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NEW JERSEY

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OF THE
BUREAU OF STATISTICS
OF
LABOR AND INDUSTRIES
OF
NEW JERSEY.

FOR THE YEAR ENDING OCTOBER 31,

1889.

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CONTENTS.

	PAGE.
INDEX TO SUBJECTS	v
LETTER OF TRANSMITTAL	xi
INTRODUCTION.....	xiii
PART I.—The Effect of Occupation on the Health and Duration of the Trade-Life of Workmen.....	1-303
Factory Legislation—Hygiene of Occupation—Duration of Trade-Life, Sanitary Conditions and Methods of Working in the Glass, Hat and Pottery Industries	1-43
Appendix 1: Table 1.—Ages when Journeymen Glass Blowers, Hatters and Potters began to Work (46-73). Table 2.— Present Ages, Nativity and Number beginning to Decline (74-103). Table 3.—Ages of Decline (104-115). Table 4.— Number of Years at Work (116-125). Table 5.—Nativity in Detail (126-131). Table 6.—Ages of Incapacity (132- 144). Table 7.—Summary of Causes of Decline (146-154). Table 8.—Summary of Diseases Contracted at Trade (156- 159). Table 9.—Summary of Causes of Incapacity (162- 166). Table 10.—Record and Causes of Death of Members of the Orange (N. J.) Hat Finishers' Association (167, 168). Table 11.—Record and Causes of Death of Members of the International Hat Finishers' Association (169, 170). Tables 12 and 13.—Record and Causes of Death and Membership of the Newark (N. J.) Hat Finishers' Association (171, 172). Table 14.—Ages and Causes of Decline of Journeymen, in Detail (173-187). Table 15.—Diseases Contracted at Trade, in Detail (188-193). Table 16.—Ages and Causes of Incapacity of Journeymen, in Detail (194-210).....	46-210
Appendix 2: Mortality in Different Occupations.....	213-222
Appendix 3: The Factories Act of Switzerland, 1877	225-230
Appendix 4: The Factory and Workshop Act, 1878, England..	233-303

PART II.—Real Estate Mortgage Indebtedness and Foreclosure Executions	307-390
Appendix: Table 1.—Increase or Decrease in Number of Real Estate Foreclosure Executions (343). Table 2.—Increase or Decrease in Number of Recorded Real Estate Mortgages (344). Table 3.—Whole Number of Real Estate Foreclosure Executions (345).—Table 4.—Real Estate Foreclosure Executions against Individuals (346). Table 5.—Real Estate Foreclosure Executions in Cities (347). Table 6.—Real Estate Foreclosure Executions by Corporations, Complainants (348). Table 7.—Amounts of Real Estate Foreclosure Executions (349, 350). Table 8.—Foreclosure Executions on Lands (Acres) and Acreage Foreclosed (351). Table 9.—Life of Mortgages Foreclosed (352). Table 10.—Number of Real Estate Recorded Mortgages (353). Table 11.—Monthly Mortgage Movement (354). Tables 12 and 13.—Number and Amounts of Real Estate Mortgages Recorded in Essex County (355, 356). Table 14.—Whole Number and Amounts of Real Estate Foreclosure Executions, by Counties (357-374). Table 15.—Real Estate Foreclosure Executions by Corporations, Complainants, by Counties (375-381). Table 16.—Life of Mortgages Foreclosed, by Counties (382-388). Table 17.—Assessed Valuations of Real Estate (389, 390).....	343-390
PART III.—Industrial Co-operative Legislation in England and the United States.—	
United Kingdom. Connecticut. Kansas. Massachusetts, Minnesota. New Jersey. Ohio. Pennsylvania. Tennessee. Wisconsin	393-430
PART IV.—Labor Legislation.—	
Laws Enacted in 1890.....	433-438

INDEX TO SUBJECTS.

Act of Congress in Relation to Recorded Indebtedness.....	311
Legislature. See Labor Legislation, Co-operative Legislation.	
Ages of Workmen. See Occupation, Effect of.	
Agricultural Depression.....	307, 308, 321, 322, 326-333
Atlantic County, Mortgage and Foreclosure Movement, Valuations in	319-323, 328, 329, 343, 344, 353, 354, 357, 375, 382, 389, 390
Banks as Mortgagees.....	338, 356
Bankruptcies and Foreclosure Executions.....	323-326
Blowers, Glass. See Glass Workers.	
Bergen County, Mortgage and Foreclosure Movement, Valuations in	319-323, 343, 344, 354, 358, 375, 382, 389, 390
Boards of Health. See Occupation, Effect of.	
Burlington County, Mortgage and Foreclosure Movement, Valuations in	319-323, 330, 337, 343, 344, 357, 375, 382, 389, 390
Bottle and Vial Blowers. See Glass Workers.	
Building and Loan Associations, as Mortgagees.....	338, 356
Camden County, Mortgage and Foreclosure Movement, Valuations in	319-323, 343, 344, 357, 359, 376, 383, 389, 390
Census Investigation of Recorded Indebtedness.....	311
Cape May, Mortgage and Foreclosure Movement, Valuations in	319-323, 343, 344, 357, 360, 376, 383, 389, 390
Chancery and Circuit Foreclosures.....	315
Chattel Mortgages.....	311, 312
Cities, Foreclosure Executions in.....	347
Connecticut, Co-operative Legislation.....	394, 399-491
Co-operative Legislation in England and the United States.....	393-430
Connecticut.....	394, 399-401
Kansas.....	394, 401-403
Massachusetts.....	394, 403-405
Minnesota.....	394, 405
New Jersey.....	394, 405-411
New York.....	394, 411-413
Ohio.....	394, 413-415
Pennsylvania.....	394, 415-427
Tennessee.....	394, 427-429
Wisconsin.....	394, 429-430
United Kingdom.....	393-397
Corporations, Mortgages by.....	318, 338, 355
Mortgages to.....	338, 348, 356
Foreclosure Executions by.....	339, 348, 375-381
Against.....	318, 345, 357-374
Cumberland County, Mortgage and Foreclosure Movement, Valuations in	319-323, 329, 343, 344, 357, 361, 376, 383, 389, 390
Cutters. See Glass Workers.	
Deaths. See Occupations, Effect of	
Decline of Workmen. See Occupation, Effect of.	
Diseases of Workmen. See Occupation, Effect of.	

- Decorators. See Potters.
- Dippers. See Potters.
- England, Factory and Sanitary, and Co operative Legislation of. See
Essex County, Mortgage and Foreclosure Movement, Valuations in
..... 319-323, 328, 337, 343, 344, 362, 377, 384, 389, 390
- Executions, Foreclosure. See Mortgage Indebtedness.
- Factory and Sanitary Legislation..... 5-13, 21, 22, 36, 225-303
France..... 6-9
England..... 9-11, 16, 233-303
New Jersey..... 12-14
See also Labor Legislation.
- Switzerland..... 11, 12, 225-230
- United States..... 12, 13
See Occupation, Effect of.
- Factory and Workshop Acts (England), 1878 and 1883..... 233-303
Switzerland, 1877..... 225-230
- Farms. See Mortgage Indebtedness.
- Failures, Mercantile and Farming..... 323-326
- Farr, Dr., Register-General, England, reports of..... 20, 21
- Federal Factories Act of Switzerland, 1877..... 11, 12, 225-230
- Financial Depressions..... 317-319
- Finishers, Hat. See Hatters.
- Flatteners, Window Glass. See Glass Workers.
- Flint Glass. See Glass Workers.
- Foreclosures. See Mortgage Indebtedness.
- Glass Workers, Effects of Occupation on..... 20-210
Age of Beginning Work..... 25, 26, 46-54, 70, 72
Decline..... 104-106, 114
Present..... 74-82, 98
Causes of Decline and Incapacity of.... 146-148, 162-166, 173-177, 194-201
Declined, Number..... 74-82, 102
Diseases of..... 20, 146-148, 156, 162-166, 173-177, 188-190, 194-210
Description of Method of Working..... 27-30, 32-35
Incapacitated, Number and Ages of..... 132-138, 144
Mortality Statistics..... 215
Nativity of..... 25, 72, 74-82, 100, 126, 130
Sanitary Arrangements of Factories..... 30-32
Years at Work..... 25, 26, 74-82, 98, 116, 117, 124
- Green Glass. See Glass Workers.
- Gloucester County, Mortgage and Foreclosure Movement, Valuations in
..... 319-323, 329, 331, 337, 343, 344, 363, 377, 384, 389, 390
- Hatters, Effect of Occupation on..... 20-217
Age of Beginning Work..... 25, 26, 55-57, 70, 72
Decline..... 107, 108, 114, 115
Present..... 83-85, 98, 99
Causes of Decline..... 149, 150, 178-184
Declined, Number of..... 83-85, 102
Description of Work..... 35-38
Diseases of..... 21, 36-39, 149, 150, 157, 167-171, 178-184, 191-217
Hatters' Consumption, Report on..... 21
Incapacitated, Number and Ages of..... 138-140, 144
Nativity of..... 25, 72, 83-85, 100, 101, 126, 130
Record and Causes of Death of..... 167-172, 215, 217
Sanitary Arrangements of Factories..... 36-39
Years at Work..... 25, 26, 83-85, 98, 99, 118, 119, 124, 125
- Handlers. See Potters.
- Health, Boards of. See Occupation, Effect of.
Of Workmen. See Occupation, Effect of.

- Hudson County, Mortgage and Foreclosure Movement, Valuations in
 319-323, 328, 343, 344, 364, 377, 384, 389, 390
- Hunterdon County, Mortgage and Foreclosure Movement, Valuations in
 319-323, 329, 330, 331, 337, 343, 344, 364, 378, 385, 389, 390
- Incapacity of Workmen. See Occupation, Effect of.
- Indebtedness, Mortgage. See.
- Industrial Diseases.....15-22
 Report to Privy Council on.....17-20
- Installment Payments on Mortgages.....333-325, 339
- Insurance Companies as Mortgagees. See Mortgage Indebtedness.
- Interest Rate, Decrease in.....337
- Jiggermen. See Potters.
- Judgments, Real Estate, Effect of.....311
- Kansas, Co-operative Legislation.....394, 401-403
- Kilnmen. See Potters.
- Land Values, Movement in. See Mortgage Indebtedness.
- Laws. See Labor Legislation, Factory Legislation, Co-operative Legislation.
- Labor Legislation, New Jersey, 1890.....433-438
 See also Factory and Co-operative Legislation.
- Life, Increase of Average Length of Human.....5, 22
 Trade, Duration. See Occupation, Effect of.
 Mortgage, of. See Mortgage Indebtedness.
- Makers, Hat. See Hatters.
- Massachusetts, Co-operative Legislation.....394, 403, 404
- Master Shearers. See Glass Workers.
- Mercantile Failures.....323, 324
- Mercer County, Mortgage and Foreclosure Movement, Valuations in
 319-323, 343, 366, 378, 385, 389, 390
- Middlesex County, Mortgage and Foreclosure Movement, Valuations in
 319-323, 343, 344, 367, 379, 385, 389, 390
- Minnesota, Co-operative Legislation.....394, 405
- Monmouth County, Mortgage and Foreclosure Movement, Valuations in
 319-323, 344, 368, 379, 386, 389, 390
- Morris County, Mortgage and Foreclosure Movement, Valuations in
 319-323, 343, 344, 368, 379, 386, 389, 390
- Mortality, Occupational. See Occupation, Effect of.
- Mortgage Indebtedness and Foreclosure Executions.....307-390
 Absence of data of.....311
 Assessed Valuations in New Jersey.....321, 389, 390
 Western States.....309
 Bill of Foreclosure.....315
 Bond, Proceedings on.....314
 Census Investigation.....308, 310, 311
 Counties, of. See
 Estimated, in United States.....309
 New Jersey.....336, 337
 Farms, on.....308, 323, 325-327
 Farming Industry and Lands, Depressed Condition,
 307-309, 326, 328, 329, 330-332, 336
 Financial Depressions.....317-319
 Five County Act.....313
 Foreclosure Executions, Acreage.....351, 357-374
 Building Association.....339, 348, 375-381
 Bank.....339, 348, 375, 381
 Business Failures and.....323-326
 Chancery and Circuit Court.....315
 Corporation.....318, 339, 345, 348, 357-381
 Cities, in.....347
 Counties, in. See.

- Decrease in.....325, 332, 342
 Farm lands, on.....325, 326
 Insurance Company.....339, 345, 348, 375-381
 Mortgage and, Movement Contrast.....318-323
 Number and Amount..318, 319, 326, 339, 343, 344-346, 349, 350, 357-381
 Sacrifice of Property by.....317
 Sheriff's Statement, a.....315, 316
 Judgments, Effects of.....311
 Mortgages, Building and Loan Association.....310, 338, 355, 356
 Bank.....338, 355, 356
 Chattel.....311, 312
 Corporation.....338, 355, 356
 Counties, Number Recorded in.....353
 Equity of Redemption.....315
 Essex County, Transcript of, in.....336, 338, 355, 356
 Farm, Extent of.....330
 Increase of, Meaning.....307, 323
 Foreclosures of.....325, 326
 Life of.....310, 331, 335
 Number and Amount of.....336, 337
 Foreclosed, Life of.....315, 335, 352, 382-388
 Increase in.....318-320, 323, 344
 Insurance Company.....338, 355, 356
 Interest Rate, in Essex County.....337
 Interest and Insurance Clauses in.....314
 Installment Payments on.....310, 333, 335
 Life of.....313, 335, 352
 Monthly Movement.....352
 Number and Amount of.....320, 336, 344, 353-356
 Requisites and Effect of.....312, 313
 Statute of Limitations.....313
 Taxes on.....313, 314
 To be Foreclosed before Bond Proceedings.....314, 329
 Western Farm.....308
 Population, Valuation and.....320-323. 390
 Mould Makers See Potters.
 Nativity of Workmen. See Occupation, Effect of.
 New Jersey, Labor Legislation, Co-operative Legislation. See
 New York, Co-operative Legislation.....394, 411-413
 Ocean County, Mortgage and Foreclosure Movement, Valuations in
 319-323, 343, 357, 369, 379, 386, 389, 390
 Occupational Mortality. See Occupation, Effect of
 Occupation, Effect of, on Health and Trade Life.....1-222
 Age of Beginning Work.....25, 26, 46-68, 70-73
 Decline.....104-111, 114, 115
 Incapacity.....132-144, 162-166, 194-201
 Present.....74-96, 98, 99
 Boards of Health.....13, 14
 Bureau Investigation Blank, etc.....23-27
 Decline of Workmen, Age of. See Above
 Cause of.....146-154, 173-187
 Number.....74-96, 102, 103
 Diseases contracted.....19-21, 36-39, 146-159, 162-171, 173-218, 221
 Duration of Trade Life. See below, Years at Work.
 Factory and Sanitary Legislation.....5-13, 21, 22, 36, 225-303
 Farr, Dr., Reports of.....20, 21
 Glass Workers, Statistics of. See Glass Workers.
 Factories, Sanitary Arrangements of.....30-82
 Method of Working in.....27-30, 32-35

- Hatters, Statistics of. See Hatters.
- Consumption, Report on.....121
- Factories, Sanitary Arrangements of.....36-39
- Incapacity of Workmen, Age, and Causes of. 132-141, 144, 162-166, 194-201
- Increase in Length of Life.....5
- Industrial Diseases.....15-22
- Reports on, to Privy Council.....17-20
- Mortality Statistics, Occupational.....17-20, 167-172, 213-222
- Nativity of Workmen.....25, 72, 73, 74-96, 100, 101, 126, 127, 130, 131
- Ogle, Dr., Reports of.....20, 21, 213-222
- Potters, Statistics of. See Potters.
- Factories, Sanitary Arrangements of.....42-43
- Sanitary Legislation, Effect of.....5, 6-11, 22
- Stickler, Dr. J. W., on Hatters' Diseases.....21, 36-38
- Value of Trade Life.....25, 26
- Wages.....25, 26
- Years at Work.....25, 26, 74-96, 98, 99, 116-121, 124, 125
- Ogle, Dr., Register-General, England, Reports of.....20, 21, 213-222
- Ohio, Co-operative Legislation.....394, 413-415
- Packers and Warehousemen. See Potters.
- Pennsylvania, Co operative Legislation.....394, 415-427
- Population, Valuation, and Mortgage Indebtedness.....320-323, 389, 390
- Passaic County, Mortgages Foreclosures and Assessed Valuations in
.....319-323, 343, 344, 353, 354, 370, 380, 387, 389, 390
- Potters, Effects of Occupation on.....19-221
- Age of Beginning Work.....25, 26, 58-68, 71, 73
- Decline.....109-111, 115
- Present.....86-96, 99
- Causes of Decline.....150-154, 185-187
- Declined, Number of.....86-96, 103
- Description of Work of.....39-43
- Diseases of.....19, 20, 150-154, 157-159, 185, 186, 193, 218, 221
- Incapacitated, Number and Ages of.....140, 141, 144
- Mortality Statistics.....215, 218, 221
- Nativity of.....25, 73, 86-96, 101, 126, 127, 131
- Sanitary Arrangements of Factories.....42, 43
- Years at Work.....25, 26, 86-96, 99, 120, 121, 125
- Pot Makers. See Glass Workers.
- Pouncers. See Hatters.
- Pressers. See Potters.
- Privy Council, Report on Industrial Diseases to.....17-20
- Recorded Indebtedness. See Mortgage Indebtedness.
- Real Estate, Mortgage Indebtedness. See
Valuations.....389, 390
- Register-General, Eng., Reports of.....20, 21, 22, 213-222
- Saggermakers. See Potters.
- Salem County, Mortgages, Foreclosures and Assessed Valuations in
.....319-323, 337, 343, 344, 353, 370, 380, 387, 389, 390
- Sanitary Arrangements of Factories in New Jersey. See Occupation, Effect of
Legislation. See Factory Legislation, and Occupation, Effect of
- Somerset County, Mortgages, Foreclosures, and Assessed Valuations in
.....319-323, 330, 337, 343, 344, 353, 372, 380, 387, 389, 390
- Stickler, Dr. J. W., on Hatters' Diseases.....21, 36, 38
- Sussex County, Mortgages, Foreclosures and Assessed Valuations in
319-323, 330, 331, 337, 343, 344, 353, 373, 381, 388, 389, 390
- Switzerland, Factory Legislation of. See.
- Tennessee, Co operative Legislation.....394, 427-429
- Throwers. See Potters.
- trade Life. See Occupation, Effect of.

