches celery	.22	1.10
210	bunches celery	.23	48.30
9	bunches celery	.25	2.25

224	heads celeriac	.12	26.88
800	heads celeriac	.12	96.00
25½	baskets cucumbers	.40	10.20
42½	baskets cucumbers	.50	21.25
79	baskets cucumbers	.65	51.35
15	baskets cucumbers	.75	11.25
5	baskets cucumbers	1.25	6.25
24,375	ears corn	.02	487.50
6,550	ears corn	.02¼	147.38
21,125	ears corn	.02¾	580.94
20,600	ears corn	.03	618.00
8,600	ears corn	.03½	301.00
45	baskets egg plant	.40	18.00
20	baskets egg plant	.45	9.00
66	baskets egg plant	.50	33.00
26	baskets egg plant	.90	23.40
70	quarts gooseberries	.20	14.00
6	baskets grapes	.85	5.10
4	baskets grapes	1.00	4.00
3	baskets grapes	1.20	3.60
1	basket grapes	1.25	1.25
9	baskets grapes	1.40	12.60
1,000	pounds horseradish	.20	200.00
214	baskets kale	.20	42.80
200	baskets kale	.25	50.00
24	baskets kale	.30	7.20
104	bunches kohlrabi	.04	4.16
14	bunches kohlrabi	.05	.70
8	bunches kohlrabi	.06	.48
60	bunches leek	.04	2.40
1,000	bunches leek	.05	50.00
110	bunches leek	.06	6.60
1,572	heads lettuce	.05	78.60
144	heads lettuce	.07	10.08
35	heads lettuce	.08	2.80
3,252	heads lettuce	.10	325.20
34	heads lettuce	.15	5.10
150	bunches marjoram	.03	4.50
3,444	bunches green onions	.06	206.64
1,604	bunches green onions	.10	160.40
1,751	bunches green onions	.12	210.12
25	baskets onions	.50	12.50
53	baskets onions	.55	29.15
9	baskets onions	.60	5.40
74	baskets onions	.65	48.10
66	baskets onions	.70	46.20
852	baskets onions	.75	639.00
77	baskets onions	.80	61.60
37	baskets onions	.90	33.30
5,000	pounds pumpkins	.0133	66.50
65	bunches parsley	.02	1.30
15	bunches parsley	.02½	.39
241	bunches parsley	.03	7.23
52	bunches parsley	.03½	1.83
330	bunches parsley	.04	13.20
10	bunches parsley	.04½	.46
38	baskets parsnips	.30	11.40
366	baskets parsnips	.50	183.00
76	baskets parsnips	.55	41.80

298	baskets parsnips	.60	178.80
17	baskets peppers	.40	6.80
5	baskets peppers	.45	2.25
4	baskets peppers	.55	2.20
117	baskets peas	.50	58.50
112	baskets peas	.65	72.80
568	bunches rhubarb	.06	34.08
526	bunches rhubarb	.08	42.08
874	bunches rhubarb	.09	78.66
24	bunches rhubarb	.12	2.88
1,071	bunches radishes	.03	32.13
746	bunches radishes	.05	37.30
332	bunches radishes	.06	19.92
25	bunches radishes	.07	1.75
40	bunches radishes	.10	4.00
601	pints raspberries	.16	96.16
127	pints raspberries	.17	21.59
1,029	pints raspberries	.18	185.22
150	bunches sage	.02½	3.75
236	baskets spinach	.25	59.00
146	baskets spinach	.50	73.00
38	baskets squash	.40	15.20
70	baskets squash	.45	31.50
111	baskets squash	.50	55.50
105	baskets squash	.55	57.75
52	baskets squash	.60	31.20
28	baskets squash	.75	21.00
156	quarts strawberries	.23	35.88
1,806	quarts strawberries	.25	451.50
2,421	quarts strawberries	.30	726.30
1,011	quarts strawberries	.40	404.40
192	baskets Swiss chard	.25	48.00
198	baskets Swiss chard	.35	69.30
192	baskets Swiss chard	.38	72.96
360	baskets Swiss chard	.40	144.00
102	baskets Swiss chard	.65	66.30
114	baskets Swiss chard	.70	79.80
192	baskets Swiss chard	.75	144.00
303	baskets red tomatoes	.35	106.05
779	baskets red tomatoes	.40	311.60
899	baskets red tomatoes	.50	449.50
54	baskets red tomatoes	.60	32.40
378	baskets red tomatoes	.75	283.50
175	baskets red tomatoes	1.10	192.50
144	baskets red tomatoes	1.25	180.00
11	baskets red tomatoes	1.30	14.30
29	baskets red tomatoes	1.60	46.40
289	baskets red tomatoes	1.75	505.75
2½	baskets red tomatoes	2.00	5.00
5	baskets yellow tomatoes	.55	2.75
15	baskets yellow tomatoes	.70	10.50
28	baskets yellow tomatoes	.75	21.00
18	baskets yellow tomatoes	1.00	18.00
66	baskets yellow tomatoes	1.25	82.50
21	baskets yellow tomatoes	1.30	27.30
27	baskets yellow tomatoes	1.75	47.25
40	baskets white turnips	.40	16.00
574	baskets white turnips	.50	287.00
36	baskets white turnips	.65	23.40
	Total receipts		\$34,254.36

EXPENSES

2	tons corn fertilizer	\$48.93	97.36
¾	potato fertilizer		50.05
2½	tons truck fertilizer	57.48	143.70
½	ton sulphate of ammonia	100.00	50.00
280,780	pounds manure	4.95	694.93
50	pounds arsenic of lead	.32	16.00
	Seeds and sets		636.80
4	bushels clover seed	7.00	28.00
2,000	bean poles	.07	140.00
	Keep of five (5) horses		1,005.77
	Food for ten (10) patients	180.00	1,800.00
	Household supplies for ten patients	12.00	120.00
	Clothing for ten (10) patients	35.00	350.00
	Board of garden help (4)	180.00	720.00
	Household supplies for garden help	15.00	45.00
	Wages of garden help		3,900.00
	Horseshoeing		210.00
	New tools, harness and wagons		300.00
	Interest on investment of land, buildings, stock and machinery, \$17,229.58 at five per cent (5%)		816.47
	Insurance on value of stock, tools and machinery, \$3,000.00 at .38%		11.60
	Inventory value of real estate, stock and equipment March 1, 1920		16,780.30
			\$27,960.98
	Total profit on garden for the year		\$6,293.38

FARM REPORT—FROM MARCH 1, 1920 TO FEBRUARY 28, 1921

RECEIPTS

	Inventory value of real estate, stock and equipment—March 1, 1921		\$56,251.45
7,942¾	bushels potatoes	1.35	10,722.60
951 19/60	bushels wheat	2.30	2,188.03
159	tons mixed hay	25.00	3,992.19
1,040	bushels ears corn	97.00	1,008.80
3,600	bundles corn stalks	.03	108.00
205	bushels ears corn, seconds	.50	102.50
40	tons wheat straw	12.00	480.00
550	tons ensilage	8.00	4,400.00
50	bushels apples	1.00	50.00
8	baskets Keiffer pears	.90	7.20
2	cords wood	6.00	12.00
3,200	ears sweet corn	.02¾	88.00
42	baskets tomatoes	.75	31.50
10	baskets lima beans	1.25	12.50
8	baskets onions	.75	6.00
40	bunches asparagus	.40	16.00
40	bunches radishes	.06	2.40
8	baskets string beans	.75	6.00

8	baskets beets .....	.60	4.80
100	bunches celery .....	.18	18.00
6	barrels cabbage	1.65	9.90
3	baskets egg plant .....	.50	1.50
159	pounds chicken used on farm ..	.38	60.42
296 1/4	dozen eggs gathered .....	.62	183.67
25	baskets cherries	1.25	31.25
8	baskets cucumbers .....	.75	6.00
6	baskets grapes	1.20	7.20
150	heads lettuce .....	.10	15.00
10	baskets melons .....	.85	8.50
2	baskets peppers .....	.50	1.00
75	quarts strawberries .....	.30	22.50
2,500	pounds pumpkins .....	.0133	33.25
32	days labor, 1 team and man, carting to dairy	3.31	105.92
37	days labor, 1 team and man, carting to piggery	3.31	122.47
46	days labor, 1 team and man, carting to hospital	3.31	152.26
22 1/2	days labor, 1 man, killing hogs..	1.87	42.07
40	acres pasture to dairy		782.60
			<u>\$81,093.48</u>

EXPENSES

15	tons potato fertilizer	66.74	1,001.10
8	tons corn fertilizer	48.93	391.44
800	pounds kiltone .....	.18	144.00
472 1/2	bushels lime .....	.25	118.30
430	bushels seed potatoes	2.70	1,161.00
300	pounds binder twine .....	.16 1/2	49.50
24,375	pounds stove coal	8.70	106.02
475	gallons gasoline .....	.28	136.95
1 4/5	bushels red clover seed	27.50	49.50
4	quarts red clover seed .....	.90	3.60
8 1/2	bushels seed corn	4.50	38.25
8 11/20	bushels timothy seed		54.34
1 4/5	bushels alfalfa seed	26.00	46.80
4	quarts alfalfa seed .....	.90	3.60
1 4/5	bushels alsike seed	27.50	49.50
4	quarts alsike seed .....	.90	3.60
200	pounds arsenic of lead .....	.29	58.00
	Manure from dairy		1,960.00
75	tons manure from piggery	1.50	112.50
	Garden seeds and sets		36.48
41	bushels shelled corn feed	1.85	75.85
1,700	pounds cracked corn feed .....	.04	68.00
33,320	pounds oats feed .....	.0277	922.37
4,200	pounds wheat bran feed .....	.0249	104.55
45,690	pounds timothy hay feed (ton)..	25.00	705.49
	New machinery and repairs		200.00
	Blacksmithing		225.00
	Veterinary		25.25
10	tons straw	12.00	120.00
	Extra labor cutting ensilage		260.00
	Board of nine (9) patients	180.00	1,620.00