Turners. See Potters,
 Union County, Mortgages, Foreclosures and Assessed Valuations in
 319-323, 328, 343, 344, 353, 374, 381, 388-390
 United Kingdom. See Co operative Legislation ; Factory Legislation, England.
 States, Mercantile Failures in..... 323, 324
 See also Co-operative Legislation and Factory Legislation.
 Valuations Assessed, and Mortgage Indebtedness..... 320-323, 389, 390
 Vial Blowers, Bottle and. See Glass Workers.
 Warren County, Mortgages, Foreclosures, and Assessed Valuations in
 319-323, 331, 332, 337, 343, 344, 353, 375, 381, 388-390
 Wages..... 25, 26
 Warehousemen. See Potters
 Western Farm Mortgages..... 308
 Window Glass. See Glass Workers.
 Wisconsin, Co-operative Legislation... .. 394, 429-430
 Work Ages. See Occupation, Effect of.
 Workmen. See Occupation, Effect of.
 Years at Work. See Occupation, Effect of.

STATE OF NEW JERSEY, OFFICE OF BUREAU OF
STATISTICS OF LABOR AND INDUSTRIES, }
TRENTON, October 31st, 1887. }

To His Excellency, Leon Abbett, Governor:

SIR—I have the honor to submit to the Senate and General Assembly, through you, the Twelfth Annual Report of the Bureau of Statistics of Labor and Industries.

JAMES BISHOP,
Chief.

ERRATA.

Page 80, table heading, read "Glass *Workers*—Master Shearers," for "Glass Blowers," &c.

Pages 157, to 159, Table VIII, headings, read "Showing Summary of *Diseases Contracted at Trade*," and "Age *When Contracted*," for "Causes of Decline," and "Age of Decline."

Page 311, 17 lines from bottom, read "Mortgagors," for "Mortgages."

Page 326, foot note, 3 lines from bottom, read "Rural Population *to* the Cities," for "of the Cities."

Page 336, 6 lines from bottom, read "Average Essex County *Farm Mortgage*."

Page 336, 5 lines from bottom, read "\$30,000,000."

Page 338, table heading, read "Per Cent. of Mortgages to Corporations *of* Aggregate Recorded."

Page 339, 5 lines from top, read "*was* issued."

Page 393, 5 lines from top, read "*in*" for "*to*."

INTRODUCTION.

The influence of occupation upon the health and trade-life of workmen never has been sufficiently investigated, although, as a very important phase of the industrial question, it deserves serious attention. It is true, some valuable statistics of occupational mortality have been collected in England from the annual reports of the Registers-General, Drs. Farr and Ogle. These compilations, the latest of which are reproduced in the Appendix, give the average age at death of particular classes of persons and indicate the diseases peculiar to them. But it is questionable whether such tables are of much service in determining the number of years the enumerated occupations have shortened the lives of those engaged therein.

As is admitted by the authorities mentioned, "the mean age of death of people in different businesses after all furnishes very erroneous indications, as it is affected so much by the ages at which people enter and leave, as well as by the salubrity or insalubrity of any particular profession." The actuary of the New York Mutual Life Insurance Company, referring to the unreliability of statistics of occupational mortality, mentions the somewhat extreme example of judges, whose average age at death is found to be high: "The inference that would be made from this fact, that the occupation of being a judge tends to longevity, may or may not be true. It seems to me quite as likely, that nothing more is proved than that a healthy class of men become judges. Apart from this, it would rather show that men do not become judges until already advanced in years. This fact might make an immense difference in

the average age at death." Then again, it is improbable that the larger proportion of those employed in industrial pursuits, excepting, possibly, those commonly classed as dangerous, such as mining, seafaring and the like, die in harness, as it were: the more unhealthy or enervating a trade, the greater the probability that physical impairment will compel the worker to seek other but more suitable employment, perhaps, many years before his death; but vital statistics do not show this historical record.

These considerations induced the Bureau to pursue a different but largely experimented line of inquiry in the investigation, begun during the year, into the "effect of occupation on the health and duration of the trade life of workmen." A beginning has been made with three of our most important industries, namely, glass, hatting and pottery. The effort was primarily directed to obtaining from journeymen, of twenty-one years and upwards, a sufficiently full history of their trade life for a correct estimate of its duration. The tables in Part I comprise the summarized replies from 4,739 journeymen actively engaged in their respective occupations, as well as information respecting several hundred workmen who, from incapacity or other causes, had quit the trades at which they were once employed.

In connection with and as introductory to these original data, is given an account of the results of the more general observations of medical experts, based on private professional experience or the official inspection of workshops and mills. These go to show the needs of efficient factory laws, and the excellent effects where they have been energetically pushed and administered. In the United States where but little progress has been made in this direction, the results of our experience are necessarily limited. It is only within very recent years that departments of factory inspection have been established in but nine of the States. Such legislation, so far as it goes, seems to be fairly efficient. Little attention, however, has been given to the sanitary regulation of workshops; and taken a whole, these factory acts are far less comprehensive than those enacted in many of the European countries, notably, France, Switzerland, and especially, England, whose laws, consolidated into the Factory and Workshop Act of 1878, have formed the model for such legislation elsewhere. This important statute is

reproduced at the close of Part I, as is also the more general but no less efficient act in force in the Swiss Confederation since 1877.

As extensive an investigation of the subject of recorded indebtedness in New Jersey as was deemed advisable, in view of the probability, at the time, that statistics of farms, houses and mortgages would be gathered, by the United States Census department, for the whole country—an inquiry which is now being prosecuted. The number of real estate mortgages recorded was collated from the official records of the several counties, and, especially the number, nature and amounts of foreclosure executions issued, the conclusions having been reached that the latter data rather than the extent of mortgage indebtedness, other things being equal, indicate the condition of the land holding classes. Foreclosure executions point to the embarrassment of the mortgage debtors; while a mere mortgage incumbrance often signifies the contrary, especially when the borrowed money is being used in remunerative productive industry. As a matter of fact, this inquiry, the results of which are set forth in Part 2, shows, that the tendency in periods of business activity has been towards the increase of mortgages and decrease in foreclosures; and conversely, in hard times. There has been a constant increase in the total number of recorded mortgages in this State since the business revival at the close of the last decade, as well as a generally marked decrease in the foreclosure rate. This tendency, however, has been much less observable in those counties which are rural than in the urban—a state of affairs for which, there is considerable evidence to show that the decreasing value of farm land and the depressed condition of the agricultural interests are largely responsible.

To satisfy a demand for information on the industrial co-operative legislation in this country and Great Britain, a synopsis of the laws regulating the organization and management of co-operative associations in the United Kingdom, as well as the comparatively few and less comprehensive acts which are in force in the United States, are reproduced in Part 3. The final chapter of this report, Part 4, is devoted, as customary, to such so-called labor legislation as was enacted at the session of the State Legislature in 1890

The supervision of this work of obtaining the statistics for Part 1

of this volume was chiefly in the hands of Mr. Charles H. Simmerman, secretary of the Bureau, and I desire to acknowledge his earnestness and fidelity in the prosecution of a line of inquiry, which, though somewhat novel, is, nevertheless, a most important one. I wish also to acknowledge the valuable services of Mr. Joseph Fischer, chief clerk, and to express my satisfaction at his devotion to the interests of the office, and his efficient aid in the preparation of the present report.

PART I.

THE EFFECT OF OCCUPATION

ON THE

Health and Duration of the Trade-Life
of Workmen.

PART I.

The Effect of Occupation on the Health and Duration of the Trade Life of Workmen.

National health and national wealth are the fundamental requisites of all national existence. Without these, no nation can develop itself, become great, progressive, and prosperous. Upon its constructive activity, its labor force, and the continued abundance of its products, depend the continuity, wealth, morality, and vitality of a people. But in order that production may be abundant and of superior quality, the individual worker, the unit of the nation, must be physically and intellectually developed; for the better his physical and intellectual development, the greater will be the quantity and the better the quality of his product, and the greater the wealth of the State.

The labor force being thus the ground work of the prosperity of the State, to maintain in its most efficient condition the total amount of productive energy at present existing, to prevent its deterioration, to increase it to its utmost possible capacity in the future, should be the aim of all true statesmanship. If it be discovered, that in any given industry, the demise of the worker takes place before the ordinary average number of years of life expectancy has been reached, the natural conclusion to be drawn from the fact would be, that certain causes, perhaps visible and known, perhaps hidden and ignored, are at work to produce the effect observed; that exhaustion caused by over-exertion of the physical forces, or the absence of proper hygienic conditions, or a combination of both, might be found to be responsible for the results. In either case, or whatever may be the cause, we may be assured that the active working

period as well as the productive capacity of the individual is curtailed, which curtailment is an economic loss to the State.

Human life has a value which can be expressed in dollars, and its pecuniary worth is to be measured by the amount of the production of wealth which it contributes to the State during its passage from the cradle to the grave. Life has a monetary value from the fact that a certain amount of capital is sunk in its production and maintainance. At first it is all expenditure, and a certain necessary outlay goes on to the end in order to preserve it and keep life in being. This valuation of life differs from that of the mother to whom her helpless child is inestimably precious, and from that of the man ready in his filial sympathy to sacrifice his life for his parents; but it agrees well with the popular appreciation of the value of life as expressed by a whole nation when one of its citizens, who has been a conspicuous character and who has rendered great and valuable services to the commonwealth, dies.

To obtain a knowledge of the economic loss to a nation consequent upon the premature demise of the worker, probably no well directed and continuous effort has ever been made. The obstacles standing in the way are numerous, and so fugitive is the character of the evidence upon which it may be based, that it is almost unattainable in the present state of data, or rather absence of data, upon the point; nor can such data be of value until sufficient have been accumulated and compared, and a sufficient length of time has elapsed to admit of something like correctness in generalization. Although the example of mechanics who work over heated furnaces and in vitiated air, founders, stokers, engineers, charcoal burners, miners and the like, goes to prove that the human lungs may ultimately adjust themselves to unhealthy conditions, and although life, being vitiated and poisoned with different forms of disease, may in rare instances be prolonged to old age, yet we know these cases to be exceptions and not the rule. We have nothing on which to base an estimate of the number of years of active and productive life lost to the state by premature death. *

*Dr. Jarvis in the health report of Massachusetts calculated a loss of time in 1870 of 24,553.8 months for that year in that State from sickness, not including ailments of less than a week's duration as cases of chronic impaired power arising from various causes.

It must undoubtedly vary in each industry and also be modified by the varied conditions under which an industry may be conducted from one period to another.* Only by carefully compared and verified statistics in each particular occupation, during a series of years can an exact result be obtained. But we can have no hesitation in conceiving of the possibility of prolonging human life in many industries. It is a well observed and well known fact that some industries are highly prejudicial to health, and greatly reduce the period of life of those engaged in them. And though the length of that period in any given industry is not known with anything approximating to certainty, we do know that, taken as a whole, the average life of the human race has increased.† All mortuary tables agree in giving evidence of that fact. The death rates in all the countries of Europe are known with more or less exactness according to the care taken in collecting them, or the importance attached to the subject by the respective governments. In our own country we may boast of a greater average length of life of our citizens over any other example of recorded history. And it is not reasonable to suppose, in face of the increased longevity already achieved by the human race within comparatively recent historical times, that the limit has been reached. The three score and ten years of man may yet be rounded in health and vigor, and during the plenitude of his power his energies and capacities should honor and enrich the State. It should be the aim of statesmanship to secure this end.

If the average period of life of a worker, in any given industry, is found to be much shorter than the average period of workers in other industries, we may very reasonably attribute the fact to some cause; the effort should then be made to discover the cause. The next step would be to search for a remedy. Should the remedy require the presence of legislative action, wisdom would dictate its

*For instance, there is more of "devil's dust" in large factories and carding mills than when weaving was a domestic industry and the spinning wheel was in use.

†Our modern system of statistics obtained neither in antiquity nor the middle ages, and we must necessarily therefore, accept statements respecting these periods with considerable reserve. for example, that, as some historians tell us, the average life in Rome at the time of the Cæsars was but eighteen years, or twenty years in England in the Elizabethan period. In Rome this average to-day is 40 years, in England much greater. In France the average life of the population during the past half century has been raised from 28 to 45 years.

speedy application, for human life is the most valuable possession of the State. The State being prosperous in direct ratio to its productive forces, it is to the interest of the State to prolong the productive period of the life of the worker to the fullest extent. Therefore, the means conducive to that end come legitimately within the sphere of legislation. To preserve human life is not only the highest prerogative, but the highest duty of the State. To serve well the State, is the highest duty of the legislator.

The necessity of legislative action in the interest of industry and public health has been recognized, to a greater or less degree, by all modern industrial nations; and in France, at least, the investigation made into industrial conditions, under which workers pursue their employments, and under which manufacturing establishments are conducted, cannot be said to be of recent date. It would be extreme to date back the regulation of noxious and deleterious occupations to the royal proclamations of 1486, which suppressed the potteries in Paris; or to the period when, from the exigencies of public salubrity, the tanners, the rag pickers and other unhealthy occupations were driven from the interior of all the small towns in France, which occurred in 1567. Still it may be said that the subject has been under the regulation of the government for about a century only, that is, since the first French Revolution, when much was written concerning industrial conditions, and public sentiment was actively stimulated to investigation.

It was found that industrial establishments were frequently inconvenient, noxious or unhealthy to a neighborhood. This experience induced the ordinance of February 12, 1806, under which the Prefect of Police was required to prohibit the establishing in Paris, of workshops or laboratories, liable to occasion fire or deleterious to health. The requirements of this ordinance being imperfectly executed, the Minister of the Interior consulted the Academy of Sciences on the general measures necessary for the regulation of manufactures in the interest of public health. A committee of the Academy reported upon the subject, which report served as a basis of the decree of October 15, 1810, and of the ordinance of January 14, 1815. From that date forward all industries have been under governmental supervision, and those two measures fundamentally regulated the hygienics of industry in France up to the present day.

By the latter ordinance, the carrying on of all dangerous, unhealthy, or noxious operations, divided into three classes, must be legally authorized under advice of the Council of Health. Factories of the first class are those which can only be established at a certain distance from private dwellings, but are not necessarily prohibited in the outskirts of a town. To the authorities belongs the duty of determining whether the isolation is sufficient and complete, and other details; but authorization to operate is given only after the consent of the prefect of the department and the prefect of police of the prefecture has been obtained, and after due notice has been placarded in all the communes within a radius of five kilometers, or about three miles; nor until after an *enquete* (inquisition) has been established by the mayor of the commune, the object of which is to consult all the residents of the immediate neighborhood. These formalities having been complied with, the documents relating to the subject are transmitted by the prefect to the Council of Health, to the Council of the Prefecture, to the Minister of Commerce, to the Council of State, and finally to the head of the government.

Factories of the second class constitute those which are not rigorously required to be isolated from habitations, but which should not be erected if the operations or processes intended to be conducted, can in any way cause damage to the neighborhood. The authorization of this second class lies with the Prefect and the Council of Health.

Those which are considered factories of the third class are such as may remain without inconvenience near to dwellings, but which should be subject to the surveillance of the Police of Public Salubrity. The establishment of factories of this category may be authorized by the sous-prefet in the sous-prefectures, by the prefects in the arrondissements, and by the Prefect of police in the department.

These three categories have been subject to a careful classification under the aspects: First, as to the nature of the materials employed or elaborated during the progress of the particular industry; secondly, as to the general features of the danger, inconvenience or insalubrity of the result of each particular manufacture or process. The classification so far as it has progressed up to the present time, since 1810, with the summary of the attendant incon-

veniences, shows, for the first class, 67 occupations or manufactures; for the second class, 78, and for the third class, 67. This classification is, however, not considered as being complete. The mutations and improvements to which industrial processes are amenable may render a revision possible or necessary at any time. The following passage from the report of Dr. Walter Lewis, Medical Officer to the British Post Office, who was commissioned in 1855 to inquire into the workings of the laws relating to the industries in France, is perhaps worthy of quotation:

"As far as I have been able to form an opinion the system of keeping an active supervision by means of a department of the police (*Hygiene Publique et Salubrite*), over the noxious trades and occupations likely to interfere with the public health, appears to be very successful. While the interests of the workmen is strictly cared for, the employers themselves do not complain of any undue or harsh treatment by the authorities."

In 1842, the Childrens' Employment Commission made its first report to the British Parliament. A year before, on March 21, 1841, a law came into operation in France, relating to the same subject and containing the following principal provisions:

"On account of danger and insalubrity, children shall not be employed under the age of sixteen years in certain industries, which are to be determined by the Government.

"No child under six years of age shall enter any factory or workshop.

"No child between the ages of eight and twelve years, shall work more than eight hours a day.

"No youth between the ages of twelve and sixteen years, shall work more than twelve hours a day.