Board of eight (8) employees ..	16.00	1,536.00
Wages of eight (8) employees..		4,860.00
Interest on investment, \$56,251.45 at five per cent (5%)—land, buildings, stock and machinery		2,812.57
Insurance on buildings, stock, machinery, etc.—\$18,000.00 at 38 3/8 cents		69.60
Wear and tear on implements, etc.		800.00
Inventory value of real estate, stock and equipment—March 1, 1920		55,351.35
		<u>75,280.39</u>
Total profit on farm for the year		<u>\$5,813.09</u>

DAIRY REPORT—FROM MARCH 1, 1920 TO FEBRUARY 28, 1921

RECEIPTS

Inventory value of real estate, stock and equipment— March 1, 1921			\$67,289.28
575,290 pounds milk produced	\$0.0514		29,569.90
8,220 pounds beef slaughtered .....	.1937	\$1,592.21	
10,965 pounds beef slaughtered .....	.1790	1,962.75	
			<u>3,554.96</u>
261 pounds hides sold .....	.1727	\$45.08	
270 pounds hides sold .....	.12	32.40	
200 pounds hides sold .....	.09	18.00	
300 pounds hides sold .....	.08	24.00	
			<u>119.48</u>
2 cows sold			100.00
1 calf sold			50.00
55 bob calves sold			520.00
Manure from 74 cows—\$20.00 per cow per year			1,480.00
Manure from 40 heifers—\$12.00 per heifer per year			480.00

DAIRY GARDEN

40 baskets apples .....	.40	16.00
140 bunches asparagus .....	.40	56.00
10 baskets beans, lima	1.00	10.00
50 baskets bean, string	1.00	50.00
45 bunches beets .....	.05 1/2	2.48
7 barrels cabbage	1.50	10.50
20 bunches carrots .....	.08	1.60
200 bunches celery .....	.18	36.00
6 baskets cherries	1.25	7.50
100 ears corn, sweet .....	.02 3/4	2.75
2 baskets egg plant .....	.50	1.00
5 baskets grapes	1.25	6.25
150 heads lettuce .....	.10	15.00
15 baskets onions .....	.90	13.50
52 bunches onions, green .....	.08	4.16

1 baskets peppers .....	.45	.45	
10 baskets pears .....	.90	9.00	
19 baskets peas .....	.65	12.35	
55 bunches rhubarb .....	.08	4.40	
50 bunches radishes .....	.07	3.50	
60 pints raspberries .....	.18	10.80	
10 baskets spinach .....	.50	5.00	
95 quarts strawberries .....	.30	28.50	
12 baskets Swiss chard .....	.60	7.20	
37 baskets tomatoes	1.25	46.25	
			360.19
			<u>\$103,523.81</u>

EXPENSES

124,200 pounds hay	(ton)	\$25.00	\$1,552.50
7,000 pounds hay	(ton)	23.00	80.50
33,320 pounds hay	(ton)	32.00	533.12
16,000 pounds hay	(ton)	45.60	364.80
15,600 pounds hay	(ton)	45.00	335.25
11,960 pounds hay	(ton)	50.00	299.00
19,060 pounds hay	(ton)	24.00	228.72
850,470 pounds ensilage	(ton)	10.00	4,252.35
38,700 pounds mixed feed	(ton)	63.74	1,233.46
22,600 pounds mixed feed	(ton)	64.00	723.20
17,200 pounds mixed feed	(ton)	68.00	584.80
43,500 pounds mixed feed	(ton)	65.00	1,413.75
26,600 pounds mixed feed	(ton)	71.00	944.30
78,600 pounds mixed feed	(ton)	61.80	2,428.74
6,000 pounds mixed feed	(ton)	63.10	189.30
24,000 pounds mixed feed	(ton)	53.80	645.50
25,000 pounds mixed feed	(ton)	54.27	678.38
3,000 pounds heifer feed	(ton)	54.64	95.62
5,800 pounds heifer feed	(ton)	57.00	166.14
6,600 pounds heifer feed	(ton)	56.00	184.80
6,900 pounds heifer feed	(ton)	54.50	188.03
3,000 pounds heifer feed	(ton)	61.50	92.25
1,000 pounds heifer feed	(ton)	71.00	35.50
3,000 pounds heifer feed	(ton)	64.00	96.00
3,000 pounds heifer feed	(ton)	54.80	82.20
3,300 pounds heifer feed	(ton)	55.00	90.75
6,000 pounds heifer feed	(ton)	53.80	161.40
2,400 pounds heifer feed	(ton)	50.00	55.00
3,000 pounds heifer feed	(ton)	51.15	76.72
2,000 pounds corn meal	(ton)	68.00	68.00
800 pounds corn meal	(ton)	70.00	28.00
200 pounds corn meal	(ton)	50.00	5.00
3,100 pounds hominy	(ton)	66.50	102.61
1,200 pounds hominy	(ton)	76.00	45.60
200 pounds hominy	(ton)	65.50	6.55
200 pounds oil meal	(ton)	90.00	9.00
100 pounds oil meal	(ton)	83.00	4.15
200 pounds oil meal	(ton)	80.00	8.00
300 pounds oil meal	(ton)	75.00	11.25
200 pounds oil meal	(ton)	50.00	5.00
200 pounds ground oats	(ton)	80.00	8.00
2,800 pounds ground oats	(ton)	52.00	70.10

450 pounds calf meal	(ton)	132.00	23.10
1,100 pounds calf meal	(ton)	65.00	35.75
600 pounds bran	(ton)	50.00	15.00
2,600 pounds bran	(ton)	45.25	56.65
1,800 pounds bran	(ton)	50.50	45.45
2,450 pounds salt	(hundred-weight)	1.00	24.50
26,833 pounds milk feed .....		.0514	1,408.28
168 days pasture .. (per day per cow)		.05	782.60
2,000 corn stalks	(each)	.035	70.00
50 tons straw		12.00	600.00
Garden seeds and sets			50.00
Soap, cotton and supplies			386.23
Wages of employees			2,460.00
Board of employees	(month)	16.00	384.00
Board, clothing and house supplies of five (5) patients		180.00	900.00
Heat and light			500.00
Veterinary services			219.00
Keep of two (2) horses, repairs, etc			558.00
Cost of pumping water			288.12
Insurance			133.32
Labor—27 days—1 man and team—carting feed and coal		3.31	89.37
Labor—mixing feed at mill			150.00
Interest on investment—\$67,289.28 at 5%			3,364.46
Inventory value of real estate, stock and equipment—March 1, 1920			66,931.77
			<u>97,658.94</u>
Profit for the year			\$5,864.87

PIGGERY REPORT—FROM MARCH 1, 1920 TO FEBRUARY 28, 1921

RECEIPTS

Inventory value of real estate, stock and equipment—March 1, 1921			\$18,827.33
1920			
March 2, 4,475 pounds pork killed	\$0.19		\$850.25
March 16, 5,245 pounds pork killed .....	.19		996.55
Oct. 26, 305 pounds pork killed .....	.21		64.05
Nov. 9, 5,060 pounds pork killed .....	.24		1,214.40
Nov. 24, 5,300 pounds pork killed .....	.21		1,113.00
Dec. 7, 5,025 pounds pork killed .....	.16		804.00
1921			
Jan. 4, 5,225 pounds pork killed .....	.15		783.75
Jan. 18, 5,325 pounds pork killed .....	.15		798.75
Feb. 1, 5,575 pounds pork killed .....	.15		836.25
Feb. 15, 5,525 pounds pork killed .....	.15		828.75
Feb. 28, 5,535 pounds pork killed .....	.16		885.60
			<u>9,175.35</u>
75 tons manure	1.50		112.50
Value of pigs sold			235.00
			<u>\$28,350.18</u>