"This labor shall be performed between the hours of 5 a.m. and 8 p.m.; and the hours shall be divided by periods of rest.

"No night work or overtime shall be performed by any child."

In an able memorandum published by Mr. Andiganne on the law of 1841 relating to children, he says, "the morality of childhood should be the object of an effective and affectionate solicitude continually augmenting, and the basis of this law should be gradually enlarged." In another part he calls attention to the progress which education has made and its beneficial results upon the youth of the manufacturing districts of France since the passage of the law of 1841. Within the short space of fifteen years, the beneficent operation of these laws relating to industry had become so well under-

stood, that in 1856 the general council of the *Department du Nord* moved to make a regular appropriation to pay the expenses of the inspection of child labor in factories, instead of leaving the amount to the discretion of the authorities.

If we look to England, we shall find that in that country the growth and development of all that can be considered as coming within the scope of industrial legislation has taken place within the century. As in the case of France, it would be extreme to consider the various repressive measures enacted to control the laborers of the middle ages, or the statutes which attempted unsuccessfully to regulate their wages or the price of food, to prevent the worker from leaving his employer, or those passed under Elizabeth relating to vagabondage—these and the like legislative enactments can hardly be considered as coming within the range of the modern conception of legislative interference in relation to labor, since such legislation in former times had neither the public wealth nor the public health in view.

The rapid growth of the conception of the importance of Hygiene in England is quite modern, and may be judged from the number of laws relating to public health. From the year 1844 to 1873, no less than eighty-nine statutes were enacted, either rural or urban. The mere index to the powers granted to the authorities under these sanitary acts covers sixteen closely printed pages. The index to the penalties to be inflicted for the violation of the sanitary enactments covers fourteen pages.

During the past century numerous statutes have been passed by Parliament, for the protection of women, young persons, and children employed in factories, and working at various trades, so as to prevent the health from being injured, either by excessive hours of labor, or from neglect of ventilation or cleanliness. The first of the measures became law in 1802, and is entitled "Regulations respecting Apprentices in Factories, and whitewashing of Cotton and Woolen Factories." After this, in 1833, a more general act was passed, but before the legislation was consolidated in 1878, no fewer than fifteen statutes were in force. In the latter year (1878), "An act to consolidate and amend the laws relating to Factories and Workshops" was enacted. (See close of this chapter.)

These various laws gradually increased in the scope of their action as they proceeded from the simple to the more complex problems involved. The glaring, brutal and immoral practices in mines and factories, and the barbaric cruelty exercised by employers foremen and overseers upon women and children, was probably the fact which first called attention to the subject, and compelled legislative interference, which, as it proceeded, shows the gradual and logical development of the thoughts of legislators and the public, in relation to this industrial question. It began by the simple interference which compelled the "whitewashing of walls in cotton and woolen factories," and the "regulations respecting apprentices" in 1802, and did not stop until it finally reached the points of complete supervision of all factories and mines, the instituting of strict scrutiny into the causes of any injury or death arising from any accident whatsoever, occurring therein, and the appointment of an officer, in the person of a certifying surgeon, to fully investigate and report upon all and every disaster. It appears first to have begun by a series of investigations, leading toward the study of the health of the individual, and the enactment of such regulations as would tend to secure it, and from these leading up to the study of the means of the health of the general body of society, and the enactment of such measures as would accomplish that desired end. The earliest regulations generally speaking, dealt with the question of "bodily care," the care of the individual worker or the industrial body. Then followed regulations in regard to "sanitary works." Afterwards these regulations were extended to food, adulterations, poisons, etc., and finally to medical supervision and care—the care of the collective body.

In relation to the bodily care of the individual, we find laws relating to health in the factory: children under 9 years prohibited from working in mills and mines; safety from unguarded and dangerous machinery, exposed vats, etc.; the number of hours of employment; the establishing of meal hours at stated intervals; the regulation of night work, overtime and holidays; the regulations securing the education of children, half time schools and alternate days of schooling; medical certificates of fitness to labor—as to absence of infirmity, diseases or strength of children under 16 years of age; regulations in case of accidents: notice of acci-

dents causing death or injury and investigation of the same ; inspectors appointed to enforce these regulations and penalties imposed upon obstructions placed in the way of the efficient performance of these duties. The regulation of bake-houses and the safety of mines is provided for, as well as protection from explosion and fire ; the use of gunpowder, petroleum, etc., is guarded, and so on.

In relation to sanitary measures generally legislative action covers an extensive field. It includes house drainage, water supply, baths and warehouses, removal of nuisances, offensive trades, prevention of smoke, and public conveniences, such as urinals, the cost of which is to be defrayed from the general district rates on taxes. Then come provision for public parks, commons and inclosures regulations, the cleansing of public streets, the security of buildings and the dwelling in cellars, which was prohibited after 1848 ; the common lodging houses and the burial grounds.

Under sanitary measures should also be included the legislation relating to food and poisons, such as the manufacture and adulteration of food and drinks, the sale of diseased meat, the sale of arsenic, laudanum and other poisons, and various other similar enactments. The regard for human life is also seen, so far as the prevention of diseases is concerned, in the legislation in reference to vaccination, quarantine, precautions against the spread of cholera ; as well as the contagious diseases acts, which apply both to man and cattle. We find that all these questions have been the subject of legislation within the past century in Great Britain, and to a lesser extent in the other European countries, to which especially English labor legislation, so called, has largely served as a model.

In the report of the Bureau for 1888,* attention was called to the more important provisions of these European factory acts, which, in connection with other legislation of a socialistic tendency, are at present giving much concern to continental statesmanship. Probably in no country in the world has so much earnest consideration been expended lately in this direction as in the Swiss confederation, whose federal council has been active in agitating for an international conference to regulate labor interests.

The Federal Factories Act of 1877, as was stated in the Bureau's report for 1888, provides for the inspection of industrial establish-

*See Part 2, "Employers' Liability for personal injuries to their Employees.

ments and requires the proprietors to adopt all practical measures for the security of employes against accident and protection of their health, and also establishes the liability in damages of employers for injuries happening to a workman in the course of employment. "It regulates not only the employment of women and child labor, but that of adults and the payment of wages. Its principal provisions relate to the safety and protection of employes; to insure proper lighting and ventilation, as well as the employment of safeguards against accidents from belting and machinery. Plans of buildings to be erected must be submitted to the proper authorities, and before work can begin legal authorization is necessary. If a dangerous condition of affairs subsequently arises the authorities require the removal of the danger or suspension of the work. Manufacturers must establish regulations for the internal workings of their establishments, to be approved by the cantonal governments. They are also required to watch over the morals and public conduct of their employes." *

In the United States, thus far, industrial legislation has occupied itself little with the sanitary regulations in the workshop, and has mainly been directed to the question of child and woman factory labor, but even restrictions in this direction have been, as yet, very limited. State departments of factory inspection have been established in Massachusetts, New Jersey, New York, Connecticut, Rhode Island, Maine, Ohio, Michigan and Pennsylvania. The laws of these States have considerable uniformity and seem fairly well adapted, so far as they go, to prevent many of the abuses heretofore existing, in forbidding the employment of children under certain ages, the restriction of the hours of labor of minors and women, providing for the safe guarding of exposed machinery, hatchways, fire escapes and the like. The general factories act of New Jersey, approved April 17th, 1885, also provides "that where the factories or workshops appear so overcrowded that, in the opinion of the inspectors of factories there is danger to health, the inspectors shall have power after being supported in their opinion by some reputable physician to prohibit such overcrowding; that the inspectors of factories shall have power to order a fan or other mechanical means of proper construction if possible, for the purpose of pre-

* See Bureau report for 1888, pp. 138, 139; and appendix at close of this chapter.

venting the inhalation of dust in establishments where any process is carried on by which dust is generated and inhaled by the workers to an injurious extent ; that all factories and mines be ventilated so as to render harmless all impurities as near as may be."

The factory acts have generally followed the institution of Boards of Health, State and local, which within the past three decades have been organized under law, in Massachusetts, New York, Illinois, New Jersey, and some other localities, so that a more or less general interest, is now given to sanitation in the more populous centres.*

A beginning having thus been made, it is reasonable to expect that our own several State governments will, at least, soon be abreast of the advanced thought in Europe, in adopting radical and effective measures to preserve and promote the comfort and health of those whose labor produces our wealth, and on whose well being the future of our institutions depend. When attention was first called to the evils resulting from unrestricted employment of children and minors in the factories of New Jersey, objection to any interference was made by a class of employers, on the ground that such interference was an infringement on their personal rights. But the operation of these laws has proved so wholesome, that there is little or no remonstrance now from any quarter ; while many of the largest employers give a support to their enforcement. So we may well assume that all far-sighted men will sooner or later sanction the adoption of measures to prevent the suffering and loss that now so heavily falls upon a large portion of our mill operatives in consequence of the absence of proper hygienic regulations.

It is not urged that the circumstances are precisely similar in the case of men, who have more or less option to remain in an employment known to be injurious, to those of helpless children and minors who have no choice. In the two cases there is not the same justification for legislative interference. Yet when we consider the persistence with which workmen, from force of habit or otherwise, cling to old methods and customs, and the dislike of employers to make needed improvements unless imperatively de-

* Sanitary investigation into means of preserving the public health, is of recent origin in this country. Local Boards of Health had existed in the chief maritime cities, but no State board was created till that of Massachusetts in 1869. A National Board of Health was established in 1879.

manded, it may well be questioned whether there will be any changes for the better unless the State interfere to save the laborer from the result of his own ignorance and folly, or of the greed and indifference of his employer. There certainly can be no objection to an investigation by scientific men into the conditions under which are conducted such industries as glass, hatting, pottery, rubber, leather, flax and the various textile dust generating manufactures, so as to apprise the workmen of the dangers to which they are liable and to suggest such rules for their avoidance or instigation as may be found feasible. "It is extremely important," observes a writer in the Massachusetts Board of Health report for 1873, that every person should be advised to what extent, if at all, his occupation is prejudicial to health, and to have such perfect understanding of its dangers and the means of escaping them, that he may not through ignorance find his pecuniary success early supplemented by his physical wreck."

In the report of the New Jersey State Board of Health for 1884, it is asserted, that "if a thorough inspection should be made into all our mills and shops, it would be found that the health of many operators was suffering from working in crowded rooms, and from impure air. Instances of this kind have already been noted by us in hatting and pottery, and are known to exist in the glass-blowing, leather and other industries." *

*In 1877, an act entitled "An Act to Establish a State Board of Health," was passed by the Legislature of New Jersey. One of the provisions of this law is that it "shall make sanitary investigations and inquiries in respect to the people, the causes of diseases, and especially of epidemics and the source of mortality, and the effect of localities, employments, conditions and circumstances on the public health." Subsequently other acts and supplements were enacted, and in 1886 these laws consolidated and enlarged by an Act entitled "An Act to revise, consolidate and amend certain acts concerning Boards of Health in this State." Since 1877, this State Board of Health has made annual reports as provided, several of which have contained articles by physicians in active practice, among the workers, on industrial diseases and the need of improvement in the hygiene of various occupations extensively carried on in the State, notably the following: "Hatting as Affecting the health of Operatives," by Laban Dennis, M. D., in the report for 1878, pages 69 to 85; "Trades and Occupations," by Ezra M. Hunt, M. D., report for 1883, pages 161 to 170; the "Hygiene of Occupation," general introduction, by Ezra M. Hunt, M. D., to the report for 1886, pages 157-200; "Diseases of Hatters," by J. M. Stickley, M. D., of Orange, N. J.; "Workers in Silk, Flax and Jute," by Wm. K. Newton, M. D., of Paterson, N. J., and "Manufacture of Rubber Boots and Shoes," by J. P. Davis, M. D., Milltown, N. J.; also "The Diseases of Potters, their cause and prevention," by David Warman, M. D., of Trenton, N. J.

Doubtless the medical faculty has been active in stimulating inquiry into the condition of the laboring masses. One of them in particular, Dr. Thackrah, of Leeds, in a work published in 1832, entitled, "The effect of Arts, Trades, and Professions, etc., etc., on Health and Longevity," says in his preface :

"If any object that the cure, not the cause or prevention of disease, is the business of the medical practitioner, I would reply that the scientific treatment of a malady requires a knowledge of its nature, and the nature is but imperfectly understood, without a knowledge of the cause; there the modern systems of physic are singularly deficient. From Buserins to Good we find volumes on the symptoms, character, and treatment of diseases, but rarely a line on the causes as produced by employments and habits, and this line as frequently erroneous as correct. Strange this omission or ignorance in centuries of advancing knowledge."

That the workers are exposed to forms of disease peculiar to their various avocations cannot be denied, and the faculty of medicine has so far recognized this as to have adopted into its nomenclature the term "industrial diseases," "noxious trades," and trades "deleterious to health," &c. These industries may be divided into two classes. In the first class the work is naturally unhealthy, in the second class it is artificially unhealthy. In the first case the worker must suffer in health by reason of the injurious effects of the material upon which he operates, except in so far as the injurious effects can be and are counteracted by artificial contrivances. This may be termed the unpreventable or more strictly, the modifiable class of diseases. In the other case the work is not naturally injurious to health, but becomes injurious by reason of the manner in which it is conducted and the surroundings of the worker. This may be termed the preventable class of diseases. In the first case the injury to health may be greatly decreased by scientific appliances which act upon such causes as are remediable, thereby reducing the danger to a minimum. In the second class the injury to health may be entirely eliminated by the application of hygienic knowledge. In both cases medical knowledge, social science and scientific appliances must go hand in hand with executive enforcement and legislative wisdom.

As to the injurious effects of the first category of industrial diseases, which are classed as the unpreventable, no doubt can be entertained, such for instance as the dangerous mining industries, the

fishery and maritime industries or the various dust producing indoor industries. Nor can there be any doubt as to the injurious effects of the material with which he works upon the health of the worker whenever he labors where lead, mercury phosphorous, arsenic green and such similar chemical poisons are employed. As to the second class, or preventable diseases, it has become well known that where many persons are employed together in any indoor industry the ventilation and other sanitary conditions are likely to be so bad as to convert the employment, which in its own nature is not of a hurtful tendency, into an employment seriously dangerous to health.

Nearly a half century ago the first general "Public Health Act" was passed by the British Parliament.* In the report for 1863 of the medical officer of the Privy council, acting under that legislative measure, the following passage occurs in italics :

*"In proportion as the people of a district are attracted to any indoor occupation, in such proportion, other things being equal, the district death rate by lung diseases will be increased, for the bad ventilation which, as a rule, belongs to the place of employments, tends to develop among the work people a large excess of phthisis, and probably also some excess of other fatal lung diseases. * * In every district which has a large indoor industry, the increased mortality is such as to color the death return of the whole district with a marked excess of lung disease."*

The official documents of France prove that in that country as in all others, "the population of the manufacturing towns is less vigorous than that of the rural districts." One report says: "The population of the manufacturing towns are weak and diminutive, bent over their looms and living in shade they become *etiolated* like plants. Since the great increase of the manufactures in the department of the *Haut Rhin* (from 1810 to 1823) the average height of the people has not increased in the same proportion as in the neighboring department."

In France, as elsewhere, the dust-producing occupations of all kinds have been the object of considerable investigation and have

*In 1848, the local government act of 1858 amended this, and in 1875 was passed the comprehensive consolidated act of 1875.

been found to be very detrimental to health. It has been discovered that dust from hard substances causes a greater number of consumptive cases than the dust from soft bodies or substances of ordinary hardness, while it has been found that the specific gravity of dusts does not effect in any marked degree the production of phthisis. Among the great number who have investigated the subject of phthisis and consumption, the researches of Drs. Benoitson and Lombard are remarkable. With great ingenuity they have calculated the influence of dust upon the human lungs. They have determined that mineral dust is the most detrimental to health; that animal dust is less obnoxious; and that vegetable dust is less deleterious than either. Many hundreds of the medical faculty have made searching investigations into the processes employed in the numerous match factories of France, and they all agree in substance, with the reports of the English doctors in declaring that bronchitis, more or less severe, the destruction of the teeth, necrosis of the jaw bone, etc., are the invariable results of this industry, which is so dangerous to health.

Speaking of "industrial diseases," the medical officer of the Privy Council of Great Britain, in the report to which reference has already been made, has the following passages:

"In my fourth annual report I showed how practically impossible it is for workpeople to insist upon that which in theory is their first sanitary right—the right that whatever work their employer assembles them to do, shall, so far as depends upon him, be, at his cost, divested of all needlessly unwholesome circumstances; and I pointed out that workpeople are practically unable to exact that sanitary justice for themselves. * * * Since the making of that fourth report, my information on the industries of England has necessarily been increased and extended. And now, with this bettered information, I beg leave to express my opinion that the whole large question of the sanitary circumstances of labor demands very urgently the consideration of the legislature.

"So far as printers, tailors, and dressmakers are concerned, the appendix to my present report contains evidences which will, I think, be deemed sufficient to justify the opinion which I express; and lest the urgency of the case should be undervalued, I here insert a table, showing the excessive mortality of the London printers and London tailors as compared with the healthy standard of agricultural industry:

Number of persons, of all ages, employed in the industries re- spectively.	INDUSTRIES TO BE COMPARED AS TO THEIR EFFECT ON HEALTH.	DEATH RATE PER 100,000 MEN EM- PLOYED IN THE RESPECTIVE INDUSTRIES AT THE AGES MENTIONED.		
		25-35	35-45	45-55
958,265	Agriculture throughout England and Wales.	743	805	1,145
22,301 men.	London tailors.....	958	1,262	2,003
12,377 women.				
13,803.	London printers.....	894	1,747	2,367

"I have no such statistics as regards dressmakers, nor can I, as regards any special industry, give death rates, calculated like the district death rates in the above table, for the one particular fatality of lung disease. But Dr. Smith's report tells, both for printers and for tailors, that phthisis and other lung diseases are notoriously in vast excess. He finds reason to believe that among the printers of London phthisis, in proportion to other diseases, is twice as prevalent as even among the general male population of London. He finds also that among tailors consumption and other forms of chest disease constitute two-thirds of all the causes of death.

"It will be seen that, at the age of 35—45, the mortality of London tailors is 57 per cent. higher than that of the male agricultural population. It also shows that at the age of 45—55 the London tailors have nearly twice, and the London printers more than twice, the mortality of the agriculturists.

"In support of the same opinion with regard to other industries, I would refer to the detailed evidence given in my third, fourth and fifth reports, and to the overwhelming statistical evidence which has been laid before Parliament. Especially would I advert again to the statistics which I have already quoted, with regard to the prevalence of pulmonary disease at our principal seats of textile industry, and in our straw plaiting, glove making, hosiery and lace making districts. And in further illustration of the case I would submit the annexed table, showing, too, how deplorable an extent various other industries tend to destroy their work people by

chronic lung diseases (here not usually phthisical, but irritative and inflammatory), which breaks them down in what would be their prime of life. By this table the fact is shown that, in the districts where the miners and metal forgers and cutlers, and potters follow their respective industries, the death rates, by lung disease of men, aged from 45—65, is from two and one-half times to eight times as high as in healthy agricultural districts.

"These arguments taken together, will, I trust, establish my position. Doubtless there may be some small technical difficulty in defining the exact line at which employers shall become subject to regulation; but I would submit that, in principle, the sanitary claim is universal, and in the interests of myriads of laboring men and women, whose lives are now needlessly afflicted and shortened by the infinite physical suffering which their mere employment engenders, I would venture to express my hope, that universally the sanitary circumstances of labor may, at least so far, be brought within appropriate provisions of law, that the effective ventilation of all indoor workplaces may be ensured, and that in every naturally insalubrious occupation the specific health endangering influence may, as far as practicable, be reduced."

In the third annual report of the medical officer of the Privy Council (for 1860), on the manufacture of Earthenware, speaking of the potters of Stokes-upon-Trent and Wolstanton, Dr. Greenhow, says: "In fact, as usually happens whenever the female population is largely employed in manufactures, the domestic education is deficient, whence results much sickness and mortality among children. One consequence of this is said to be a manifest deterioration of the race. It was stated by Mr. Boothroyd, a medical practitioner at Hanley, that each successive generation of potters becomes more dwarfed and less robust than the preceding one, and that in his opinion but for the occasional intermarriage with strangers, this deterioration would proceed even more rapidly. This statement was confirmed by Mr. McBean, another medical man, who said he had observed a marked degeneration in the potters, especially shown in a diminution of statures and breadth, since he had commenced practice among them twenty five years ago. This falling off he attributed greatly to the neglect of children by their mothers, but more especially to the early age at which children are put to labor, and to the unhealthiness of many of the parents. Some of the evils incidental to a potter's life have, it is said, been aggravated by the circumstance, that there is now no cessation of work during the winter. Formerly the potteries were annually closed for some weeks in frosty weather. And this respite from labor afforded the potters time to recover, in some degree, from the diseases engendered by their occupation. Improvements have lately been intro-

duced, which enable the potteries to continue in operation all the year round, and the advantage of the winter's respite is now lost to the operatives."

Referring to the excessive mortality from lung diseases in Stokes-upon-Trent and Wolstanton, the following statistical information is given :

"Notwithstanding only 36.6 per cent. of the men of Stokes above the age of 20 years and 30.4 per cent. of those of Wolstanton, were employed in the potteries in 1851, proportions which have probably not materially varied since that time, more than half, or 438 of 827, deaths of men over 20 years of age from pulmonary diseases during the five years 1855-59 in Stokes, and 241 out of 615, or nearly two-fifths of those of Woolstanton, were death of potters. This class of operatives has therefor suffered a much larger mortality from these diseases, in proportion to its number, than the rest of the population, and may therefor be presumed to be exposed to some causes productive of pulmonary diseases from which the rest of the population is exempt."

In the supplement to the 35th (1871) annual report of the Register General of England, Dr. William Farr, makes this statement :

"The earthenware manufacture is one of the unhealthiest trades in the country. At joining the mortality is low; but after the age of 35 approaches, double the average; it is exceedingly high; it exceeds the mortality of the publicans." And he concludes by asking this pertinent question. "What can be done to save the men dying so fast in the potteries and engaged in one of our most useful manufactures?"

In another passage he says :

"Among the glass manufacturers the mortality is higher between the ages of 25 and 35 years than among the earthenware manufacturers."*

The admirable reports of Dr. Farr have been continued since his decease by Dr. Ogle, who ten years later, in his supplement to the 45th annual report of the Register-General gives the most recent and trustworthy information on the subject. For that report, the deaths, in combination with ages and occupations, have been abstracted for three entire years, 1880-82. The inquiry was limited to males, aged 15 and upwards, who, according to the census of 1881 for England and Wales, numbered 7,911,436, while the total

*For further death rates in the different occupations, see appendix.

deaths during the three years 1880-82 aggregated 418,214. The information collated by Dr. Ogle on occupational mortality is reproduced in a condensed form in the appendix.*

The high rate of mortality exhibited among the hatters has been noticed in all industrial countries. In a paper read, by Dr. J. W. Stickler, of Orange, New Jersey, before the Essex County Medical Society, on "Hatters' Consumption," it is stated, that :

"In the past, mercurial poisoning was very common among hatters, and even at the present day it is not infrequent. It, however, usually succumbs to proper treatment, and does not lead directly to the death of the patient. There is another disease, which is not only very common among the hatters, but is also very fatal to life. The disease to which I refer is pulmonary phthisis. I at first thought that there was no causative relation between the making of hats and the type of disease in question, but when I questioned the patients, I ascertained that in almost every instance the disease developed after work was begun in the shops. * * The majority of "finishers" who develop consumption become exhausted and incapacitated for active and regular work before thirty. In fact the disease makes such rapid progress when it shows itself in hatters from eighteen to twenty-five years of age, that it generally terminates fatally before the patient reaches thirty. It is true that a small number reaches middle life before the disease seriously impairs their strength, and it is also a fact that a certain number do not develop consumption till they have passed the meridian of life; and when this is the case, they sometimes linger fifteen or twenty years before they die. But the rule is, that pulmonary consumption manifests itself at an early age, in hatters, and proves fatal in from five to ten years."

Such facts, supported as they are by the most impartial evidence of statistics, are really deplorable, especially so when we consider that the workers in these industries are cut off from life in the very blossom of age, before it is ripe, and that the production of the wealth of which they are most capable at the fullest period of their lives and of their greatest power is irretrievably lost to the State. Life, as has been said, has a pecuniary value, and viewed from the standpoint of monetary loss alone, national pride, national policy, national economy, humanity, patriotism—all these

*See also a very excellent little work on the "Elements of Vital Statistics," by Dr. Arthur Newsholme, recently published.

feelings should be actively enlisted in a combined effort to lessen this sacrifice of money as represented by the lives of men.*

The Register-General of England, as has already been noticed, has formulated tables on the basis of the death returns, to show the comparative healthfulness of the various trades and professions. But it is admitted, that "the mean age of death of people in different businesses after all furnishes very erroneous indications, as it is affected so much by the ages at which people enter and leave, and by the increase or decrease of employment, as well as by the salubrity or insalubrity of any particular profession." Yet even these data, unsatisfactory as they may be, are unavailable here. And while the works of many eminent scientists, both in this country and Europe, who in the course of their professional labors have observed the effects of different occupations on those engaged in them, especially the diseases to which such operatives are peculiarly subject, have been of immense practical value, we are not aware that any extended effort has as yet been made to determine the actual duration of the active trade-life of the workmen in the various employments. This phase of the industrial question heretofore has received little attention, but is one of immense moment to the wage-worker, who, if still alive, will sooner or later find himself unable to continue at work in competition with younger men. Perhaps not more than 45 to 50 years of age, and still in comparative good health, with an expectation of life of from 20 to 25 years, he is, by reason of some slight physical impairment, unfitted to follow a trade in which he has spent the best of his early days to become efficient. He finds, too, that such contingencies have not been provided against, any assumed law of political economy, that remuneration is determined by the dangerous and disagreeable character of employment, to the contrary notwithstanding.

*The Register-General's report for 1881 states that "there is nothing in a series of annual reports issued by this office that came out more distinctly and unmistakably than the wonderful effect which the sanitary operations of the last decade have had in saving human life * * Doubtless the money thus expended has been enormous in amount. There can be no real doubt, however, that the saving effected in life was the direct product of the money and labor expended in sanitary improvements. * * No less than 392,749 persons, who under the old regime (before 1872) would have died (in Great Britain) were, as a matter of fact, still living at the close of 1881. Add to these saved lives the avoidance of at least four times as many attacks of non fatal illness, and we have the total profits as yet received from our sanitary expenditure."

What then is the duration of the active trade or working life of workmen ?

With the view of obtaining at least an approximate answer to this yet unsolved problem, the Bureau during the year began an investigation, which necessarily has been largely experimental, and covers but a small part of our industrial activity, but the results attained seem fully to justify its further prosecution. The inquiry has taken in three of our most important industries, namely, glass-blowing, pottery and hatting. The chief difficulty which presented itself at the start, was to determine the line of inquiry to be followed, owing to the absence of known previous efforts in this direction. After consultation with those who have given the matter attention, the conclusion was reached that information showing the age at which a workman began to work at his trade, his present age, the age at which he began to decline, that is, grow less active, or became incapacitated, and the total number of years actually at work, formed the basis for a correct estimate of the duration of his trade life. This information was obtained by means of the following blank, placed in the hands of competent agents, who caused it to be filled out by individuals engaged in the three industries mentioned :

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1. Name.....Residence.....
 2. Place of birth.....Occupation.....
 3. Subdivision of trade.....Explain in detail the work performed.....
 4. Your age.....Age when you began to work at your trade.....
 5. Have you worked consecutively at your trade since you started?.....If not, name the years when not working, and give the reasons.....
 6. Number of years actually engaged at your trade.....
 7. Was the occupation of your father the same as that which you follow?.....
 8. How long did he follow the trade?.....
 9. At what age did your father die?.....
 10. At what age did you begin to decline at your trade?.....
 11. How were you first affected?.....
 12. At what age did you become incapacitated for work at your trade?.....
 13. What are the diseases peculiar to your trade?.....
 14. Have you suffered from any disease contracted at your trade?.....If so, what?.....
 15. Give any facts within your knowledge relating to the number of years worked by those who have quit the trade, or have died.....
 16. Remarks relating to the sanitary condition of the factory in which you work, and, also, whether any changes could be made that would improve it.

Full replies were received from 4,739 journeymen, of 21 years and upwards, actively engaged in the occupations enumerated, namely, glass workers, 1,040; hatters, 2,577; and potters, 1,122. This number comprises a very considerable proportion of the workmen employed in the respective industries in New Jersey, substantially all the glass and hatting journeymen in the State, and those in the Trenton potteries. The data are therefore considered sufficiently complete to make deductions from the returns summarized in the tables reproduced below reliable. An analysis of these tables furnishes some very interesting and instructive facts. The variation in the age at which workers begin their trades is noticeable, because this necessarily affects their present age as well as the period of actual trade life. Between 16 and 18 years of age seems to have been the usual starting period in all but a few of the trades: 62 per cent. of the green glass bottle and vial blowers, 82 per cent. of the hat finishers, 79 per cent. of the makers; while 96 per cent. of the pressers and 59 per cent. of the kilnmen in the pottery industry began work at 18 years of age or under. On the other hand we find that all but a fraction of the master shearers (glass workers) entered on their trade life at a comparatively late period; and so with the window-glass workers, especially blowers, only 11 per cent. of whom began at 18 years of age or under. In regard to the several branches of pottery, it is to be observed that the bulk of the older operatives learned their respective trades in England, at a time when boys were apprenticed at a much earlier age than is now the practice in this country—a fact which has to that extent affected the average age-period here considered. The large proportion of foreign-born workers is very noticeable in the pottery as well as hatting business; while the reverse is true in the glass industries.

The average present age of the pressers employed in the Trenton potteries is but 30.5, nearly 76 per cent. being under 35 years; not much more than one-half are 30 years old. It is reasonable to presume that soon after the latter age, these workmen in this branch have reached the meridian of their trade life, and that at 35 they already have begun perceptibly to drop out of the trade. The 455 pressers have been at work, on an average, 15.7 years, which may therefore be considered not far from the duration of a presser's trade

life. As his average annual earnings do not exceed \$750, its value may be approximately calculated. A kilnman, who begins to work at his trade at a later period of life, seems to be even less favorably situated. According to our calculations, the average age of the 297 individual workmen reporting is 32.6, but 49 per cent. of these are below 30 and 68.5 per cent. below 35 years. The average number of years of actual work at the trade has been only 14.5. The average earnings in this branch of the trade fall below \$600. That is also the rule with the hat makers and finishers, who, however, seem to have a slightly longer period of trade activity—15.5 and 15 years respectively. As will be seen in the tables, the number of individuals in these two branches is considerably larger than in any of the other occupations tabulated, namely, 1,247 makers and 1,257 finishers, the average age of the former being 34.5 and of the latter, 32.8 years. The average age of the 57 master shearers in the glass industry, who begin their trade late in life, is 42.6, which, next to that of the 15 pot makers, is the highest average on the list; the duration of their trade life is, on the other hand, apparently brief—only 12.7 years. The trade income of a master shearer approximates \$800 yearly, which is not far below the average annual remuneration of the window-glass blowers. The latter, also enter upon their trade career at a somewhat late period in life. The average present age of the 149 workmen reporting is 35.7 years, and they have been at work, on the average, for 14.1 years. Green bottle blowers earn between \$1,000 and \$1,100 a year. Their average present age, 514 individuals, is 37.4 years; while the average duration of their active trade life thus far has been 18.3 years. This comparatively extended longevity does not imply anything in favor of its being a healthy occupation, for the contrary is true, but, as will be seen further on, is explained by the custom which permits declining blowers to go at "gaffing."

Altogether, the returns from 23 occupations, or branches of trade, have been summarized in the tables reproduced below. Tables 1 and 2 show in detail the facts mentioned above. Table No. 3 indicates the proportion and ages of journeymen in the respective trades who are beginning to decline or fail—facts which are very material in gauging the relative healthfulness of an occupation, and this is supplemented by the valuable though necessarily incomplete record

of the number and ages of workers incapacitated from following the trades at which they once earned a livelihood. In Table No. 5 is noted the nativity of the journeymen at present at work. The remaining tables are merely addenda to those already referred to. Particular attention is directed to the record of the causes of death of deceased members of the Orange, Newark and International Hat Finisher's Associations. These are both interesting and valuable, although the period covered is limited. It would be comparatively an easy matter for all our trade organizations, especially those which have beneficial annexes, to follow this practice and to extend its scope so as to include all cases of sickness. Such carefully kept records, for a series of years, would be of the greatest possible interest and value.

During the progress of this investigation, many complaints and suggestions were received from the workmen respecting the sanitary arrangements of the factories in which they were employed. These are evidence that employes are neither ignorant of nor indifferent to the insalubrious conditions under which they are compelled to work, and which are by no means a necessary incident of their employment.

Most of the buildings in which glass-blowing is done are mere shells, usually frame structures with numerous doors and swinging shutters on all sides. The furnace is placed in the centre of the building, and the tempering ovens, "glory holes" and lears, at the sides or corners. The heat from the furnace and ovens in ordinary weather makes the whole enclosure so warm that there are few days in the year when all the doors and shutters need to be kept closed, and even when it is moderately warm all of them are opened to admit the air. When the temperature is high, and when any sudden changes of wind alter the currents of air through the factory, the blowers, all of whom work near the furnace, are especially liable to take cold. In many cases the outbuildings, such as the pot-house, batch house, packing sheds and blacksmith shops, are so situated as to obstruct the free circulation of the air as well as to render it impossible for the blowers to escape the dust generated therein. Another source of annoyance is the dust and other particles of matter which settle on the beams and various places of lodgment during the night, or while the furnaces are being cleaned after

the melt is made. Then, the fine particles of glass, and the gases from the coal and oil used in the furnaces and "glory holes," are inhaled by the workmen during work hours, and doubtless are the cause of many of the throat disorders common among them. Many of these nuisances might be avoided, and without any considerable expense to employer or employe, if the factories were thoroughly renovated and the dust removed once a week, or oftener, if necessary.

Within the past generation there has been a very radical change in the method of working in the green-glass bottle and vial trade. Under the old style, known as "single," or "footbench," the blower worked by himself, and where bottles were less than one pint (size), he gathered the glass and completed the bottle without an assistant. Where larger sizes were made it was generally the custom to have a boy to gather the glass, but the blower himself performed all the other necessary operations.

The first innovation commenced in the 50's when "double work" was introduced. At first this was confined to making large sizes of ware, by two blowers and a gatherer, the gatherer taking the glass from the furnace and the blowers working in rotation, each completing his work in the same manner as when working singly. During the 60's the method of finishing at a "glory hole" was introduced and has since become quite general throughout the state, there being only four or five workmen that now work "singly," and not more than fifty who work at what is known as "double" that is two blowers working in rotation, and each finishing his own ware. The present method is to work in shops of three—two blowers and a gaffer, or finisher. The blowers gather the glass and mould the bottle, working in rotation; the bottle is then taken from the blower to the gaffer, who finishes it at the "glory hole," a small furnace arranged for the purpose, some feet away from the main furnace or melting pots.