EXPENSES

2,500	pounds hominy	(ton)	\$72.00	\$90.00
20,900	pounds hominy	(ton)	66.50	699.69
9,000	pounds hominy	(ton)	76.00	342.00
5,400	pounds hominy	(ton)	77.00	207.90
2,400	pounds hominy	(ton)	73.00	87.60
2,000	pounds hominy	(ton)	75.00	75.00
26,500	pounds hominy	(ton)	65.50	837.48
41,100	pounds middlings	(ton)	74.00	1,520.70
17,000	pounds middlings	(ton)	68.50	582.25
1,000	pounds bran	(ton)	45.25	22.63
500	pounds bran	(ton)	58.00	14.50
200	pounds bran	(ton)	60.00	6.00
4,300	pounds bran	(ton)	50.50	108.56
1,900	pounds corn meal	(ton)	70.00	66.50
28,500	pounds corn meal	(ton)	50.00	712.50
4,400	pounds oil meal	(ton)	83.00	182.60
2,100	pounds oil meal	(ton)	80.00	84.00
2,700	pounds oil meal	(ton)	75.00	101.25
300	pounds oil meal	(ton)	50.00	7.50
10,500	pounds shelled corn	(bushel)	1.85	346.88
205	bushels nubbin corn		.50	102.50
5,600	pounds ground wheat	(ton)	65.00	182.00
377½	barrels garbage		.25	94.27
100	pounds salt	(hundred weight)	.95	.95
50	pounds salt	(hundred weight)	1.00	.50
200	pounds charcoal	(bags)	.20	2.00
100	pounds bone meal	(hundred weight)	3.45	3.45
112	pounds bi-carbonate soda		.12	11.20
				<u>\$6,492.41</u>
27,130	pounds egg coal	(ton)	8.45	117.96
	Wages of swineherd			1,320.00
	Wages of garbage collector			630.00
	Board, clothing and house supplies of three (3) patients	(each)	180.00	540.00
	Keep of horse, shoeing, etc., for six (6) months			150.00
	Repairs to auto truck			200.00
	Gasoline and oil for auto car			311.94
	Labor—1 man—22½ days—helping at hog killing		1.87	42.07
	Insurance on buildings, equipment, \$2,500.00			32.18
	Labor killing hogs			50.00
	1 brood boar			60.00
	Veterinary services, etc.			175.00
	Labor—1 team and 1 man—37 days—carting and plowing at piggery		3.31	122.47
	Interest on investment, \$18,827.33 at 5%			941.36
	Inventory value of real estate, stock and equipment, March 1, 1920			19,499.22
				<u>\$30,684.61</u>
	Loss			\$2,334.43
	(\$660.27 of this loss was caused by the depreciation in the value of the hogs in the inventory.)			

HOG KILLING REPORT—FROM MARCH 1, 1920 TO FEBRUARY 28, 1921

RECEIPTS

40	pounds bacon		\$0.25	\$10.00
830	pounds bacon		.28	232.40
746	pounds bacon		.30	233.80
505	pounds bacon		.36	181.80
465	pounds bacon		.38	176.70
728	pounds hams		.20	145.60
724	pounds hams		.24	173.76
1,569	pounds hams		.25	392.25
606	pounds hams		.26	157.56
658	pounds hams		.28	184.24
37	pounds hams		.28½	10.55
2,136	pounds hams		.30	640.80
656	pounds hams		.31	203.36
30	pounds heads		.11	3.30
28	pounds kidneys		.07	1.96
39	pounds kidneys		.08	3.12
91	pounds kidneys		.10	9.10
1,131	pounds lard		.14	158.34
985	pounds lard		.15	147.75
2,990	pounds lard		.18	538.20
3,360	pounds lard		.22	739.20
82	pounds lard		.24	19.68
1,335	pounds lard		.28	373.80
455	pounds pigs feet		.08	36.40
1,041	pounds pigs feet		.10	104.10
596	pounds pork loins		.24	143.04
637	pounds pork loins		.25	159.25
1,800	pounds pork loins		.28	504.00
1,313	pounds pork loins		.30	393.90
1,181	pounds pork loins		.32	377.92
39	pounds pork loins		.34	13.26
500	pounds pork loins		.35	175.00
840	pounds salt pork		.20	168.00
470	pounds salt pork		.22	103.40
2,564	pounds salt pork		.25	641.00
1,407	pounds salt pork		.28	393.96
1,068	pounds sausage		.23	245.64
1,073	pounds sausage		.25	268.25
3,239	pounds sausage		.28	906.92
2,145	pounds sausage		.30	643.50
1,067	pounds sausage		.32	341.44
2,000	pounds sausage		.36	720.00
1,471	pounds scrapple		.07	102.97
1,411	pounds scrapple		.08	112.88
10,262	pounds scrapple		.10	1,026.20
1,439	pounds scrapple		.12	172.68
37	pounds shoulders		.20	7.40
515	pounds spare ribs		.18	92.70
1,023	pounds spare ribs		.20	204.60
784	pounds spare ribs		.22	172.48
212	pounds spare ribs		.25	53.00
	Value of products			\$13,011.16

EXPENSES

Spices		\$2.50	
360 pounds beef	\$0.1661	59.80	
739 pounds beef .....	.1736	128.29	
615 pounds beef .....	.1798	110.58	
15 pounds pepper .....	.249	3.74	
35 pounds pepper .....	.285	9.98	
40 pounds salt .....	.01	.40	
40 pounds salt .....	.0109	.44	
120 pounds salt .....	.0125	1.50	
Cost of material in sausage			\$317.23
110 pounds buckwheat .....	.06½	7.15	
615 pounds buckwheat .....	.0735	45.20	
770 pounds corn meal .....	.038625	29.74	
250 pounds corn meal .....	.04	10.00	
230 pounds corn meal .....	.04½	10.35	
9 pounds pepper .....	.249	2.24	
21 pounds pepper .....	.28½	5.99	
8 pounds salt .....	.01	.08	
12 pounds salt .....	.0109	.13	
37 pounds salt .....	.01¼	.46	
Cost of material in scrapple			111.34
Approximate cost of labor		160.80	
Approximate cost of fuel, light and power		10.00	170.80
Total expenses			\$599.37
Cost of dressed hogs, 21,650 pounds .....	.15	3,247.50	
Cost of dressed hogs, 10,560 pounds .....	.16	1,689.60	
Cost of dressed hogs, 9,720 pounds .....	.19	1,846.80	
Cost of dressed hogs, 5,605 pounds .....	.21	1,177.05	
Cost of dressed hogs, 5,060 pounds .....	.24	1,214.40	
			9,175.35
			\$3,835.81
Cost of material in sausage and scrapple		428.57	
Cost of labor, etc.		170.80	
			599.37
Gained by utilizing our own products			\$3,236.44
Loss on piggery			2,334.43
Total profit			\$902.01

REPORT OF GREENHOUSE—FROM MARCH 1, 1920 TO FEBRUARY 28, 1921

CUT FLOWERS

6,135 carnations	\$0.07	\$429.45
1,365 chrysanthemums (single flowers) .....	.20	273.00
1,095 chrysanthemums (sprays) .....	.10	109.50
430 callas .....	.25	107.50
9,285 dahlias .....	.06	557.10
500 roses .....	.05	25.00
212 dozen snapdragons	1.50	318.00
105 dozen phlox .....	.50	52.50
125 dozen mixed flowers .....	.30	37.50

PLANTS (POTTED)

800 plants cannas .....	.15	120.00
800 plants coleus .....	.08	64.00
300 plants cineraria .....	.35	105.00
800 plants begonias .....	.45	360.00
600 plants ferns	1.00	600.00
1,200 plants geraniums .....	.15	180.00
2,200 plants pansies .....	.05	110.00
105 plants primulas .....	.40	42.00
500 plants mixed annuals .....	.06	30.00
		\$3,520.55

EXPENSES

19 tons egg coal	\$10.83	\$220.34
50 pounds tobacco dust .....	.06	3.00
150 feet garden hose .....	.14½	21.75
5 tons manure	3.55	17.75
8 days labor—team and man—carting coal and manure	3.31	26.48
880 flower pots		41.85
1 patient's board and clothing (month)	15.00	180.00
Florist's salary, house and vegetables used by florist		1,380.00
Florist's helper's wages		900.00
		2,791.17
Profit on greenhouse		\$729.38

REPORT OF WORK DONE IN UPHOLSTERY DEPARTMENT
YEAR ENDING JUNE 30, 1921

442 mattresses made over	144 clothes bags made
11 three-quarter mattresses made over	158 new shades made
166 hair pillows made over	147 shades repaired
26 feather pillows made over	37 new beds put up
520 mattress ticks made	66 beds repaired
18 three-quarter mattress ticks made	19 hall carpets laid
380 pillow ticks made	15 chairs upholstered

5 three-quarter mattresses made	20 large rugs made
2 double mattresses made	15 rugs repaired and laid
88 new mattresses made	45 old beds put up
10 foot stools made	2 horse blankets repaired
3 halls laid with linoleum	10 small rugs made
2 rooms laid with linoleum	159 hair pillows made
10 room carpets laid	3 small sofas upholstered
4 pairs heavy portieres hung	4 canvases sewed on steam pipes
105 window shades made over	2 slip covers for box couches made
6 chair cushions made	6 slip covers for chairs made
21 pads for farm teams made	2 slip covers for wicker sofas made
9 large awnings hung	2 wicker couches repaired
14 small awnings hung	

REPORT OF TAILOR FOR YEAR ENDING JUNE 30, 1921

471 coats mended	11 overcoats mended
1426 pants mended	5 caps mended
98 vests mended	

Respectfully submitted,

SAMUEL T. ATCHLEY
Warden

TABLE 1.—GENERAL INFORMATION

DATA CORRECT AT END OF INSTITUTIONAL YEAR JUNE 30, 1921

1. Date of opening as an institution for the insane May 15, 1848.

2. Type of institution? State.

3. Hospital plant

Value of hospital property—

Personal property	\$450,000.00
Total acreage of hospital property owned (includes grounds, farm and garden and sites occupied by buildings)	462
Additional acreage rented .....	.....
Total acreage under cultivation during previous year	260

4. Officers and employees

	MALES	FEMALES	TOTAL
Superintendents	1	.....	1
Assistant physicians	7	1	8
Medical internes	6	.....	6
Consulting staff	7	.....	7
Total physicians	21	1	22

	MALES	FEMALES	TOTAL
Stewards .....	.....	.....	.....
Resident dentists	1	.....	1
Graduate nurses .....	.....	9	9
Other nurses and attendants	83	66	149
Teachers of occupational therapy .....	.....	2	2
Social workers .....	.....	2	2
All other officers and employees	124	62	186
Total officers and employees	208	141	349

5. Census of patient population at end of year

White and colored	MALES	FEMALES	TOTAL
Insane	930	881	1811
Epileptics	23	10	33
Mental defectives	80	47	127
Alcoholics	49	7	56
Drug addicts	2	4	6
Neurosyphilitics (without psychosis) .....	.....	.....	.....
All other cases .....	.....	.....	.....
Total	1084	949	2033

	MALES	FEMALES	TOTAL
6. Patients employed in industrial classes or in general hospital work on date of report	164	181	345
7. Average daily number of all patients actually in institution during year	1052	915	1967
8. Voluntary patients admitted during year	130	138	268
9. Persons given advice or treatment in out-patient clinics during year .....	.....	.....	105

TABLE 2.—FINANCIAL STATEMENT FOR THE FISCAL YEAR
ENDING JUNE 30, 1921

RECEIPTS	
Received from appropriations	\$828,865.00
Received from paying patients (\$167,659.25 county patients 120,830.03 non-indigent) ..	318,489.28
Received from all other sources	4,720.55
Total receipts	\$1,152,074.83
DISBURSEMENTS	
1. Expenditures for maintenance of patients—	
Salaries and wages	\$251,598.99
Provisions (food)	168,745.09
Fuel, light and water	86,279.16
All other expenditures for maintenance	234,235.15
Total expenditures for maintenance ..	740,858.39
2. Expenditures for purposes other than maintenance, including new buildings, additions, extraordinary repairs, improve- ments, etc.	59,000.00
Total expenditures	\$799,858.39
Amount returned to state treasurer or other officials	352,216.44
Total disbursements, including balance on hand ..	\$1,152,074.83

TABLE 3.—MOVEMENT OF INSANE PATIENT POPULATION
FOR YEAR BEGINNING JULY 1, 1920 AND ENDING JUNE 30, 1921

	MALES	FEMALES	TOTAL
1. Insane patients on books of institution at beginning of institution year	1045	837	1918
2. Admissions during year—			
a—First admissions	387	390	777
b—Readmissions	52	67	119
c—Returned from escape	11	5	16
3. Total received during year	450	462	912
4. Total on books during year	1495	1335	2830
5. Discharged from books during year—			
a—As recovered	177	164	341
b—As improved	60	46	106
c—As unimproved	22	46	68
d—Escapes	14	3	17
f—Died during year	133	118	251
6. Total discharged, transferred and died during year ...	406	377	783
7. Insane patients remaining on books of institution at end of institution year	1084	949	2033

TABLE 4.—NATIVITY OF FIRST ADMISSIONS AND OF PARENTS OF FIRST ADMISSIONS
For the Year Ending June 30, 1921

NATIVITY	Patients			Parents of Male Patients			Parents of Female Patients		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
United States	260	280	540			424			490
Africa									
*Asia									
Australia									
Austria	17	15	32			38			34
Belgium									
†Canada	2	2	4			4			4
Central America									
China	2		2			4			
Czecho-Slovakia									
Cuba									
Denmark		2	2						4
England	5	10	15			28			26
*Europe									
Finland									
France	1	1	2			2			2
Germany	24	21	45			72			64
Greece	4		4			8			
Holland									
Hungary	12	9	21			28			18
India									
Ireland	9	13	22			42			54
Italy	15	10	25			36			22
Japan									
Jugo-Slavia									
Mexico	1		1			2			
Norway									
Philippine Islands									
Poland	12	8	20			28			16
Porto Rico									
Portugal	1		1			2			
Roumania		2	2						4
Russia	14	10	24			38			26
Scotland	3	1	4			6			4
South America									
Spain									
Sweden	1	3	4			2			6
Switzerland	2	3	5			6			6
Turkey in Asia									
Turkey in Europe									
Wales	1		1			2			
West Indies	1		1			2			
Other countries									
Unascertained									
Total	387	390	777			774			780

*Not otherwise specified

†Includes Newfoundland

‡Except Cuba and Porto Rico

TABLE 5.—CITIZENSHIP OF FIRST ADMISSIONS
FOR THE YEAR ENDING JUNE 30, 1921

	MALES	FEMALES	TOTAL
Citizens by birth	260	280	540
Citizens by naturalization	127	110	237
Aliens .....	.....	.....	.....
Citizenship unascertained .....	.....	.....	.....
Total	387	390	777

TABLE 6.—PSYCHOSES OF FIRST ADMISSIONS
FOR THE YEAR ENDING JUNE 30, 1921

PSYCHOSES	MALES	FEMALES	TOTAL
1. Traumatic psychoses .....	.....	.....	.....
2. Senile psychoses, total	10	27	37
a—Simple deterioration	10	27	.....
b—Presbyophrenic type .....	.....	.....	.....
c—Delirious and confused states .....	.....	.....	.....
d—Depressed and agitated states in addition to deterioration .....	.....	.....	.....
e—Paranoid states in addition to deterioration ..	.....	.....	.....
f—Pre-senile types .....	.....	.....	.....
3. Psychoses with cerebral arteriosclerosis	34	20	54
4. General paralysis	43	7	50
5. Psychoses with cerebral syphilis	1	1	2
6. Psychoses with Huntington's chorea .....	.....	.....	.....
7. Psychoses with brain tumor	1	.....	1
8. Psychoses with other brain or nervous diseases, total..	7	1	8
Cerebral embolism .....	.....	.....	.....
Paralysis agitans	3	1	.....
Meningitis, tuberculous or other forms .....	.....	.....	.....
Multiple sclerosis .....	.....	.....	.....
Tabes	3	.....	.....
Acute chorea	1	.....	.....
Other conditions .....	.....	.....	.....
9. Alcoholic psychoses, total	22	1	23
a—Pathological intoxication	3	1	.....
b—Delirium tremens	2	.....	.....
c—Acute hallucinosis	6	.....	.....
d—Acute paranoid type	5	.....	.....
e—Korsakow's psychosis .....	.....	.....	.....
f—Chronic hallucinosis	3	.....	.....
g—Chronic paranoid type	3	.....	.....
h—Alcoholic deterioration .....	.....	.....	.....
i—Other types, acute or chronic .....	.....	.....	.....
10. Psychoses due to drugs and other exogenous toxins, total	3	3	6
a—Opium (and derivatives), cocaine, bromides, chloral, etc., alone or combined	3	3	.....
b—Metals, as lead, arsenic, etc. ....	.....	.....	.....
c—Gases .....	.....	.....	.....
d—Other exogenous toxins .....	.....	.....	.....

PSYCHOSES	MALES	FEMALES	TOTAL
11. Psychoses with pellagra .....	.....	.....	.....
12. Psychoses with other somatic diseases, total	14	20	34
a—Delirium with infectious diseases	14	20	.....
b—Post-infectious psychoses .....	.....	.....	.....
c—Exhaustion delirium .....	.....	.....	.....
d—Delirium of unknown origin .....	.....	.....	.....
e—Diseases of the ductless glands .....	.....	.....	.....
f—Cardio-renal diseases .....	.....	.....	.....
g—Other diseases or conditions .....	.....	.....	.....
13. Manic-depressive psychoses, total	70	145	215
a—Manic type	25	52	.....
b—Depressive type	34	64	.....
c—Stupor .....	.....	.....	.....
d—Mixed type	9	29	.....
e—Circular type	2	.....	.....
14. Involution melancholia .....	.....	.....	.....
15. Dementia præcox, total	64	60	124
a—Paranoid type	11	13	.....
b—Katatonic type	11	4	.....
c—Hebephrenic type	3	8	.....
d—Simple type	39	35	.....
16. Paranoia and paranoid conditions	21	21	42
17. Epileptic psychoses, total	19	11	30
a—Deterioration .....	.....	.....	.....
b—Clouded states .....	.....	.....	.....
c—Other conditions .....	.....	.....	.....
18. Psychoneuroses and neuroses, total	25	19	44
a—Hysterical type	19	7	.....
b—Psychasthenic type .....	.....	1	.....
c—Neurasthenic type	5	9	.....
d—Anxiety neuroses	1	2	.....
19. Psychoses with constitutional psychopathic inferiority	15	12	27
20. Psychoses with mental deficiency	12	17	29
21. Undiagnosed psychoses	20	18	38
22. Not insane, total	6	7	13
a—Epilepsy without psychosis .....	.....	.....	.....
b—Alcoholism without psychosis .....	.....	.....	.....
c—Drug addiction without psychosis .....	.....	.....	.....
d—Constitutional psychopathic inferiority with-out psychosis .....	.....	.....	.....
e—Mental deficiency without psychosis .....	.....	.....	.....
f—Others .....	.....	.....	.....
Totals	387	390	777

TABLE 7—RACE OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

RACE	Total			Traumatic			Senile			With Cerebral Arteriosclerosis			General Paralysis			With Cerebral Syphilis			With Huntington's Chorea			With Brain Tumor			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
African (black)	20	28	48						6	6		1	1	3		3									
American Indian																									
Armenian																									
Bulgarian															1										
Chinese	2		2																						
Cuban																									
Dutch and Flemish																									
East Indian									6	14	20	25	16	41	22	4	26		1	1				1	1
English	175	209	384																						
Finnish	1	2	3						1	1															
French	48	43	91						2	1	3	6	1	7	7		7								
German	7		7																						
Greek	1		1																						
Hebrew	1		1																						
Irish	27	31	58						1	3	4				3		3								
Italian*	21	10	31						1		1			1	1		1								
Japanese																									
Lithuanian																									
Magyar																	1		1						
Mexican	1		1																						
Pacific Islander																									
Portuguese	1		1																						
Roumanian		2	2																						
Scandinavian†	6	10	16														1	1							
Scotch	5	1	6																						
Slavonic‡	67	54	121							2	2			1	1	6	2	8							
Spanish																									
Spanish-American																									
Syrian																									
Turkish																									
Welsh	1		1										1		1										
West Indian§	1		1																						
Other specific races																									
Mixed	3		3																						
Race unascertained																									
Total	387	390	777						10	27	37	34	20	54	43	7	50	1	1	2				1	1

*Includes "North" and "South." †Norwegians, Danes and Swedes. ‡Includes Bohemian, Bosnian, Croatian, Delmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian. §Except Cuban.