The effect of each of these changes has been to lessen the independence of the individual workman, and to make his work more and more contingent upon others, but has largely increased production. Under the original method of working singly, 72 dozen of one ounce vials were a high average for a day's work of 10½ hours; while at present 350 to 400 dozen in a day of 8½ to 9 hours are

made by three workmen (two blowers and one gaffer). Under the old system, 36 to 40 dozen of one pound bottles were a high average. At present, 150 dozen, and as many as 180 dozen, are made by the three men in much shorter time.

So general has the plan of shopwork now become, that any description or reference to the trade, must deal with this method of work and the conditions it imposes.

It is also to be observed that these changes in methods of work, have materially shortened the period of active trade-life of the workmen. Working singly under the old system, the blower could accommodate himself to his needs. As he worked by the piece, when indisposed or old age came on, the only effect was to lessen the day's product and reduce the amount of his earnings, with little or no loss to his employer; but since the practice of working double, or in shops of three, has been introduced, this cannot be done so easily, as others are dependent on him, and any slackness on his part, interferes with those whom he is working with, retarding, and in some cases compelling a suspension of work by all others. So it happens that when from any cause a workman is not equal to his partner's skill or speed, the result is an unequally yoked team.

The occupation of blowing requires great dexterity and nimbleness of the fingers to manipulate the glass; and while not laborious in the sense of requiring great muscular power, every limb and muscle is brought into use in moulding a bottle, whether a large or small one. The blower in a shop is constantly on his feet, moving in a circle, and usually takes from six to seven steps to each bottle he moulds. When it is considered that in making some sizes, he moulds from 175 to 200 dozen in a day, we have some idea of the endurance required. There is scarcely an infliction that man is liable to that does not interfere with his work. The least sore on any of his fingers, hands, or feet, sore lips, sore throat, or toothache, or any of these, and he is obliged to lay off.

The gaffer sits while at his work and is not liable to be laid up by so many ailments as the blower. Although subjected to heat, dust and the gases that arise from the use of coal, or oil, in heating the glory hole, his workmanship is not impaired by most of the afflictions that disqualify a blower. Hence, gaffers are usually superannuated blowers. Green glass blowers do not learn to gaff

as a distinct branch of the trade, but adapt themselves to it in the course of their active working period. In some cases all three of the workmen in a shop are young men, able to blow in turns, changing off, each taking one third of the time in the gaffer's chair but where one of the number is physically unable to work as fast as the others, he is compelled to gaff or quit the trade altogether. As there is only one place to gaff where there are two to blow, or one chance for an old man where there are three for a young one, after a workman is disqualified to blow he only has one chance in three to obtain work at all. The detailed returns show that of the total 514 journeymen employed, 139 are gaffers, 278 blow in shops, 51 blow and gaff, and 46 work either singly or double, on footbench.

A selection from the statements of glassblowers respecting the sanitary condition of their workshops, is here appended :

MILLVILLE.—“The factories here are not well arranged. There is plenty of air but it does not always come in the proper direction to suit all engaged. A factory should be so arranged that no matter from what quarter the wind comes, all the workmen will get a share. As it is at present, it frequently happens that those working on one side of the furnace get more than they can endure, while those opposite receive none at all, but suffer from the heated air coming through the furnace from the opposite side.” “Some of the factories need more ventilation at the top.” “Usually when the wind comes from the south, in warm weather the blowers working on the north side of the furnace suffer greatly from the heat.” “There seems to be plenty of air near the floors; the factories should be so improved as to have more ventilation at the top.” “The outbuildings, in many cases, are too close to the factories and shut out the air.” “A cupalo on the top of factory to carry off the dust and gases would be a great improvement.” “The sanitary conditions would be improved by a higher roof, which would aid to improve the ventilation.”

CLAYTON.—“The sanitary condition of the factories at Clayton are conceded to be good. They were all constructed to afford the best possible ventilation, and are kept clean and well dusted out. Excepting some improved plan of building, or a different arrangement of the furnaces, no improvement in the present factories can be suggested.”

SALEM.—“At a meeting of the blowers where the sanitary condition of the factories was considered, it was the general opinion

that the buildings were too low and not well ventilated, and that owing to the prevalence of dyspepsia and liver complaints among glassblowers, these diseases should be classed, with throat affections, as peculiar to the trade." "Some way to avoid the gas that arises from the use of coal, or means to prevent it from escaping in the factory would be a very great aid to improvement in the sanitary conditions here."

GLASSBORO—"Most of the factories here might be improved by ventilation at the top of building," "Many of the workmen have to work on wet floors. Any means to prevent this would be an improvement and advantage to the blower." "The use of coal oil as a fuel to heat the glory hole causes more gas to escape in the factory than the old style of using coal; it should be abolished." "Where the footbench is not raised above the floor level of the factory and the brick pavements become wet, they are the cause of a great deal of rheumatism to the blowers who stand on them." "Continuous tank furnaces have been built here in a factory not constructed for their use; they are filled with escaping gas; some method should be devised to get rid of it. I would suggest revolving fans, which would aid in clearing away the dust also." "Other things being equal, drunkenness and debauchery have shortened the lives of many blowers which has been charged to glass blowing. I do not see among blowers any greater mortality than in other trades; in fact I think the health of the average blower is better than in many other occupations. The free circulation of air through the factories and their warm and comfortable condition in the winter season, I believe are conducive to health, and the two months vacation in the summer season give the workmen time to recuperate what they may have lost in health during the blast."

WILLIAMSTOWN.—"At a meeting of the Green Glass blowers, after a full discussion of all the questions contained in the blanks sent out by the Bureau, the conclusion was that dyspepsia, liver complaint and throat diseases were most common, and should be classed as complaints peculiar to the trade of glass-blowing, and that consumption often follows, and is the result of throat affections contracted at the trade. Where this is hereditary in the person, it develops many years earlier in life by blowing and by colds contracted from sudden changes from heat to cold, to which glassblowers are necessarily exposed, and which they cannot well avoid." "There are too many furnaces under one roof here; in one case there are three in a factory only adapted to one. This renders ventilation impossible. An improvement would be to have but one furnace to a building."

BRIDGETON.—“The conditions of the factories, so far as relates to their sanitary arrangement, is generally bad. Some of them when built were small for one ordinary furnace in use at the time; since then the furnaces have been enlarged, while nothing has been done to enlarge or improve the factories which are too small for even one furnace. In several of them two have been erected. The opinion generally among the workmen is that most of the factories here are unsuited for the purpose, and need to be replaced by larger and better structures.”

The method of working in the flint prescription trade is very similar to that of the green glass, the difference being principally in the arrangement of the furnace and melting the glass in covered pots. The manner of working is the same—shop work, two blowers and one gaffer. The workmen easily go from the flint to the green, or the reverse, with little or no inconvenience, so that all that has been said respecting the working in green glass applies equally to flint prescription blowers.

The regular flint glass industry is a comparatively new one here, Millville being the only location in this State where it is carried on. The designation “regular flint” is applied to the leaded glass, or glass in which an oxide of lead is used to improve its quality. The method of work in this trade differs in many respects from the other branches mentioned. The workmen work in shops of two and three, usually a gaffer, servitor and footmaker, sometimes a gatherer. The product consists principally of druggists’ fittings, show glasses, graduates, etc. The hands are paid by the day or week, their earnings not depending on the quantity of work. Quality is more essential than the quantity of product. They work moderately, thus avoiding many of the risks that shortens the working life in other branches of the glass industry.

Several of the Millville flint prescription blowers complain, under replies as to the sanitary condition of factories, that, where two furnaces are under one roof they suffer from gases and want of ventilation. The factories there are ten in number and so situated that when the wind comes from a southerly quarter, it is impossible for it to circulate through all of the factories, one building obstructing the other. At a conference of a large number of the workmen employed, who considered the matter, the decision was that the best means of improving the factories would be to raise the roofs of

the building higher and to have larger opening near the top, in order to increase the circulation of air. Complaint was also made against the use of coal oil for heating the glory holes, as that allows more gas to escape from them than when coal is used.

The blowing of window glass also differs materially from that of the other branches. Each blower has an assistant or gatherer who takes the glass from the furnace in quantities ranging from 12 to 20 pounds according to the size and thickness of the sheets desired. The blower receives the glass from the hand of the gatherer and makes the cylinder, performing the whole operation without stoppage. Each has a pot of glass to work from and the number of cylinders made in a day is determined by their respective sizes, each workman making the same quantity or handling the same weight of glass per day. This consists of 10 hours for 5 days, or "blowings," in a week. The hours of labor vary each day of the week. The time of commencing work on Monday morning is usually one o'clock, but on Saturday it may not be until afternoon. This is because it requires a much longer time to melt and prepare the glass, than to work it, or usually from 16 to 18 hours for melting the glass, and 10 hours for the blowers to work it, thus giving five blowings in a week.

The Window Glass Workers' Union limits the product of each blower to 48 boxes of 100 square feet per week, and under the laws of their association no blower is permitted to exceed this amount. This task can be easily accomplished by a young, vigorous man within the hours of labor prescribed; and even when a workman begins to decline, or to grow old and less active, he can still do the full amount of work required by taking the full time. For although such a blower may have declined in workmanship and be unable to turn out as much first quality glass, it will only reduce his earnings. The window glass blowers' scale of wages is arranged by quality of product; for instance, for a box of first quality he is paid \$1.60, while for the same amount of third or fourth quality but 70 and 80 cents.

Window glass blowing is more laborious than any other branch of the glass industry, but it does not require the same activity, or quickness of motion; the work is heavier but the motion of the workmen is slower. This and the limitation of the product, for a

day's work, to an amount within the easy accomplishment of the average workman, in part accounts for the small number reported in our tables as having declined.

The window-glass factories are built very similar to the bottle and prescription. There are, however, no tempering ovens, glory-holes, or other accessories necessary to the other branches, needed in a window-glass factory, and as a consequence, the workmen are not subjected to as many sources of annoyance from gas. Coal is used for melting the glass, but during the time the blowers are engaged, the fire is kept up either by wood or coke. Nor are they required to be near to the furnace all of the time while at work; on the contrary, they may change the location of their work while blocking the glass, to suit their comfort; and when the weather is quite warm, they may go near to the doors, away from the heat of the furnace. The workmen, after making a cylinder, may also take a slight rest or breathing spell, if needed. In no case have there been any complaints about the sanitary arrangement of the factories made.

The business of the flattener is to flatten the cylinder into sheets. This is done at what is known as the flattening oven, inside of which is a set of revolving tables, made of clay and large enough to contain the largest sheets of glass, heated to a temperature just sufficient to render the glass pliable.

The operation is a simple one, depending much upon the judgment of the operator, who while not allowing the oven to become overheated, must keep it sufficiently hot to smooth the sheets properly without destroying the lustre of the glass. The only tools he uses are an iron bar, by which he moves the cylinder to the exact position on the table desired, and an iron rod with a square block of wood attached to the end, by means of which he smooths the sheet of glass until it presents a perfectly flat or level surface. His work is not laborious, nor does it require very great activity, but owing to the custom of the trade there are usually but two flatteners at an oven, and each work twelve hours per day, thus continuing the work both night and day. There is nothing associated with the occupation except the long hours, to make it unhealthy, nor any reason why men should not continue at it for many years.

As will be seen by the tables the present average age of flatteners

is higher than that of glass blowers while the average number of years worked is about the same. This is accounted for, however, by the fact that the table also shows that a much larger percentage of the present generation began to work at the trade after 25 years of age than that of blowers.

The cutting of window glass requires two special qualifications. To be a first class cutter, the workman needs to be quick and active in his movements, and at the same time be able to tell at a glance how to proportion a sheet of glass so as to get the largest number of first quality window panes without wasting that portion only fit for inferior quality. The process of cutting has undergone no change within this generation of workmen. It is still done by a diamond partially sunk into metal and drawn across the sheet on a table about waist high to the cutter.

The master shearer attends to the process of melting the raw material of which glass is made. He has charge of the furnace while the melt is being made. The skill consists in determining the proper time this should be done in, and in directing his assistant to keep the furnace at the proper heat. His position is one of great responsibility as the whole operation of making the glass depends on the melting process. His duties require him to be engaged during the whole night, occupying about fourteen hours. It is not customary to begin the trade by regular apprenticeship, but, as it requires two men to operate a furnace, he always has an assistant, called shearer, who after long experience, when a vacancy occurs, is given charge of the furnace.

The pots in which the raw material for the glass is melted are made of fine clay, which requires a great deal of care in its preparation, involving the grinding and pulverizing the dry clay, its mixture and tempering. Little attention has been paid to the improvement of the machinery in use and the buildings in which these processes are conducted, so as to keep the workmen from inhaling the dust. As a consequence from 10 to 15 years is about the length of time a man can work at the trade continuously in health. The writer has witnessed the decline of three generations of potmakers, within the past forty years.

No better description of the work done by hat makers, finishers and pouncers can be given than the following extract from an article

by J. W. Stickler, M. D., in the report of the New Jersey State Board of Health for the year 1886:

"The hat bodies, after they leave the forming mill, go to the 'sizing room,' where they are taken by men called 'sizers' or 'makers,' whose business it is to dip them into hot water acidulated with sulphuric acid, and then roll them back and forth upon an inclined plane, in order to make the felt contract till it shall be reduced to the proper size. They are next run through a sizing machine which gives them still greater compactness. In this room the vapor of the hot water is so dense that one can scarcely see the floor or the passage way between the kettles. The floor, as a rule, is wet; actually has puddles of water at many places, so that as you walk from one group of men to another you get your feet wet in a few moments. This evil might be remedied by having a grating placed over the floor, at least around the kettles where the men stand while at work. The hot water vapor could all be removed from the room by means of exhaust pipes with funnel shaped openings placed over the kettles, and this precaution ought to be insisted upon, for such an apparatus can be easily made and put into position, and the expense would not be great. This hot water vapor, of course, deposits itself upon every object in the room (men included) and upon every part of the room; it then drops upon the men at work, giving them a shower bath from the time they enter till they leave the apartment. In winter this is a serious matter, for with wet clothes and exposure to sudden changes of temperature, they are very apt to develop either rheumatism or other serious affections. Some of the men wear no shoes or stockings, and those who do, unless they are rubber, have their feet constantly wet. It is true, however, that many of the men wear rubber shoes or boots, also rubber aprons, thus protecting themselves so far as their feet and lower limbs are concerned. I have also been told that the men (most of them) change their clothing after they finish work in the sizing room, but they 'change' in a room not thoroughly heated, so that the exposure there is attended with some risk. [A table of diseases most common among these men is given, but is not reproduced here].

"This table shows that of 240 sizers or makers, 76 have catarrh; 44 have rheumatism; 41 have cough; 17 have had the shakes; 13 now have the shakes; 12 constantly catch cold because of sudden change of temperature; 7 complain of dyspepsia; 200 use stimulants and tobacco. This is a very bad record for this class of men and should lead to the adoption of such improvements as will render the sizing room less dangerous to the health of those who work therein. * * * From the drying room the hats go to the pouncers, who put the hat-bodies upon revolving blocks and

cleanse them, by means of emery, of the rough fur which bristles all over the hat when it first comes from the dying-room. In this room there is considerable dust, which finds its way into the nostrils, throat and lungs of the operatives. It should be said that a suction tube is generally placed near each block, in order to provide for the escape of as much of the dust as possible, but notwithstanding this precaution some of the dust escapes into the room and is inhaled by the men."

"Twenty-seven pouncers were questioned, and of this number 12 have catarrh; 4 have cough; 3 have the shakes; 2 have had the shakes; 1 has a poisoned face (mercurial); 14 used stimulants and tobacco."

"The hats are now ready for the finishing room. It is in this room more than in any other, perhaps, that the health of the operatives is most seriously impaired. In the first place these rooms are, as a rule, very poorly ventilated. This lack of ventilation leads to the accumulation of considerable fine dust, and prevents the escape of air which contains the mercurialized vapor which rises from the hats while they are being pressed with the hot irons used for that purpose. When the finishers take the hats they place them upon stationary or movable blocks, and sandpaper and iron them off smoothly. In doing this they bend over the blocks, bringing the face very close to the iron or the sandpaper, as the case may be. In this manner they place themselves in the best possible position to inhale either the volatilized mercury or the fine fur fibres. I have learned that there is a vast difference between a *high* finishing room and a *low* one, as regards the health of the men who work in them. The shakes are much more frequent in the *low* than in the *high* finishing room. This is due to the poorer ventilation of the room on the ground floor. The dust in many of these rooms is imperceptible, as it exists in the air (at least in some of the rooms), but if you will go to the window, or the bench, you will find a deposit of dust sufficiently thick to make it possible to trace your name in it. In certain finishing rooms even the air is made cloudy by the dust which is detached from the hats with the sandpaper.

"It is this dust which enters the nose, throat and lungs of the men and causes, primarily, only a slight irritation of the mucus membrane, but secondarily, in many instances a consumptive process. The danger arising from exposures to the volatilized mercury, is also apparently very great, for as the men use the irons, they bend very close to the blocks in order to exert as much pressure as possible upon the hats. As the hats are moistened before being ironed, they are, of course, in just the condition to part with a portion of the mercury which they contain, for the moment the hot

iron touches the felt, the mercury, or a portion of it, passes off in vapor, and is very apt to be inhaled by the ironer. But I have not discovered that mercurial poisoning is common at the present day; on the other hand, it is uncommon, so far as my observation instructs me. It seems to be the fine fur dust which does most permanent harm. Some of the men told me they could expectorate black dust, one or two weeks after stopping work. It might be true that the small percentage of nitrate of mercury which these fibres contain, acts injuriously upon the lungs, causing, or helping to cause ultimately, a phthisical process. My own belief is, that the damage to the respiratory organs is the result of the mechanical irritation produced by the fur fibres."