TABLE 7—RACE OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES—(Continued)
For the Year Ending June 30, 1921

RACE	With Other Brain or Nervous Diseases			Alcoholic			Due to Drugs and Other Exogenous Toxins			With Pellagra			With Other Somatic Diseases			Manic-Depressive			Involution Melancholia			Dementia Praecox			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
African (black)																									
American Indian						2		2						3		3	7	8	15				2	4	6
Armenian																									
Bulgarian																									
Chinese																									
Cuban																									
Dutch and Flemish																									
East Indian																									
English	4		4	12	1	13	1	3	4				6		6	23	82	105				20	27	47	
Finnish																									
French														1	1										
German		1	1	1		1							1	14	15	10	12	22				8	7	15	
Greek																1		1				4		4	
Hebrew																									
Irish	1		1	1		1	1		1					2	2	6	12	18				5	4	9	
Italian*	2		2											1	4	6	10					4		4	
Japanese																									
Lithuanian																									
Magyar																									
Mexican																									
Pacific Islander																									
Portuguese																									
Roumanian													1		1										
Scandinavian†				1		1										2	4	6				1	1	2	
Scotch																									
Slavonic‡						4		4	1		1			2	3	5	15	20	35				20	16	36
Spanish																									
Spanish-American																									
Syrian																									
Turkish																									
Welsh																									
West Indian§																	1		1						
Other specific races																									
Mixed						1		1									1		1						
Race unascertained																									
Total	7	1	8	22	1	23	3	3	6				14	20	34	70	145	215				64	60	124	

*Includes "North" and "South." †Norwegians, Danes and Swedes. ‡Includes Bohemian, Bosnian, Croatian, Delmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian. §Except Cuban.

TABLE 7—RACE OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES—(Continued)
For the Year Ending June 30, 1921

RACE	Paranoia and Paranoic Conditions			Epileptic Psychoses			Psychoneuroses and Neuroses			With Constitutional Psychopathic Inferiority			With Menal Deficiency			Undiagnosed Psychoses			Not Insane		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	2		2		1	1				1	1	1		4	4		3	3			
American Indian																					
Armenian																					
Bulgarian			1																		
Chinese	1																				
Cuban																					
Dutch and Flemish																					
East Indian																					
English	8	9	17	10	6	16	8	7	15	6	11	1	9	12	21	9	11	20	5	5	10
Finnish																	1	1			
French		2	5	4	2	6	1	1	2	2			3		3		2	2			
German	3									1	1										
Greek																					
Hebrew																					
Irish	3	6	1	3		3	3	4	7												
Italian*	1		1	2	2	4		1	1	2											
Japanese																					
Lithuanian																					
Magyar																					
Mexican																					
Pacific Islander																					
Portuguese																					
Romanian																	1	2	3		
Scandinavian†			1	1				1	1	1							1	2	3		
Scotch								4	4	1											
Slavonic‡	2	3	5					7	5	12	2						7	7	1	2	3
Spanish																					
Spanish-American																					
Syrian																					
Turkish																					
Welsh																					
West Indian§																					
Other specific races										1	1										
Mixed																					
Race unascertained																					
Total	21	21	42	19	11	30	25	19	44	15	12	2	12	17	29	20	18	38	6	7	13

*Includes "North" and "South." †Norwegians, Danes and Swedes. ‡Includes Bohemian, Bosnian, Croatian, Delmatian, Herzegovinian, Montengrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian. §Except Cuban.

TABLE 8—AGE OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

Psychoses	Total			Under 15 Years			15—19 Years			20—24 Years			Years 25—29			30—34 Years			35—39 Years			40—44 Years			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
1. Traumatic																									
2. Senile	10	27	37																						
3. With cerebral arteriosclerosis	34	20	54				1		1	1	1				1	1	2								
4. General paralysis	43	7	50											3	1	4	4		4	6	1	7	11		11
5. With cerebral syphilis	1	1	2											1	1								1		1
6. With Huntington's chorea																									
7. With brain tumor	1		1																		1		1		
8. With other brain or nervous diseases	7	1	8				1		1	1											1		1		1
9. Alcoholic	22	1	23																	3		3	1		1
10. Due to drugs and other exogenous toxins	3	3	6																			1	1	2	2
11. With pellagra																									
12. With other somatic diseases	14	20	34				3	2	5	1	1	2	1	4	5	1	2	3	2	3	5	2			2
13. Manic-depressive	70	145	215				7	4	11	4	14	18	6	23	29	11	24	35	9	23	32	9	21	30	
14. Involution melancholia																									
15. Dementia præcox	64	60	124				7	3	10	13	22	35	20	13	33	11	6	17	6	8	14	7	3	10	
16. Paranoia or paranoic conditions	21	21	42							1	2	3	4	2	6	3	1	4	3	5	8	3	3	6	
17. Epileptic psychoses	9	11	20				4		4	2		2	2	2	4	5	2	7		2	2	2	3	5	
18. Psychoneuroses and neuroses	25	19	44				1		1	7	2	9	5	1	6	3	7	10	2	1	3	3	4	7	
19. With constitutional psychopathic inferiority	15	12	27	2		2	3	2	5	4	4	8	2	3	5	3	3	6							
20. With mental deficiency	12	17	29	1	1	2	2	6	8	2	5	7	2		2	1	3	4	1	1	2	1		1	
21. Undiagnosed psychoses	20	18	38	1		1	2		2	2	5	7	4	1	5	3	5	8	3	2	5	2	1	3	
22. Not insane	6	7	13	1	1	1	2		4		1	1			2	2	4					1		1	
Total	387	390	777	4	2	6	32	10	51	37	57	94	50	50	100	55	56	111	37	47	84	45	36	81	

TABLE 8—AGE OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES (Continued)
For the Year Ending June 30, 1921

Psychoses	45-49 Years			50-54 Years			55-59 Years			60-64 Years			65-69 Years			70 Years and Over			Unascertained			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
1. Traumatic																						
2. Senile											1	2	3		3	3	9	22	31			
3. With cerebral arteriosclerosis	1	1	2		2	2	2	5	7	8	2	10	6		6	15	8	23				
4. General paralysis	5	1		5	3	8	6	1	7	1					1	1		1				
5. With cerebral syphilis																						
6. With Huntington's chorea																						
7. With brain tumor																						
8. With other brain or nervous diseases	1		1			1							1		1		1		1			
9. Alcoholic	7				3	1	4					1										
10. Due to drugs and other exogenous toxins	1	1				1	1															
11. With pellagra																						
12. With other somatic diseases	2	3			3	3			1	1	1	1										
13. Manic-depressive	6	14	2	6	8	14	3	13	16	4	1	5	5		5							
14. Involution melancholia																						
15. Dementia præcox		3			2	2																
16. Paranoia or paranoic conditions	4	5		1	3	4	2		2													
17. Epileptic psychoses	2			2	1	3			1	1												
18. Psychoneuroses and neuroses	2	1		2		2			3	3												
19. With constitutional psychopathic inferiority								1		1												
20. With mental deficiency		1	1		1		1	1		1												
21. Undiagnosed psychoses	2	1		1	3	4																
22. Not insane	1	1	2										1		1							
Total	34	32	6	21	28	49	15	24	39	16	6	2	14	3	17	27	30	57				

TABLE 9—DEGREE OF EDUCATION OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

Psychoses	Total			Illiterate			Reads and Writes			Common School			High School			College			Unascertained			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
1. Traumatic																						
2. Senile	10	27	37	1	2	3	3	6	9	4	13	17	2	6	8							
3. With cerebral arteriosclerosis	34	20	54					12	7	19	18	10	28	4	2	6		1				
4. General paralysis	43	7	50					12	2	14	20	5	25	8		8		3		3		
5. With cerebral syphilis	1	1	2																			
6. With Huntington's chorea																						
7. With brain tumor	1		1																			
8. With other brain or nervous diseases	7	1						1		1	4	1	5	1		1		1				
9. Alcoholic	22	1	2		2		4		4	10	1	11	6		6							
10. Due to drugs and other exogenous toxins	3	3								1	2	3						2	1	3		
11. With pellagra																						
12. With other somatic diseases	14	20	34				2	6	8	9	10	15	2	4	6	1						
13. Manic-depressive	70	145	215	5	10	15	14	34	48	25	60	85	20	28	48	6	13	19				
14. Involution melancholia																						
15. Dementia præcox	64	60	124	3	2	5	35	21	56	15	25	40	6	8	14	5	4	9				
16. Paranoia or paranoic conditions	21	21	42				7	9	16	10	9	15	3	2	5	1	1	2				
17. Epileptic psychoses	19	11	30				5	3	8	8	4	12	5	4	9	1		1				
18. Psychoneuroses and neuroses	25	19	44				5	3	8	8	10	8	11	8	6	14	2	2	4			
19. With constitutional psychopathic inferiority	15	12	27	5	2	7	5	7	12	5	3	8										
20. With mental deficiency	12	17	29	2	5	7	6	8	14	3	3	6	1	1	2							
21. Undiagnosed psychoses	20	18	38				5	2	7	8	8	16	6	7	13	1	1	2				
22. Not insane	6	7	13										4	3	7	1	1	2				
Total	387	390	777	18	21	39	116	108	224	152	165	317	76	72	148	25	24	49				

TABLE 10—ENVIRONMENT OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

Psychoses	Total			Urban			Rural			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic												
2. Senile	10	27	37	3	8	11	7	19	26			
3. With cerebral arteriosclerosis	34	20	54	17	11	28	17	9	26			
4. General paralysis	43	7	50	25	5	30	18	2	20			
5. With cerebral syphilis	1	1	2	1		1		1	1			
6. With Huntington's chorea												
7. With brain tumor	1		1				1		1			
8. With other brain or nervous diseases	7	1	8	3	1	4	4		4			
9. Alcoholic	22	1	23	12	1	13	10		10			
10. Due to drugs and other exogenous toxins	3	3	6	3	1	4		2	2			
11. With pellagra												
12. With other somatic diseases	14	20	34	7	10	17	7	10	17			
13. Manic-depressive	70	145	215	35	77	112	35	68	103			
14. Involution melancholia												
15. Dementia precox	64	60	124	37	31	68	27	29	56			
16. Paranoia or paranoid conditions	21	21	42	12	10	22	9	11	20			
17. Epileptic psychoses	19	11	30	12	4	16	7	7	14			
18. Psychoneuroses and neuroses	25	19	44	17	9	26	8	10	18			
19. With constitutional psychopathic inferiority	15	12	27	10	4	14	5	8	13			
20. With mental deficiency	12	17	29	6	6	12	6	11	17			
21. Undiagnosed psychoses	20	18	38	11	9	20	9	9	18			
22. Not insane	6	7	13	4	5	9	2	2	4			
Total	387	390	777	215	192	407	172	198	370			

TABLE 11—ECONOMIC CONDITIONS OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

Psychoses	Total			Indigent			Marginal			Private			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic															
2. Senile	10	27	37	5	19	24				5	8	13			
3. With cerebral arteriosclerosis	34	20	54	26	15	41				8	5	13			
4. General paralysis	43	7	50	31	3	34				12	4	16			
5. With cerebral syphilis	1	1	2		1	1				1		1			
6. With Huntington's chorea															
7. With brain tumor	1		1	1		1									
8. With other brain or nervous diseases	7	1	8	4	1	5				3		3			
9. Alcoholic	22	1	23	13	1	14				9		9			
10. Due to drugs and other exogenous toxins	3	3	6							3		3			
11. With pellagra															
12. With other somatic diseases	14	20	34	7	16	23				7	4	11			
13. Manic-depressive	70	145	215	38	62	100				32	83	115			
14. Involution melancholia															
15. Dementia precox	64	60	124	33	25	58				31	35	66			
16. Paranoia or paranoid conditions	21	21	42	18	11	29				3	10	13			
17. Epileptic psychoses	19	11	30	13	6	19				6	5	11			
18. Psychoneuroses and neuroses	25	19	44	3	4	7				22	15	37			
19. With constitutional psychopathic inferiority	15	12	27	12	9	21				3	3	6			
20. With mental deficiency	12	17	29	10	14	24				2	3	5			
21. Undiagnosed psychoses	20	18	38	14	7	21				6	11	17			
22. Not insane	6	7	13	4	2	6				2	5	7			
Total	387	390	777	232	196	428				155	194	349			

TABLE 12—USE OF ALCOHOL BY FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

PSYCHOSES	Total			Abstinent			Temperate			Intemperate			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic															
2. Senile	10	27	37	7	27	34	2		2	1			1		
3. With cerebral arteriosclerosis	34	20	54	27	19	46	5	1	6	2			2		
4. General paralysis	43	7	50	35	6	41	3	1	4	5			5		
5. With cerebral syphilis	1	1	2		1	1							1		
6. With Huntington's chorea															
7. With brain tumor	1		1	1		1									
8. With other brain or nervous diseases	7	1	8	7		7			1	1					
9. Alcoholic	22	1	23							22	1	23			
10. Due to drugs and other exogenous toxins	3	3	6	2	3	5	1		1						
11. With pellagra															
12. With other somatic diseases	14	20	34	11	20	31	2		2	1			1		
13. Manic-depressive	70	145	215	58	140	198	5	5	10	7			7		
14. Involution melancholia															
15. Dementia præcox	64	60	124	53	60	113	9		2				2		
16. Paranoia or paranoic conditions	21	21	42	19	21	40	2		2						
17. Epileptic psychoses	19	11	30	15	11	26	4		4						
18. Psychoneuroses and neuroses	25	19	44	24	18	42	1	1	2						
19. With constitutional psychopathic inferiority	15	12	27	12	12	24	2		2	1			1		
20. With mental deficiency	12	17	29	12	16	28		1	1						
21. Undiagnosed psychoses	20	18	38	16	18	34	2		2	2			2		
22. Not insane	6	7	13	5	7	12			1	1			1		
Total	387	390	777	304	379	683	38	10	44	45	1	46			

TABLE 13—MARITAL CONDITION OF FIRST ADMISSIONS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

PSYCHOSES	Total			Single			Married			Widowed			Separated			Divorced			Unascertained			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
1. Traumatic																						
2. Senile	10	27	37																			
3. With cerebral arteriosclerosis	34	20	54	6	4	10	6	6	12	4	14	18							2	2		
4. General paralysis	43	7	50	14		14	26	5	31	1	1	2										
5. With cerebral syphilis	1	1	2						1	1												
6. With Huntington's chorea																						
7. With brain tumor	1		1						1		1											
8. With other brain or nervous diseases	7	1	8	2		2	5	1	6													
9. Alcoholic	22	1	23	9		9	13		13		1	1										
10. Due to drugs and other exogenous toxins	3	3	6	1	1	3	2	5														
11. With pellagra																						
12. With other somatic diseases	14	20	34	8	5	13	5	13	18	1	2	4										
13. Manic-depressive	70	145	215	36	39	75	29	89	118	5	15	20										
14. Involution melancholia																						
15. Dementia præcox	64	60	124	53	36	89	9	20	29	1	3	4										
16. Paranoia or paranoic conditions	21	21	42	8	4	12	13	13	26		4	4							1	1	2	
17. Epileptic psychoses	19	11	30	15	4	19	4	7	11													
18. Psychoneuroses and neuroses	25	19	44	21	6	27	4	9	13		3	1										
19. With constitutional psychopathic inferiority	15	12	27	13	7	20	1	5	6	1												
20. With mental deficiency	12	17	29	10	15	25	2	1	3													
21. Undiagnosed psychoses	20	18	38	11	8	19	9	9	18		1	1										
22. Not insane	6	7	13	2	4	6	4	1	5													
Total	387	390	777	209	138	347	154	189	343	21	56	77			3	7	10					

TABLE 14.—PSYCHOSES OF READMISSIONS

FOR THE YEAR ENDING JUNE 30, 1921

PSYCHOSES	MALES	FEMALES	TOTAL
1. Traumatic psychoses .....	.....	.....	.....
2. Senile psychoses, total	3	4	7
a—Simple deterioration .....	.....	.....	.....
b—Presbyophrenic type .....	.....	.....	.....
c—Delirious and confused states .....	.....	.....	.....
d—Depressed and agitated states in addition to deterioration .....	.....	.....	.....
e—Paranoid states in addition to deterioration ..	.....	.....	.....
f—Pre-senile types .....	.....	.....	.....
3. Psychoses with cerebral arteriosclerosis .....	.....	5	5
4. General paralysis	5	2	7
5. Psychoses with cerebral syphilis .....	.....	.....	.....
6. Psychoses with Huntington's chorea .....	.....	.....	.....
7. Psychoses with brain tumor .....	.....	.....	.....
8. Psychoses with other brain or nervous diseases, total..	1	.....	1
Cerebral embolism .....	.....	.....	.....
Paralysis agitans .....	.....	.....	.....
Meningitis, tuberculous or other forms .....	.....	.....	.....
Multiple sclerosis .....	.....	.....	.....
Tabes .....	.....	.....	.....
Acute chorea .....	.....	.....	.....
Other conditions .....	.....	.....	.....
9. Alcoholic psychoses, total	9	.....	9
a—Pathological intoxication	1	.....	.....
b—Delirium tremens .....	.....	.....	.....
c—Acute hallucinosis	2	.....	.....
d—Acute paranoid type	1	.....	.....
e—Korsakow's psychosis .....	.....	.....	.....
f—Chronic hallucinosis	1	.....	.....
g—Chronic paranoid type	3	.....	.....
h—Alcoholic deterioration	1	.....	.....
i—Other types, acute or chronic .....	.....	.....	.....
10. Psychoses due to drugs and other exogenous toxins, total	1	.....	1
a—Opium (and derivatives), cocaine, bromides, chloral, etc., alone or combined .....	.....	.....	.....
b—Metals, as lead, arsenic, etc. ....	.....	.....	.....
c—Gases .....	.....	.....	.....
d—Other exogenous toxins .....	.....	.....	.....
11. Psychoses with pellagra .....	.....	.....	.....
12. Psychoses with other somatic diseases, total .....	.....	3	3
a—Delirium with infectious diseases .....	.....	3	.....
b—Post-infectious psychoses .....	.....	.....	.....
c—Exhaustion delirium .....	.....	.....	.....
d—Delirium of unknown origin .....	.....	.....	.....
e—Diseases of the ductless glands .....	.....	.....	.....
f—Cardio-renal disease .....	.....	.....	.....
g—Other diseases or conditions .....	.....	.....	.....