"As a matter of fact, the testimony of 222 finishers will show what diseases they are specially prone to, viz :

"Of those recently visited, 64 have catarrh; 42 have cough; 17 have the shakes; 16 have had the shakes; 15 have rheumatism; 9 have had mercurial sore mouth; 7 have the sore mouth at present time; 7 have bronchitis; 2 had sore mouth when working in low shops; 4 have chest pains; 4 have phthisis; 4 have catarrh; 1 has dyspepsia; 1 has insomnia; 1 has asthma; 127 use stimulants and tobacco.

"It is plainly shown by this list that the diseases of the organs of respiration are far more common than is generally supposed to be the case, and more common than any other disease. It is likewise the most fatal disease the hatter suffers from; most dangerous, because it is so comparatively insidious."

Neither these statements, nor the statistics of the high rate of mortality among hatters, can surprise any one who has inspected the buildings in which the work is prosecuted, or observed the men while at their work. In Orange, in the buildings but recently erected, those that are considered the most commodious and best adapted to their purpose, no attention whatever has been given in their construction to the comfort or health of the men; while some others, where hatters work are a disgrace to civilization. The surprise is that men can be induced to work at all in such death producing enclosures. The only explanation for their being there must be either their profound ignorance of the danger to which they are exposed by their surroundings, or because their necessities compel them to take the risk in order to procure a living. It is hard to believe that men of ordinary intelligence could be so indifferent to the ordinary laws of health that they will work

at such an occupation as hatting without any attempt to get rid of the dust and slush to which they are at present subjected; or eat their meals from off the bench where they work, while the whole atmosphere around them is filled with fine particles of hair, and dust, and every object in the room covered with black dirt. Yet this is a common practice. In one case, 90 finishers were observed working in a third story room (140 feet long and 30 feet wide, with ceiling not more than 10 feet to the roof), which was unplastered while the beams, rafters, and girders were loaded with the dust that found a lodgment on them, which the least commotion in the building would cause to fall. At least 50 of the number were eating their dinner and seemed to be utterly unconscious of any danger from such a practice when spoken to about it, but laughingly assured the writer that the dust had not been removed since the place was occupied about two years previous. And when the fact of the workmen in the sizing room, who stand in water, was mentioned, and the simple and inexpensive means by which it could be largely avoided was spoken of, the reply was that it would cost money and hat manufacturers did not care to expend money for such purposes, if they could help it.

Hatters cannot be charged with any lack of interest in what they suppose to be of direct benefit to themselves or to their craft, for they are among the most energetic and best organized trades in the country, and are always quick to resent any infringement on their price list, or of any of the shop rules and regulations made by the union for the securing of wages; but it does not seem to have occurred to them that all their efforts to keep up wages, and thus to increase their income, is largely offset by the impairment of their health, due to neglect of proper hygienic regulations of their workshops.

The various branches of earthenware manufacture, or the potter's art, may be classed, generally speaking, under three heads, the clay, kiln and decorating departments. Under the first are included slip-makers, throwers, turners, handlers, jiggermen and hollowware pressers. The kiln department comprises the kilnmen, dippers, and in the bisque and glost rooms, dressers or brushers, who are females; while printers, burnishers, painters, gilders, ground layers, fillers-in, transferers and firemen come under the decorating depart-

ment. Mould makers constitute a distinct class, producing the moulds on which dishes, plates and the other products are shaped. Their work consists in taking a cast in plaster of Paris from a model. In making ordinary sizes of moulds there is little strain or lifting to be done, but in case of large ones the work is heavier and more laborious. In finishing the moulds they use a guide to rest the arm on, one end of which they press against the breast, very much in the same manner as a carpenter uses a brace and bit. The rooms in which the work is done are separate from the rest of the establishment and are generally well lighted and ventilated, and with care in handling the dry material, they need not subject themselves to a great amount of dust.

Slip Makers are employed in preparing the clay or material of which earthenware is made, grinding and mixing it so as to form a dough suitable for handling. There is but little skill required to perform the duty; nor is there anything they do, more than there is in ordinary labor, calculated to break them down; but they frequently work in damp cellars and the dust that rises in their work-places, while mixing the material, is inhaled by them.

Throwers shape their work upon a wheel, which is kept revolving by an assistant. While employed they sit upon a stool with their work directly in front of them, and frequently stoop over very much. This has a tendency to contract the chest and is very tiresome to the operative.

Turners are employed in turning into a complete form the ware made by the thrower or jiggerman. While at work the turner is in a standing position (the work being similar to that of wood turning at a lathe), but from habit many of them stand in a stooping or bent over attitude. This has a tendency to contract the chest. There is frequent change from the dry rooms, where they work, to the damp cellar, where the unfinished ware is kept in the proper condition; the work of lifting and bringing the ware from one room to the other is sometimes heavy and laborious, while the thin shavings of clay taken from the article operated on soon becomes dry and reduced to dust, which the constant shuffling of the feet causes to float, continually to be inhaled by the workman.

Handlers are engaged in shaping and fixing the handles to cups, mugs, &c. It is customary for the workman when working

on small articles to sit upon a stool with the partly prepared handles on a table or "bench" in front, and the article to be handled on one side of him. The workmen sit in this position until they have a number of articles finished, when they remove them on boards to another part of the room to dry. While sitting many of them acquire the habit of stooping over, which interferes with the full expansion of the chest; and when they get upon their feet to remove the finished ware, the ever present dust which they cause to rise from the floor aggravates the resulting lung troubles.

Under the head jiggermen are classed plate, saucer and dish-makers, or all who work on a revolving wheel. While at work, they stand at a bench, but are not required to remain in any one position for a long time. In making some shapes of ware they are compelled to stoop over their work in order to obtain pressure against the moulds and perfect the form. The rapid moving and shuffling of feet on the floor by the assistant, and the swiftly revolving moulds on the jiggerhead, keep a cloud of dust around the workman, which he cannot avoid inhaling, to the great injury of his health.

Hollow ware pressers take the clay in a ductile state and fit it to the mould, using their hands to obtain a perfect impression, and to secure a uniform thickness on all sides of the vessel. Like the jiggerman or flat presser, they stand while at their business, and are obliged to stoop a great deal over their work. In forming large articles the work is laborious, by reason of the size and weight of the moulds used. The rapid motion necessary causes the dust from the floor and from their clothing to be kept in constant agitation, resulting in injury to the throat and lungs.

After the ware has passed through the clay department it reaches the kiln in what is known as the green, or clay state, where it is placed in the saggars by the kilnmen, who, if it is hollow ware, sprinkles sand between the pieces to prevent their touching each other. Flat ware, such as large dishes and plates, if it is the ordinary grade of earthenware, is bedded in sand; but if it is porcelain or china ware, in finely-powdered flint. After this, the ware is placed in the kiln to be fired. This is the most laborious branch of the pottery business. The saggars are made of coarse clay, varying in size and shape, from an oval, with sides the height of a teacup

and two feet long, to those high enough to take in a tall ewer or slop jar, and much larger in sanitary ware potteries. A sagger when filled with general ware weighs from 50 to 100 pounds; in sanitary ware even more than this. The kiln is a circular brick structure, ranging in size from 15 to 18 feet in the interior circumference, and about the same height to the crown. The saggings are placed in tiers, one on top of another, so that the bottom of the last one put in position forms the covering for the one underneath it. The workmen enter the kiln through an opening, with the saggings on their heads, and after the tiers are too high to reach from the floor of the kiln they ascend by means of a stepladder to place the sagger in position. This requires not only muscular power but considerable agility, so that when a workman begins to fail in either, he is unable to perform the work as well as younger men and is soon laid off. After the firing, the saggings are removed from the kiln, which is frequently done while they are so hot that the workmen are obliged to wear thick coverings on their hands to keep them from being burnt. In passing from the kiln while at such a high temperature to the outside, where the temperature is much lower, the men are liable to take colds and to suffer from every other discomfort which such conditions give rise to.

After the first firing the ware is cleaned of all sand and other particles that may adhere to it, by the brushers, when it passes to the dipper, who immerses it into a liquid glaze, which contains oxide of lead, borax, Paris white, clay, flint, &c. The operation consists in sinking each piece into the glaze, and removing it immediately, after which it is again sent to the kiln as glost ware and again undergoes the same process of firing as before, except that no sand or powdered flint is applied, but small three cornered pins and spurs are used instead to prevent the pieces from touching each other.

With the growth of the Trenton pottery industry, there has been a constant tendency to concentrate it in large factories. This has been followed by the building of larger and more commodious workshops, and as many processes through which the ware passes require a large floor room, no inconvenience is experienced by the workmen through overcrowding. Many of the buildings are well adapted to their purposes, so far as height of ceiling and arrangements for ventilation through windows and doors can conduce to

that end ; but several are deficient in these respects, and few, if any of them, have been constructed upon scientific methods to avoid dust or dampness, the two principal causes of injury to the potter.

All authorities agree that it is not so much the physical labor that affects the potter as it is the dust arising from the clay or material upon which he operates. And if means could be devised by which this can be obviated, there is no doubt that the potter's art might be raised from a very unhealthy and short lived to a healthy and long lived one.

APPENDIX.

APPENDIX I.

TABLE 1.—SHOWING AGE WHEN JOURNEYMEN BEGAN TO WORK AT TRADE.

GLASS-BLOWERS—GREEN (BOTTLE AND VIAL.)

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.																	
12-15	19	19		1			1			2	3	6	1	5		3.6	100.
15	33	31	2						4	2	2	3	10	13		6.4	94.
16	78	74	4	1	1	2		3	10	16	10	7	12	14	1	15.2	95.
17	89	85	4		1	7	2	5	10	16	15	9	11	13		17.3	95.
18	102	100	2		1	2	8	6	28	18	7	10	11	10	1	19.8	98.
19	68	66	2				1	5	31	10	12	6	1	2		13.2	97.
20	73	73					1	1	24	9	12	9	8	8	1	14.2	100.
20-25	44	43	1					1	15	14	3	6	1	4		8.5	98.
Over 25	8	8							2	2	1	3				1.5	100.
Total	514	499	15	2	3	11	13	21	124	89	65	59	55	69	3	100.	97.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN WORK.

Glass-Blowers—Flint (Prescription).

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.											PER CENT.			
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	(1)ver 60	When began to work.	American Born.	
Under 12 Years.	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-15	12	5	7	0	0	0	0	1	1	3	3	2	1	0	0	3.1	100.	
15	15	13	11	0	0	0	1	4	2	6	4	2	2	0	0	9.5	42.	
16	24	15	6	0	0	1	4	2	4	4	1	1	2	0	0	19.1	54.	
17	21	15	3	0	0	0	0	14	7	4	2	1	1	0	0	16.7	71.	
18	48	40	3	0	0	0	0	10	7	5	1	3	2	0	0	34.1	93.	
19	11	11	0	0	0	0	0	7	1	2	0	0	0	0	0	8.8	100.	
20	8	7	1	0	0	0	0	1	1	2	1	0	1	0	0	8.8	100.	
20-25	8	7	1	0	0	0	0	2	3	1	0	0	0	0	0	6.3	87.	
Over 25	3	3	0	0	0	0	0	1	1	0	1	0	0	0	0	6.3	87.	
Total.....	126	98	28	0	0	1	5	14	31	21	11	11	7	0	100.	78.		

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Glass Blowers—Flint (regular).

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12-15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
16	2	2	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
17	5	4	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
18	17	7	.....	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
19	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20-25	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 25	10	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	39	20	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100.	57.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN WORK.

Glass Blowers—Window.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12-15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	4	4	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	1	.....	2.7	100.
16	3	3	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....	2.0	100.
17	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	2.0	100.
18	7	7	.....	1	1	.....	.....	.....	2	1	.....	.....	.....	2	.....	4.7	100.
19	8	8	.....	.....	2	.....	.....	.....	3	2	.....	.....	.....	1	.....	5.4	100.
20	55	52	3	2	3	3	.....	3	19	10	9	1	1	4	.....	36.9	95.
20-25	61	60	1	.....	2	1	2	2	15	15	6	5	4	9	.....	40.9	98.
Over 25	8	8	.....	.....	.....	.....	.....	.....	3	3	1	.....	1	.....	1	5.4	100.
Total.....	149	145	4	3	8	4	3	5	41	33	20	6	7	19	1	100.	97.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Window Glass Flatteners.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.													PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to Work.	American Born.	
Under 12 Years.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12-15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	11	11	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	9	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20-25	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 25	7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	39	39	.....	1	1	1	1	1	5	6	6	3	7	6	2	100.	100.	.....

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Window Glass Cutters.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.											PER CENT.		
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12-15	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.3	100.
15	7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9.2	100.
16	15	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19.7	100.
17	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.6	100.
18	7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9.2	100.
19	7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9.2	100.
20	16	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21.1	100.
20-25	18	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23.8	100.
Over 25	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.9	100.
Total.....	76	76	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100.	100

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Glassworkers.—Master Shearers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to Work.	American Born.
Under 12 Years.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12-15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1.7	100.	
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20-25	11	8	3	.....	.....	.....	.....	.....	3	2	4	3	.....	.....	19.3	73.	
Over 25	45	43	2	.....	.....	.....	.....	.....	11	8	8	12	2	3	79.0	96.	
Total.....	57	52	5	.....	.....	.....	.....	.....	3	13	12	12	12	2	3	100.	91.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Glass Workers—Pot Makers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12-15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6.7	100.	
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	5	2	3	.....	.....	.....	.....	.....	.....	3	2	.....	.....	.....	33.3	40.	
20-25	2	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	13.3	50.	
Over 25	7	7	.....	.....	.....	.....	.....	.....	1	2	1	.....	3	.....	46.7	100.	
Total.....	15	11	4	.....	.....	.....	.....	.....	1	5	4	.....	4	.....	100.	73.	

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Glass-Workers—Stopper Grinders.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.											PER CENT.		
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born
Under 12 years.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12-15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	3	3	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	12.	.....
16	3	3	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	12.	.....
17	3	3	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	12.	.....
18	4	4	.....	.....	.....	.....	.....	.....	3	.....	1	.....	.....	.....	.....	16.	.....
19	2	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	8.	.....
20	5	5	.....	.....	.....	.....	.....	.....	3	2	.....	.....	.....	.....	.....	20.	.....
20-25	5	5	.....	.....	.....	.....	.....	1	2	2	.....	.....	.....	.....	.....	20.	.....
Over 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	25	25	.....	.....	.....	1	1	6	11	5	1	.....	.....	.....	.....	100.	100

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Hat Finishers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	10	3	7	.....	.....	.....	.....	.....	3	.....	2	.....	3	1	1	0.8	30.
12-15	75	24	51	3	.....	4	3	3	8	11	16	10	8	7	2	6.0	32.
15	51	24	27	1	2	1	6	.....	7	6	8	11	5	3	1	4.0	47.
16	139	85	54	5	8	5	3	7	25	18	27	17	14	8	2	11.0	61.
17	660	563	97	25	46	35	54	23	199	112	87	37	17	23	2	52.5	85.
18	100	69	31	3	6	6	9	5	28	20	8	4	5	6	.....	8.0	69.
19	60	41	19	.....	1	5	3	4	17	13	13	1	3	.....	.....	4.8	68.
20	82	40	42	1	.....	6	1	3	21	19	16	8	4	3	.....	6.5	48.
20-25	55	15	40	.....	.....	.....	1	4	25	9	9	5	2	.....	.....	4.4	27.
Over 25	25	4	21	.....	.....	.....	.....	.....	.....	10	4	6	1	4	.....	2.0	16.
Total	1257	868	389	38	63	62	80	49	333	218	190	99	62	55	8	100.	69.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Hat Makers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	15	6	9	.....	.....	.....	.....	.....	3	3	1	4	3	.....	1	1.2	40.
12-15	196	56	140	3	3	2	3	6	29	33	28	23	23	27	16	15.7	28.
15	138	52	86	4	1	9	7	8	35	18	24	9	11	8	4	11.1	38.
16	227	90	137	5	5	10	11	10	66	28	42	16	20	10	4	18.2	40.
17	347	257	90	10	11	12	34	16	139	57	25	18	14	8	3	27.9	74.
18	65	32	33	5	3	3	2	3	13	7	8	8	5	5	3	5.2	49.
19	52	22	30	1	3	2	5	3	11	6	7	4	4	3	3	4.1	42.
20	64	16	48	1	.....	3	2	7	24	7	9	2	3	3	3	5.2	25.
20-25	117	16	101	.....	1	1	4	3	73	5	10	8	8	3	1	9.4	14.
Over 25	26	.....	26	.....	.....	.....	.....	.....	5	2	5	1	3	6	4	2.0	.....
Total.....	1247	547	700	29	27	42	68	56	398	166	159	93	94	73	42	100.	44.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Hat Pouncers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 years.	4	2	2	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....	1	5.5	50.
12-15	4	4	.....	1	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	5.5	100.
15	7	5	2	.....	.....	.....	.....	1	2	2	1	.....	1	.....	.....	9.6	71.
16	5	4	1	.....	1	.....	.....	.....	1	1	1	1	.....	.....	.....	6.8	80.
17	11	9	2	.....	.....	1	2	.....	4	2	1	.....	1	.....	.....	15.1	82.
18	3	3	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	4.1	100.
19	12	6	6	.....	.....	.....	.....	.....	5	.....	4	3	.....	.....	.....	16.4	50.
20	13	5	8	.....	.....	.....	.....	.....	2	1	6	2	2	.....	.....	17.8	38.
20-25	11	2	9	.....	.....	.....	.....	.....	2	1	6	.....	1	1	.....	15.1	18.
Over 25	3	1	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....	4.1	33.
Total.....	73	41	32	1	1	1	2	3	18	7	22	7	8	2	1	100.	56.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Potters—Mould Makers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.											PER CENT.			
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.	
Under 12 Years.	3	.....	3	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....	13.6	.....
12-15	12	.....	12	1	1	.....	.....	.....	.....	2	2	5	1	.....	.....	54.6	.....
15	4	3	1	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	18.2	75.
16	3	2	1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	13.6	67.
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20-25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	22	5	17	4	2	2	3	3	5	2	1	100.	23.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Potters—Jiggermen.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American born.	Foreign born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to Work.	American born.
Under 12 years.	8	2	6	.....	.....	.....	.....	1	1	3	.....	2	1	.....	8.1	25.
12-15	28	7	21	.....	1	.....	1	1	5	8	.....	4	3	.....	28.3	25.
15	18	4	14	2	.....	.....	.....	.....	5	3	.....	5	1	2	19.2	22.
16	22	8	14	1	2	.....	2	.....	5	2	.....	4	5	1	22.2	36.
17	7	4	3	.....	.....	1	.....	.....	.....	4	.....	1	.....	1	7.1	57.
18	11	5	6	.....	1	3	.....	.....	4	1	.....	2	.....	.....	11.1	45.
19	4	3	1	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	4.0	75.
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20-25	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.0	100.
Over 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	99	34	65	3	4	5	3	3	20	22	17	14	8	.....	100.	34.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Potters—Turners.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	5	3	2	.....	.....	1	1	.....	1	1	.....	1	.....	.....	.....	12.2	60.
12-15	12	3	9	2	1	1	.....	1	1	2	1	.....	2	.....	1	29.2	25.
15	9	4	5	2	1	1	.....	2	.....	1	1	.....	1	.....	.....	22.0	44.
16	4	1	3	.....	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	9.8	25.
17	2	.....	2	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	4.9	.....
18	6	2	4	.....	1	.....	.....	.....	2	1	1	.....	.....	1	.....	14.6	33.
19	2	.....	2	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	4.9	.....
20	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2.4	100.
20-25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	41	14	27	4	3	4	1	2	9	5	3	4	4	1	1	100.	34.1