PSYCHOSES	MALES	FEMALES	TOTAL
13. Manic-depressive psychoses, total	6	25	31
a—Manic type	3	17	.....
b—Depressive type	3	8	.....
c—Stupor .....	.....	.....	.....
d—Mixed type .....	.....	.....	.....
e—Circular type .....	.....	.....	.....
14. Involution melancholia .....	.....	.....	.....
15. Dementia præcox, total	8	11	19
a—Paranoid type .....	.....	2	.....
b—Katatonic type .....	.....	1	.....
c—Hebephrenic type .....	.....	.....	.....
d—Simple type	8	8	.....
16. Paranoia and paranoic conditions	1	4	5
17. Epileptic psychoses, total	2	.....	2
a—Deterioration .....	.....	.....	.....
b—Clouded states .....	.....	.....	.....
c—Other conditions .....	.....	.....	.....
18. Psychoneuroses and neuroses, total	2	.....	2
a—Hysterical type	2	.....	.....
b—Psychasthenic type .....	.....	.....	.....
c—Neurasthenic type .....	.....	.....	.....
d—Anxiety neuroses .....	.....	.....	.....
19. Psychoses with constitutional psychopathic inferiority	8	6	14
20. Psychoses with mental deficiency	3	2	5
21. Undiagnosed psychoses	3	5	8
22. Not insane, total	1	.....	1
a—Epilepsy without psychosis .....	.....	.....	.....
b—Alcoholism without psychosis .....	.....	.....	.....
c—Drug addiction without psychosis .....	.....	.....	.....
d—Constitutional psychopathic inferiority without psychosis .....	.....	.....	.....
e—Mental deficiency without psychosis .....	.....	.....	.....
f—Others .....	.....	.....	.....
Total	52	67	119

TABLE 15—DISCHARGES OF PATIENTS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES AND CONDITION ON DISCHARGE
For the Year Ending June 30, 1921

PSYCHOSES	Total			Recovered			Improved			Unimproved			Not Insane		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic															
2. Senile	3	7	10					2	3	5	1	4	5		
3. With cerebral arteriosclerosis	12	8	20	2			2	8	8	16	2		2		
4. General paralysis	16	5	21	2	1	3	11	3	14	3	1	4			
5. With cerebral syphilis															
6. With Huntington's chorea															
7. With brain tumor															
8. With other brain or nervous diseases	3		3	1		1	2		2						
9. Alcoholic	25	2	27	22	2	24					3		3		
10. Due to drugs and other exogenous toxins	4		4	4		4									
11. With pellagra															
12. With other somatic diseases	5	11	16	5	8	13					3		3		
13. Manic-depressive	66	128	194	64	106	170				2	22	24			
14. Involution melancholia															
15. Dementia præcox	42	40	82	12	8	20	26	23	49	4	9	13			
16. Paranoia or paranoid conditions	16	10	26	15	8	23				1	2	3			
17. Epileptic psychoses	7	6	13				6	5	11	1	1	2			
18. Psychoneuroses and neuroses	18	15	33	16	13	29				2	2	4			
19. With constitutional psychopathic inferiority	13	13	26	12	11	23				1	2	3			
20. With mental deficiency	6	4	10				5	4	9	1		1			
21. Undiagnosed psychoses	16	4	20	15	4	19				1		1			
22. Not insane	7	3	10	7	3	10									
Total	259	256	515	177	164	341	60	46	106	22	46	68			

TABLE 16—CAUSES OF DEATH OF PATIENTS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

CAUSES OF DEATH	Total			Senile			With Cerebral Arteriosclerosis			General Paralysis			Alcoholic			Manic-Depressive			Involution Melancholia		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
GENERAL DISEASES																					
Typhoid fever																					
Malaria																					
Smallpox																					
Measles																					
Scarlet fever																					
Diphtheria																					
Influenza																					
Dysentery																					
Erysipelas																					
Septicæmia																					
Pellagra																					
Acute articular rheumatism																					
Tuberculosis of lungs	17	19	36				1		1					1	4	5					
Other forms of tuberculosis	1	1	2																		
Syphilis (non-nervous forms)																					
Cancer							1	1													
Tumor (non-cancerous)																					
Diabetes																					
Other general diseases																					
NERVOUS SYSTEM																					
Cerebro-spinal meningitis																					
Diseases of spinal cord																					
Apoplexy (cerebral hemorrhage)	6	10	16	2	1	3	3	9	12	1											
General paralysis of insane	17	9	26							17	9	26									
Cerebro-spinal syphilis																					
Exhaustion from other mental diseases																					
Brain tumor	1	1	2				1	1	2												
Other diseases of brain																					
Epilepsy	1	3	4																		
Chorea																					
Other diseases of nervous system																					

TABLE 16—CAUSES OF DEATH OF PATIENTS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES—(Continued)
For the Year Ending June 30, 1921

CAUSES OF DEATH	Dementia Præcox			Paranoia or Paranoid Conditions			Epileptic Psychoses			Psychoneuroses and Neuroses			With Constitutional Psychopathic Inferiority			With Mental Deficiency			*All Other Psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
GENERAL DISEASES																					
Typhoid fever																					
Malaria																					
Smallpox																					
Measles																					
Scarlet fever																					
Diphtheria																				1	1
Influenza																					
Dysentery																					
Erysipelas																					
Septicæmia																					
Pellagra																					
Acute articular rheumatism																					
Tuberculosis of lungs	12	9	21																		
Other forms of tuberculosis	1	1	2																		
Syphilis (non-nervous forms)																					
Cancer		1	1																		
Tumor (non-cancerous)																					
Diabetes																					
Other general diseases																					
NERVOUS SYSTEM																					
Cerebro-spinal meningitis																					
Diseases of spinal cord																					
Apoplexy (cerebral hemorrhage)																					
General paralysis of insane																					
Cerebro-spinal syphilis																					
Exhaustion from other mental diseases																					
Brain tumor																					
Other diseases of brain																					
Epilepsy							1	3	4												
Chorea																				1	1
Other diseases of nervous system																					

*Includes group 22 "not insane."

TABLE 16—CAUSES OF DEATH OF PATIENTS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES—(Continued)
For the Year Ending June 30, 1921

CAUSES OF DEATH	Total			Senile			With Cerebral Arteriosclerosis			General Paralysis			Alcoholic			Manic-Depressive			Involution Melancholia		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
CIRCULATORY SYSTEM																					
Acute myocarditis	5		5																		
Chronic myocarditis	42	28	70	9	9	18	6	4	10				3		3	7	4	11			
Acute pericarditis																					
Chronic pericarditis																					
Acute endocarditis	3	1	4																		
Chronic endocarditis	9	4	13	3	2	5	1		1						2			2			
Arteriosclerosis	4	4	8		1	1	4	3	7												
Other diseases of the arteries																					
Other diseases of circulatory system																					
RESPIRATORY SYSTEM																					
Bronchitis																					
Bronchopneumonia	9	10	19		1	1	3		3	1		1				1	1	1			
Lobar pneumonia	1	3	4													1	1	2			
Pleurisy																					
Gangrene of lungs																					
Other diseases of the respiratory system																					
DIGESTIVE SYSTEM																					
Ulcer of stomach																					
Other diseases of the stomach (cancer excepted)																					
Diarrhea and enteritis																					
Appendicitis																					
Intestinal obstruction		1	1															1	1		
Other diseases of intestines	1		1				1		1												
Cirrhosis of liver	1		1													1		1			
Other diseases of liver																					
Other diseases of digestive system—Peritonitis	10	6	16							1		1			1	2	3				

TABLE 16—CAUSES OF DEATH OF PATIENTS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES—(Continued)
For the Year Ending June 30, 1921

CAUSES OF DEATH	Dementia Præcox			Paranoia or Paranoid Con- ditions			Epileptic Psychoses			Psychoneuroses and Neuroses			With Constitu- tional Psycho- pathic Inferiority			With Mental Deficiency			*All Other Psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
CIRCULATORY SYSTEM																					
Acute myocarditis																				2	2
Chronic myocarditis	12	7	19	1		1	1		1										1	1	2
Acute pericarditis																					
Chronic pericarditis																					
Acute endocarditis																				1	1
Chronic endocarditis				1		1														2	2
Arteriosclerosis																					
Other diseases of the arteries																					
Other diseases of circulatory system																					
RESPIRATORY SYSTEM																					
Bronchitis																					
Bronchopneumonia	2	1																		1	1
Lobar pneumonia		2																			
Pleurisy																					
Gangrene of lungs																					
Other diseases of the respiratory system																					
DIGESTIVE SYSTEM																					
Ulcer of stomach																					
Other diseases of the stomach (cancer excepted)																					
Diarrhea and enteritis																					
Appendicitis																					
Intestinal obstruction																					
Other diseases of intestines																					
Cirrhosis of liver																					
Other diseases of liver																					
Other diseases of digestive system—Peri- tonitis	3	2							1		1				1		1	1	1	2	2

*Includes group 22 "not insane."

TABLE 16—CAUSES OF DEATH OF PATIENTS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES—(Continued)
For the Year Ending June 30, 1921

CAUSES OF DEATH	Total			Senile			With Cerebral Arteriosclerosis			General Paralysis			Alcoholic			Manic- Depressive			Involution Melancholia		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
GENITO-URINARY SYSTEM																					
Acute nephritis		3	3																		
Chronic nephritis	4	6	10		1	1							1		1	3	3	6			
Other diseases of kidneys and annexa																					
Diseases of bladder																					
Diseases of genital organs																					
Other diseases of genito-urinary system																					
DISEASES OF THE SKIN																					
Gangrene																					
Other diseases of the skin																					
DISEASES OF BONES AND LOCOMOTOR SYSTEM (tuberculosis and rheumatism excepted)																					
VIOLENCE																					
Suicide	1	2	3															1	1		
Fractures																					
Dislocations																					
Homicide																					
Other external violence																					
Total	133	118	251	14	17	31	20	17	37	20	9	29	4		4	21	18	39			

TABLE 16—CAUSES OF DEATH OF PATIENTS CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES—(Continued)
For the Year Ending June 30, 1921

CAUSES OF DEATH	Dementia Præcox			Paranoia or Paranoid Conditions			Epileptic Psychoses			Psychoneuroses and Neuroses			With Constitutional Psychopathic Inferiority			With Mental Deficiency			*All Other Psychoses			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
GENITO-URINARY SYSTEM																						
Acute nephritis		1	1																		2	2
Chronic nephritis														1	1						1	1
Other diseases of kidneys and annexa																						
Diseases of bladder																						
Diseases of genital organs																						
Other diseases of genito-urinary system																						
DISEASES OF THE SKIN																						
Gangrene																						
Other diseases of the skin																						
DISEASES OF BONES AND LOCOMOTOR SYSTEM (tuberculosis and rheumatism excepted)																						
VIOLENCE																						
Suicide		1	1											1	1							
Fractures																						
Dislocations																						
Homicide																						
Other external violence																						
Total	31	24	55	2		2	3	3	6				2	2	4	3	3	6	13	25	38	

*Includes group 22 "not insane."

TABLE 17—AGE OF PATIENTS AT TIME OF DEATH CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

PSYCHOSES	Total			Under 15 Years			15—19 Years			20—24 Years			25—29 Years			30—34 Years			35—39 Years			40—44 Years			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
1. Traumatic																									
2. Senile	14	17	31																						
3. With cerebral arteriosclerosis	20	17	37																						
4. General paralysis	20	9	29				1	1		1	1	2		2	1	2		5	1	6	1	1	2		
5. With cerebral syphilis																									
6. With Huntington's chorea																									
7. With brain tumor																									
8. With other brain or nervous diseases																									
9. Alcoholic	4		4																						
10. Due to drugs and other exogenous toxins																									
11. With pellagra																									
12. With other somatic diseases																									
13. Manic-depressive	21	18	39				1	1		2	2		6	6	3		3	2	1	3	2	1	3		
14. Involution melancholia																									
15. Dementia præcox	31	24	55							4	4	6	1	7	6	1	7	4	7	11	4	2	6		
16. Paranoia or paranoid conditions	2		2																						
17. Epileptic psychoses	3	3	6				1	1	1		1	1	1	2	1	1	2								
18. Psychoneuroses and neuroses																									
19. With constitutional psychopathic inferiority	2	2	4												1		1								
20. With mental deficiency	3	3	6	1	1	2	1	1	2																
21. Undiagnosed psychoses	13	24	37	1		1	1		1	1	2	3		2	2	1	1	2	3		3	3	3	6	
22. Not insane	1	1	2											1	1										
Total	133	118	251	2	1	3	2	4	6	2	9	11	9	11	20	13	6	15	15	9	24	10	7	17	

TABLE 17—AGE OF PATIENTS AT TIME OF DEATH CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES—(Continued)
For the Year Ending June 30, 1921

PSYCHOSES	45—49 Years			50—54 Years			55—59 Years			60—64 Years			65—69 Years			70 Years and Over			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic										2			1	1	2	11	16	27			
2. Senile																					
3. With cerebral arteriosclerosis				1	1	1		5	5	4	4	4	4	1	5	11	5	16			
4. General paralysis	5	1		1	1	2	3	1	4				1		1			1			
5. With cerebral syphilis																					
6. With Huntington's chorea																					
7. With brain tumor																					
8. With other brain or nervous diseases																					
9. Alcoholic	2						1		1				1		1						
10. Due to drugs and other exogenous toxins																					
11. With pellagra																					
12. With other somatic diseases																					
13. Manic-depressive	4			2	3	5	1		1	2	1		3	3	6	2		2			
14. Involution melancholia																					
15. Dementia præcox	1			2	3	5	2	4	6	5						1	2	3			
16. Paranoia or paranoic conditions				1		1							1		1						
17. Epileptic psychoses																					
18. Psychoneuroses and neuroses																					
19. With constitutional psychopathic inferiority					2	2	1		1												
20. With mental deficiency										1		1					1	1			
21. Undiagnosed psychoses		6			6	6	1	1	2	1	1					1	2	3			
22. Not insane																					
Total	12	7	1	6	16	22	9	11	20	15	6	2	11	5	16	27	26	53			

TABLE 18—TOTAL DURATION OF HOSPITAL LIFE OF PATIENTS DYING IN HOSPITAL CLASSIFIED ACCORDING TO PRINCIPAL PSYCHOSES
For the Year Ending June 30, 1921

PSYCHOSES	Total			Less Than 1 Month			1—3 Months			4—7 Months			8—12 Months			1—2 Years			3—4 Years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic																					
2. Senile	14	17	3	2	2	4	4	6	10	2	3	5	2	1	3		1	1	2	3	5
3. With cerebral arteriosclerosis	20	17	37	6		6	4	4	8	1	5	6	2	1	3	7	1	8		2	2
4. General paralysis	20	9	29	3		3	7	3	10	3	1	4	3	2	5	3	3	6	1		1
5. With cerebral syphilis																					
6. With Huntington's chorea	4			2		2				1		1	1		1						
7. With brain tumor																					
8. With other brain or nervous diseases																					
9. Alcoholic																					
10. Due to drugs and other exogenous toxins																					
11. With pellagra																					
12. With other somatic diseases																					
13. Manic-depressive	21	18	3	6	1	7	4	4	8	2	3	5	2	2	4	5	5	10	2	3	5
14. Involution melancholia																					
15. Dementia præcox	31	24	5	1	2	3	3	3	6	2	3	5				9	3	12	7	2	9
16. Paranoia or paranoic conditions	2									1		1				1		1			
17. Epileptic psychoses	3	3		1	1	2	1	1	2		1	1				1		1			
18. Psychoneuroses and neuroses																					
19. With constitutional psychopathic inferiority	2	2						1	1	1		1									
20. With mental deficiency	3	3			1	1	2	1	3							1		1		1	1
21. Undiagnosed psychoses	13	24	3	4	5	9	4	5	9	1	3	4		3	3	2	4	6			
22. Not insane							1	1													
Total	133	118	25	25	13	38	29	28	57	14	19	3	10	9	19	29	17	46	12	11	23

TABLE 18—TOTAL DURATION OF HOSPITAL LIFE OF PATIENTS DYING IN HOSPITAL CLASSIFIED ACCORDING TO PRINCIPAL PSYCHOSES—
(Continued)
For the Year Ending June 30, 1921

Psychoses	5-6 Years			7-8 Years			9-10 Years			11-12 Years			13-14 Years			15-19 Years			20 Years and Over			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
1. Traumatic																						
2. Senile				1		1											1	1	1			1
3. With cerebral arteriosclerosis		1	1							2	2						1	1				
4. General paralysis																						
5. With cerebral syphilis																						
6. With Huntington's chorea																						
7. With brain tumor																						
8. With other brain or nervous diseases																						
9. Alcoholic																						
10. Due to drugs and other exogenous toxins																						
11. With pellagra																						
12. With other somatic diseases																						
13. Manic-depressive																						
14. Involution melancholia																						
15. Dementia præcox	4	1	5	2	3	5				1	3	4		1	1					2	3	5
16. Paranoia or paranoic conditions																						
17. Epileptic psychoses																						
18. Psychoneuroses and neuroses																						
19. With constitutional psychopathic inferiority	1		1														1	1				
20. With mental deficiency																						
21. Undiagnosed psychoses		2	2		1	1		1	1	1		1	1		1							
22. Not insane																						
Total	5	4	5	3	4	7		1	1	2	5	7	1	1	2		3	3	3	3	3	6