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Potters—Handlers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	3	1	2								2				1	9.7	33.3
12-15	10	5	5			2			3	2	2		1			32.2	50.
15	6	4	2	1				1	4							19.4	66.6
16	6	3	3						2		1	2			1	19.4	50.
17																	
18	3	2	1						3							9.7	66.6
19	2	2			1	1										6.4	100.
20																	
20-25	1		1								1					3.2	
Over 25																	
Total.....	31	17	14	1	1	3		1	12	2	6	2	1		2	100.	54.9

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN WORK.

Potters—Pressers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.													PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.	
Under 12 Years	39	7	32	3	3	.....	.....	2	5	6	10	2	3	4	1	8.6	18.
12-15	175	65	110	20	5	8	12	4	36	35	24	15	10	6	.....	38.4	37.
15	78	49	29	7	4	5	8	7	25	9	11	1	.....	1	.....	17.2	63.
16	81	53	28	9	6	8	7	6	19	12	11	2	.....	1	.....	17.8	65.
17	34	21	13	2	3	2	1	1	18	3	1	.....	2	1	.....	7.4	62.
18	29	19	10	.....	2	1	5	.....	15	4	1	1	.....	.....	.....	6.4	65.
19	9	3	6	.....	.....	2	2	1	.....	3	1	.....	.....	.....	.....	2.0	33.
20	7	4	3	.....	.....	.....	1	.....	3	3	.....	.....	.....	.....	.....	1.5	57.
20-25	3	2	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	0.7	67.
Over 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	455	223	232	41	23	26	36	21	123	75	59	21	15	14	1	100.	49.	

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Potters—Throwers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	33.3	.....
12-15	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	66.7	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20-25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	3	.....	3	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	100.	.....

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Potters—Saggermakers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American born.	Foreign born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 years.	1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	3.9	.....
12-15	7	3	4	2	.....	.....	.....	.....	2	1	2	.....	.....	.....	.....	26.9	43.
15	2	.....	2	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	7.7	.....
16	3	2.	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	1	.....	11.5	67.
17	2	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	7.7	.....
18	3	1	2	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	.....	11.5	33.
19	2	1	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	7.7	50.
20	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3.9	.....
20-25	4	2	2	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....	.....	15.3	50.
Over 25	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	3.9	.....
Total.....	26	9	17	2	.....	.....	.....	.....	7	8	5	1	1	2	.....	100.	35.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN WORK.

Potters—Kilnmen.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	9	3	6	.....	.....	.....	.....	.....	1	4	2	1	1	.....	.....	3.0	33.
12-15	33	10	23	.....	3	.....	1	1	10	4	4	3	4	3	.....	11.1	30.
15	12	1	11	1	.....	1	.....	.....	5	1	1	2	1	.....	.....	4.0	8.
16	35	12	23	5	5	1	2	.....	5	6	6	2	1	2	.....	11.8	34.
17	35	13	22	1	2	3	.....	.....	9	9	4	4	1	2	.....	11.8	37.
18	59	31	28	.....	3	5	5	3	17	6	16	2	1	1	.....	19.9	53.
19	26	14	12	.....	2	2	3	2	7	8	2	.....	.....	.....	.....	8.8	54.
20	34	19	15	.....	.....	1	2	3	12	10	2	4	.....	.....	.....	11.5	56.
20-25	47	24	23	.....	.....	.....	.....	1	21	8	8	2	3	3	1	15.8	51.
Over 25	7	6	1	.....	.....	.....	.....	.....	.....	2	4	.....	.....	1	.....	2.3	86.
Total.....	297	133	164	7	15	13	13	10	87	58	49	20	12	12	1	100.	45.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN WORK.

Potters—Dippers.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	2	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	6.7	.....
12-15	5	2	3	.....	.....	.....	.....	.....	2	1	1	.....	.....	.....	1	16.7	40.
15	6	1	5	1	.....	.....	.....	.....	1	.....	1	1	2	.....	.....	20.0	17.
16	4	.....	4	.....	.....	.....	.....	.....	.....	.....	1	1	2	.....	.....	13.3	.....
17	3	3	.....	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	10.0	100.
18	6	5	1	.....	1	.....	.....	.....	1	2	1	1	.....	.....	.....	20.0	83.
19	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	3.3	.....
20	3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	10.0	.....
20-25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	30	11	19	1	2	.....	.....	.....	6	5	5	5	4	1	1	100.	37.

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Potters—Decorators.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	9	3	6	.....	1	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	13.3	33.
12-15	28	5	23	3	2	2	2	2	8	5	1	.....	3	.....	.....	41.1	18.
15	5	3	2	2	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	7.4	60.
16	6	5	1	.....	.....	.....	1	.....	2	2	.....	1	.....	.....	.....	8.8	83.
17	7	2	5	.....	.....	1	.....	1	3	1	1	.....	.....	.....	.....	10.3	29.
18	2	1	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.9	50.
19	2	.....	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2.9	.....
20	5	2	3	.....	.....	.....	.....	.....	2	1	.....	1	1	.....	.....	7.4	40.
20-25	3	2	1	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	4.4	67.
Over 25	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1.5	.....
Total.....	68	23	45	5	5	4	3	3	27	12	3	2	4	.....	100.	34.	

TABLE I, CONTINUED.—SHOWING AGE WHEN BEGAN TO WORK.

Packers and Warehousemen.

AGE WHEN BEGAN TO WORK AT TRADE.	WHOLE NUMBER REPORTED.			PRESENT AGE.												PER CENT.	
	Total.	American Born.	Foreign Born.	21	22	23	24	25	25-30	30-35	35-40	40-45	45-50	50-60	Over 60	When began to work.	American Born.
Under 12 Years.	3	1	2						2						1	6.0	33.
12-15	11	6	5	1	1	1	2		1	4	1					22.0	55.
15	9	6	3	1			1		3	3	1					19.0	67.
16	6	3	3	1				1		2	1	1				12.0	50.
17	5	4	1						4	1						10.0	80.
18	7	3	4			1	1	1	2	1	1					14.0	43.
19	3	1	2					1			1	1				6.0	33.
20	3	3						1	2							6.0	100.
20-25	3	3							1	2						6.0	100.
Over 25																	
Total	50	30	20	3	1	2	4	4	15	13	5	2			1	100.	60.

SUMMARY OF TABLE I.

TABLE I.—SUMMARY.

OCCUPATION.	Total Number.	PER CENT. BEGAN TO WORK AT TRADE WHEN										
		Under twelve.	Between twelve and fifteen.	At fifteen.	At sixteen.	At seventeen.	At eighteen.	At nineteen.	At twenty.	Between twenty and twenty-five.	Over twenty-five.	
Glass blowers, green bottle.....	514	.....	3.6	6.4	15.2	17.3	19.8	13.2	14.2	8.5	1.5
flint, prescription.....	126	.....	3.1	9.5	19.1	16.7	34.1	8.8	6.3	2.4	.....
" regular.....	39	.....	.....	2.6	5.1	12.8	30.8	10.3	25.6	12.8	.....
window.....	149	.....	.....	2.7	2.0	2.0	4.7	5.4	36.9	40.9	5.4
flatteners, window.....	39	.....	.....	2.6	28.2	.....	5.1	2.6	23.1	20.5	17.9
cutters, ".....	76	.....	1.3	9.2	19.7	2.6	9.2	9.2	21.1	23.8	3.9
master shearers.....	57	.....	.....	.....	.....	1.7	.....	.....	.....	19.3	79.0
potmakers.....	15	.....	.....	.....	.....	6.7	.....	.....	33.3	13.3	46.7
stopper grinders.....	25	.....	.....	12.0	12.0	12.0	16.0	8.0	20.0	20.0	.....
Hat finishers.....	1,2578	6.0	4.0	11.0	52.5	8.0	4.8	6.5	4.4	2.0
makers.....	1,247	1.2	15.7	11.1	18.2	27.9	5.2	4.1	5.2	9.4	2.0
pouncers.....	73	5.5	5.5	9.6	6.8	15.1	4.1	16.4	17.8	15.1	4.1

Potters, mould makers.....	22	13.6	54.6	18.2	13.6	.....	.....	.....	.....	.....	.....
jiggermen.....	99	8.1	28.3	18.2	22.2	7.1	11.1	4.0	.....	1.0	.....
turners.....	41	12.2	29.2	22.0	9.8	4.9	14.6	4.9	2.4	.....	.....
handlers.....	31	9.7	32.2	19.4	19.4	.....	9.7	6.4	.....	3.2	.....
pressers.....	455	8.6	38.4	17.2	17.8	7.4	6.4	2.0	1.5	0.7	.....
throwers.....	3	33.3	66.7	.....	.....	.....	.....	.....	.....	.....	.....
saggermakers.....	26	3.9	26.9	7.7	11.5	7.7	11.5	7.7	3.9	15.3	3.9
kilnmen.....	297	3.0	11.1	4.0	11.8	11.8	19.9	8.8	11.5	15.8	2.3
dippers.....	30	6.7	16.7	20.0	13.3	10.0	20.0	3.3	10.0	.....	.....
decorators.....	68	13.3	41.1	7.4	8.8	10.3	2.9	2.9	7.4	4.4	1.5
packers and warehousemen.....	50	6.0	22.0	18.0	12.0	10.0	14.0	6.0	6.0	6.0	.....

TABLE I—SUMMARY.

OCCUPATION.	Total number.	PER CENT. AMERICAN BORN OF THOSE WHO BEGAN TO WORK AT TRADE WHEN										
		Under twelve.	Between twelve and fifteen.	Fifteen.	Sixteen.	Seventeen.	Eighteen.	Nineteen.	Twenty.	Between twenty and twenty-five.	Over twenty-five.	Total.
Glass Blowers, green bottle.....	514	.....	100.0	94.0	95.0	95.0	98.0	97.0	100.0	98.0	100.0	97.0
flint, prescription.....	126	.....	100.0	42.0	54.0	71.0	93.0	100.0	87.0	100.0	.....	78.0
" regular.....	39	.....	.....	.....	100.0	80.0	58.0	.....	50.0	40.0	.....	51.0
window.....	149	.....	.....	100.0	100.0	100.0	100.0	100.0	95.0	98.0	100.0	97.0
flatteners, window glass.....	39	.....	.....	100.0	100.0	.....	100.0	100.0	100.0	100.0	100.0	100.0
cutters, ".....	76	.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
master shearers.....	57	.....	.....	.....	.....	100.0	.....	.....	.....	73.0	96.0	91.0
potmakers.....	15	.....	.....	.....	.....	100.0	.....	.....	40.0	50.0	100.0	73.0
stopper grinders.....	25	.....	.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.....	100.0
Hat finishers.....	1,257	30.0	32.0	47.0	61.0	85.0	69.0	68.0	48.8	27.0	16.0	69.0
makers.....	1,247	40.0	28.0	38.0	40.0	74.0	49.0	42.0	25.0	14.0	.....	44.0
pouncers.....	73	50.0	100.0	71.0	80.0	82.0	100.0	50.0	38.0	18.0	33.0	56.0

Potters, mould makers.....	22			75 0	67.0							23.0
jiggermen.....	99	25 0	25.0	22 0	36.0	57.0	45.0	75.0		100 0		35.0
turners.....	41	60.0	25.0	44 0	25.0		33.0		100.0			34.0
handlers.....	31	33.3	50.0	66 6	50.0		66.6	100.0				55.0
pressers.....	455	18.0	37.0	63.0	65.0	62.0	65 0	33 0	57.0	67.0		49.0
throwers.....	3											
saggermakers.....	26		43.0		67.0		33.0	50.0		50.0		35.0
kilnmen.....	297	33 0	30 0	8 0	34.0	37 0	53 0	54.0	56.0	51.0	86 0	45.0
dippers.....	30		40 0	17.0		100 0	83 0					37.0
decorators.....	68	33 0	18.0	60.0	83.0	29.0	50.0		40.0	67.0		34.0
packers and warehousemen.....	50	33 0	55.0	67.0	50.0	80.0	43 0	33.0	100.0	100.0		60.0

Table 2.—Showing Ages of Journeymen at Work, their Nativity and Number Beginning to Decline.

Glass Blowers—Green (Bottle and Vial.)

PRESENT AGE	WHOLE NUMBER REPORTED.				PER CENT.				Average Number of Years at Work.
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born	Foreign born.	At work at respective Ages.	
21 Years.	2	2	.....	.....	.....	100.	.....	0.4	6.
22	3	3	.....	.....	.....	100	.....	.6	5.
23	11	11	.....	.....	.....	100.	.....	2.2	5.9
24	13	13	.....	.....	.....	100.	.....	2.5	6.2
25	21	19	2	4	19.0	90.5	9.5	4.1	7.2
25-30	124	121	3	7	5.6	97.6	2.4	24.	7.7
30-35	89	87	2	10	11.3	97.8	2.2	17.4	13.6
35-40	65	63	2	22	33.8	96.9	3.1	12.6	20.7
40-45	59	57	2	26	44.1	96.6	3.4	11.5	22.9
45-50	55	51	4	42	76.4	92.9	7.1	10.7	30.4
50-60	69	69	.....	68	98.2	100.	.....	13.4	35.9
Over 60	3	3	.....	3	100	100.	.....	.6	40.3
Total	514	499	15	182	35.4	97.1	2.9	100.	18.3
Average Age.	37.4	.....	.....	45.5	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Glass Blowers—Flint (Prescription.)

PRESENT AGE	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	.....	.....	.....	.....	.....	.....	.....	.....
22	.....	.....	.....	.....	.....	.....	.....	.....
23	1	1	.....	.....	.....	100.	.....	0.8
24	5	5	.....	.....	.....	100.	.....	4.0
25	14	14	.....	.....	.....	100.	.....	11.1
25-30	31	27	4	3	10.0	87.1	12.9	24.6	
30-35	25	19	6	6	24.0	76.0	24.0	19.9	
35-40	21	12	9	5	23.8	57.1	42.9	16.7	
40-45	11	5	6	8	72.7	45.5	54.5	8.7	
45-50	11	10	1	8	72.7	90.9	9.1	8.7	
50-60	7	5	2	7	100.0	71.4	28.6	5.5	
Over 60	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	126	98	28	37	29.4	77.7	22.3	100.0	16.8
Average Age.	34.6	43.6

TABLE 2.—SHOWING AGE OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Glass Blowers—Flint (Regular)

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	4	4	.....	.....	.....	.....	.....	.....
22	4	4	.....	.....	100.	.....	10.3	4.3
23	1	1	.....	.....	100.	.....	2.5	6.
24	6	5	1.	.....	83.3	16.7	15.4	5.7
25	.....	.....	.....	.....	.....	.....	.....	.....
25-30	5	2	3	.....	40.0	60.0	12.8	10.8
30-35	3	2	1.	.....	66.7	33.3	7.7	15.7
35-40	11	5	6.	.....	45.5	54.5	28.2	17.8
40-45	5	1	4.	1	20.0	80.0	12.8	22.4	
45-50	3	.....	3.	1	33.3	.....	7.7	28.3
50-60	1	.....	1.	.....	100.	.....	2.6	42.
Over 60	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	39	20	19.	2	2.6	51.3	48.7	100.0	15.2
Average Age.	34.2	47.

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Window Glass Blowers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.				Average number of years at work.
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.	At work at respective ages.	
Years.									
21	3	3	.....	.....	.....	100.0	.....	2 0	1.7
22	8	8	.....	.....	.....	100.0	.....	5.3	2.3
23	4	4	.....	.....	.....	100.0	.....	2.7	2.5
24	3	3	.....	.....	.....	100.0	.....	2 0	4.0
25	5	5	.....	.....	.....	100.0	.....	3.3	4.2
25-30	41	41	.....	.....	.....	100.0	.....	27.8	7.0
30-35	33	33	.....	.....	.....	100.0	.....	22.1	12.2
35-40	20	18	2	1	5.0	90.0	10.0	13.4	16.9
40-45	6	6	.....	.....	.....	100.0	.....	4.0	21.0
45-50	7	5	2	.....	.....	71.4	28.6	4.7	22.3
50-60	19	19	.....	8	42.1	100.0	.....	12.7	37.4
over 60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	149	145	4	9	6.0	97.3	2.7	100.0	14.1
Average Age.....	35.7	.....	.....	50.1	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Window Glass Flatteners.

PRESENT AGE.	WHOLE NUMBER REPORTED.			PER CENT.				Average number of years at work.
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
Years.								
21	.....	.....	.....	.....	.....	100.0	.....	.....
22	1	1	.....	.....	.....	100.0	.....	2.6 6.0
23	1	1	.....	.....	.....	100.0	.....	2.6 3.0
24	1	1	.....	.....	.....	100.0	.....	2.6 4.0
25	1	1	.....	.....	.....	100.0	.....	2.5 5.0
25-30	5	5	.....	.....	.....	100.0	.....	12.8 9.0
30-35	6	6	.....	.....	.....	100.0	.....	15.4 10.5
35-40	6	6	.....	.....	.....	100.0	.....	15.4 16.4
40-45	3	3	.....	.....	.....	100.0	.....	7.7 19.0
45-50	7	7	.....	.....	.....	100.0	.....	17.9 24.3
50-60	6	6	.....	1	16.7	100.0	.....	15.4 29.8
over 60	2	2	.....	2	100.0	100.0	.....	5.1 49.5
Total.....	39	39	.....	3	7.7	100.0	.....	100.0 18.7
Average Age....	42.4	.....	.....	53.6	.....	.....	.....	.....

TABLE 2—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Window Glass Cutters.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	3	3	.....	.....	.....	100.	.....	4.0	5.
22	6	6	.....	.....	.....	100.	.....	7.9	5.
23	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	3	3	.....	.....	.....	100.	.....	4.0	5.7
25	1	1	.....	.....	.....	100.	.....	1.3	3.
25-30	14	14	.....	.....	.....	100.	.....	18.4	7.6
30-35	13	13	.....	.....	.....	100.	.....	17.1	15.4
35-40	11	11	.....	.....	.....	100.	.....	14.5	17.8
40-45	4	4	.....	.....	.....	100.	.....	5.2	25.5
45-50	4	4	.....	3	75.0	100.	.....	5.2	28.3
50-60	16	16	.....	3	18.7	100.	.....	21.1	32.
Over 60	1	1	.....	.....	.....	100.	.....	1.3	40.
Total.....	76	76	.....	6	7.9	100.	.....	100.	18.
Average age ..	37.2	.....	.....	52.5	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Glass Blowers—Master Shearers.

PRESENT AGE.	WHOLE NUMBER REPORTED.					PER CENT.			Average number of years at work.
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.	At work at respective ages.	
21 Years.	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	.....	.....	.....	.....	.....	.....
25-30	3	2	1	.....	.....	66.7	33.3	5.3	6.7
30-35	13	11	2	.....	.....	84.6	15.4	22.8	6.2
35-40	12	11	1	1	8.4	91.6	8.4	21.0	10.2
40-45	12	12	.....	1	8.4	100.0	.....	21.0	14.5
45-50	12	11	1	3	25.0	91.6	8.4	21.0	15.1
50-60	2	2	.....	2	100.	100.0	.....	3.6	27.5
Over 60	3	3	.....	3	100.	100.0	.....	5.3	26.6
Total	57	52	5	10	17.5	91.2	8.8	100.	12.7
Average Age.	42.6	.....	.....	55	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Glass Workers—Pot Makers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work, *	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	.....	.....	.....	.....	.....	.....	.....	.....
22	.....	.....	.....	.....	.....	.....	.....	.....
23	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	.....	.....	.....	.....	.....
25-30	1.	1	.....	.....	.....	100.	.....	6.7	3.
30-35	1.	1	.....	.....	.....	100.	.....	6.7	3.
35-40	5.	4	1	3.	60.0	80.0	20.0	33.3	13.8
40-45	4.	2	2	2.	50.0	50.0	50.0	26.6	19.
45-50	.....	.....	.....	.....	.....	.....	.....	.....	.....
50-60	4.	3	1	3.	75.0	75.	25.0	26.7	19.
Over 60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	15.	11	4	8.	53.3	73.3	26.7	100.	15.7
Average Age.	42.7	.....	.....	45.2	.....	.....	.....	.....	.....

TABLE NO. 2.—SHOWING AGE OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Hat Pouncers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	1	1	.....	.....	.....	100.	.....	1.3	6.
22	1	1	.....	.....	.....	100.	.....	1.3	6.
23	1	1	.....	.....	.....	100.	.....	1.3	6.
24	2	2	.....	.....	.....	100.	.....	2.8	7.
25	3	3	.....	.....	.....	100.	.....	4.1	11.3
25-30	18	11	7	.....	.....	61	39.	24.7	10.3
30-35	7	4	3	.....	.....	57.	43	9.6	16.3
35-40	22	9	13	.....	.....	41.	59.	30.2	17.1
40-45	7	6	1	1	14.	86.	14.	9.6	21.6
45-50	8	3	5	2	25.	37.	63.	11.	29.3
50-60	2	.....	2	1	50.	.....	100.	2.8	27.
Over 60	1	.....	1	1	100.	.....	100.	1.3	47.
Total.....	73	41	32	5	7	56.	44.	100.	16.8
Average Age.	36.2	.....	.....	53.8	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Hat Makers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.				Average number of years at work.
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.	At work at respective ages.	
21 Years.	29	17	12	.....	.....	58.6	41.4	2.3	4.5
22	27	20	7	.....	.....	74.1	25.9	2.2	5.2
23	42	30	12	1	2.4	71.4	28.6	3.4	6.4
24	68	46	22	4	5.8	67.6	32.4	5.5	7.
25	56	37	19	1	1.8	66.1	33.9	4.5	8.
25-30	398	220	178	13	3.3	55.3	44.7	31.9	10.1
30-35	166	86	81	18	10.8	51.8	48.2	13.3	16.6
35-40	159	44	115	39	24.5	27.7	72.3	12.7	20.7
40-45	93	16	77	31	33.3	17.2	82.8	7.5	26.
45-50	94	12	82	54	57.5	12.8	87.2	7.5	30.
50-60	73	4	69	39	53.2	5.5	94.5	5.8	36.6
Over 60	42	15	27	20	47.6	35.7	64.3	3.4	48.1
Total	1,247	549	700	220	17.6	43.8	56.2	100.	15.5
Average Age.	34.5	.....	.....	44.7	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Hat Finishers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	38	33	5	.....	.....	87.	13.	3.0	4.2
22	63	50	13	.....	.....	80.	20	5.0	5.1
23	62	43	19	.....	.....	70.	30.	5.0	5.7
24	80	64	16	1	1.2	80.	20.	6.5	7.
25	49	30	19	.....	.....	61.	39.	4.	7.5
25-30	333	259	74	5	15	78.	22.	26.5	10.4
30-35	218	162	56	18	8.2	75.	25.	17.	14.5
35-40	190	121	69	43	22.6	64.	36.	15.	18.9
40-45	99	55	44	36	36.3	56	44.	8.	24.2
45-50	62	28	34	24	38.7	45.	55.	5.	29.
50-60	55	18	37	24	43.6	33.	67.	4.4	34.
Over 60	8	5	3	4	50.	62.	38.	.6	47.4
Total	1257	868	389	155	12.3	69.	31.	100.	15.
Average age..	32.8	.....	.....	43.1	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMAN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Potters.—Mould Makers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
Years.									
21	4	2	2	.....	.....	50.0	50.0	18.2	6.2
22	2	1	1	.....	.....	50.0	50.0	9.1	7.5
23	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	.....	.....	.....	.....	.....	.....
25-30	2	1	1	.....	.....	50.0	50.0	9.1	11.0
30-35	3	.....	3	.....	.....	.....	100.0	13.6	20.3
35-40	3	.....	3	1	33.3	.....	100.0	13.6	26.0
40-45	5	.....	5	.....	.....	.....	100.0	22.7	29.4
45-50	2	1	1	1	50.0	50.0	50.0	9.1	34.5
50-60	1	.....	1	1	100.0	.....	100.0	4.6	40.0
over 60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	22	5	17	3	13.6	22.7	77.3	100.0	21.6
Average Age....	34.3	.....	.....	45.3	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Potters—Jiggermen.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born		At work at respective ages.
21 Years.	3	1	2	.....	.....	33.3	66.7	3.0	5.9
22	4	2	2	.....	.....	50.	50.0	4.0	6.
23	5	3	2	.....	.....	60.	40.0	5.1	5.
24	3	2	1	.....	.....	66.7	33.3	3.0	8.7
25	3	1	2	.....	.....	33.3	66.7	3.0	10.3
25-30	20	15	5	.....	.....	75.0	25.	20.2	13.4
30-35	22	6	16	1	4.5	27.3	72.7	22.2	18.7
35-40	17	4	13	2	11.8	23.5	76.5	17.2	21.4
40-45	14	1	13	4	28.5	7.1	92.9	14.2	27.8
45-50	8	.....	8	4	50.	.....	100.	8.1	33.3
50-60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	99	35	64	11	11.1	35.3	64.7	100.	18.5
Average Age.	32.8	.....	.....	43.1	.....	.....	.....	.....	.....

TABLE 2—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Potters—Turners.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.				Average number of years at work.
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.	At work at respective ages.	
21 Years.	4	3	1	.....	75.	25.	9.8	7.5
22	3	2	1	.....	66.7	33.7	7.3	6.6
23	4	3	1	.....	75.	25.	9.8	9.5
24	1	1	.....	.....	100.	.....	2.4	9.
25	2	.....	2	.....	.....	100.	4.8	10.5
25-30	9	4	5	.....	44.4	55.6	22.0	10.9
30-35	5	1	4	.....	20.	80.	12.2	17.6
35-40	3	.....	3	.....	.....	100.	7.3	23.3
40-45	4	.....	4	2	50.	.....	9.8	27.5
45-50	4	.....	4	3	75.	.....	9.8	33.
50-60	1	.....	1	1	100	.....	2.4	35.
Over 60	1	.....	1	.....	.....	100.	2.4	48.
Total	41	14	27	6	14.6	34.1	65.9	100.	17.
Average Age..	32	47.5

TABLE NO. 2.—SHOWING AGE OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Potters—Handlers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	1	1	.....	.....	.....	100	.....	3.2	6.
22	1	1	.....	.....	.....	100.	.....	3.2	3.
23	3	3	.....	.....	.....	100.	.....	9.7	8.
24	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	1	1	.....	.....	.....	100.	.....	3.2	10.
25-30	12	8	4	.....	.....	66.7	33.3	38.7	12.6
30-35	2	1	1	.....	.....	50.0	50.0	6.5	18.5
35-40	6	2	4	.....	.....	33.3	66.7	19.3	24.2
40-45	2	.....	2	.....	.....	.....	100.	6.5	25.5
45-50	1	.....	1	1	100	.....	100.	3.2	23.
50-60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 60	2	.....	2	1	50	.....	100.	6.5	28.5
Total.....	31	17	14	2	6.5	54.9	45.1	100.	16.4
Average Age.	32.9	.....	.....	55.5	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Potters—Pressers.

PRESENT AGE.	WHOLE NUMBER REPORTED				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	41	23	18	.....	.....	56.1	43.9	9.0	6.7
22	23	10	13	.....	.....	43.5	56.5	5.1	7.1
23	26	19	7	.....	.....	73.1	26.9	5.7	7.7
24	36	22	14	.....	.....	61.1	38.9	7.9	8.6
25	21	12	9	.....	.....	57.1	42.9	4.6	10.1
25-30	123	85	38	1	.8	69.1	30.9	27.0	12.5
30-35	75	30	45	2	2.7	40.0	60.0	16.5	17.9
35-40	59	20	39	6	10.2	33.9	66.1	13.0	23.5
40-45	21	2	19	2	9.5	9.5	90.5	4.6	28.1
45-50	15	.....	15	9	60.0	.....	100.	3.3	34.2
50-60	14	.....	14	8	57.1	.....	100.	3.1	40.6
Over 60	1	.....	1	1	100.	.....	100.	.2	57.
Total	455	223	232	29	6.4	49.0	51.0	100.	15.7
Average age..	30.5	.....	.....	46.5	.....	.....	.....	.....	.....

Table 2.—Showing Ages of Journeymen at Work, their Nativity and Number Beginning to Decline.

Potters — Saggermakers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average Number of Years at Work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective Ages.
21 Years.	2	2	.....	.....	.....	100.0	.....	7.7	8.0
22	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	.....	.....	.....	.....	.....	.....
25-30	7	1	6	.....	.....	14.3	85.7	26.9	13.1
30-35	8	5	3	2	25.0	62.5	37.5	30.8	13.9
35-40	5	1	4	.....	.....	20.0	80.0	19.3	22.0
40-45	1	.....	1	.....	.....	.....	100.0	3.8	25.0
45-50	1	.....	1	1	100.0	.....	100.0	3.8	30.0
50-60	2	.....	2	1	50.0	.....	100.0	7.7	25.5
Over 60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	26	9	17	4	15.4	34.6	65.4	100.0	16.7
Average Age.	34.2	.....	.....	42.2	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Potters—Kilnmen.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.				Average number of years at work.
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.	At work at respective ages.	
Years.									
21	7	5	2	.....	.....	71.4	28.6	2.4	5.
22	15	9	6	.....	.....	60.0	40.0	5.1	5.6
23	13	5	8	.....	.....	38.5	60.5	4.4	5.3
24	13	10	3	.....	.....	77.0	23.0	4.4	6.1
25	10	5	5	.....	.....	50.0	50.0	3.4	6.1
25-30	87	46	41	.....	.....	52.9	47.1	29.3	10.
30-35	58	28	30	1	1.7	48.3	51.7	19.5	15.2
35-40	49	23	26	4	8.1	46.9	53.1	16.5	18.5
40-45	20	.....	20	5	25.0	.....	100	6.7	25.6
45-50	12	2	10	9	75.0	16.7	83.3	4.0	29.8
50-60	12	.....	12	12	100.	.....	100.	4.0	34.8
over 60	1	.....	1	1	100.	.....	100.	.3	38.
Total.....	297	133	164	32	10.8	44.8	55.2	100.	14.5
Average Age....	32.6	.....	.....	48.9	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Potters—Dippers.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	1	.....	1	.....	.....	.....	100.	3.3	6.
22	2	2	.....	.....	.....	100.	.....	6.7	6.
23	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	.....	.....	.....	.....	.....	.....
25-30	6	5	1	.....	.....	83.3	16.7	20.0	13.2
30-35	5	1	4	.....	.....	20.0	80.0	16.7	15.8
35-40	5	1	4	.....	.....	20.0	80.0	16.7	24.6
40-45	5	2	3	1	20.	40.0	60.0	16.7	25.2
45-50	4	.....	4	3	75	.....	100.0	13.3	31.
50-60	1	.....	1	1	100.	.....	100.0	3.3	48.
Over 60	1	.....	1	1	100.	.....	100.0	3.3	56.
Total	30	11	19	6	20.	36.7	63.3	100.	21.8
Average Age.	38.	.....	.....	53.1	.....	.....	.....	.....	.....

TABLE 2.—SHOWING AGES OF JOURNEYMEN AT WORK, THEIR NATIVITY AND NUMBER BEGINNING TO DECLINE.

Potters—Decorators.

PRESENT AGE.	WHOLE NUMBER REPORTED.				PER CENT.			Average number of years at work.	
	Total.	American born.	Foreign born.	Beginning to decline.	Beginning to decline.	American born.	Foreign born.		At work at respective ages.
21 Years.	5	5	.....	.....	.....	100.0	.....	7.4	7.
22	5	3	2	.....	.....	60.0	40.0	7.4	7.2
23	4	2	2	.....	.....	50.0	50.0	5.9	8.
24	3	1	2	.....	.....	33.3	66.7	4.4	10.3
25	3	.....	3	.....	.....	.....	100.0	4.4	10.
25-30	27	8	19	.....	.....	29.7	70.0	39.5	11.4
30-35	12	3	9	.....	.....	25.0	25.0	17.7	17.8
35-40	3	.....	3	.....	.....	.....	100.0	4.4	18.6
40-45	2	1	1	.....	.....	50.0	50.0	3.0	23.5
45-50	4	.....	4	4	100.	.....	100.	5.9	23.
50-60	.....	.....	.....	.....	.....	.....	.....	.....	.....
over 60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	68	23	45	4	5.9	33.8	66.2	100.	13.4
Average Age.....	29.3	.....	.....	49	.....	.....	.....	.....	.....

SUMMARY OF TABLE II.

TABLE II—SUMMARY.

OCCUPATION.	Total number.	PER CENT. AT PRESENT AT WORK AT THE AGE OF—											AVERAGE.		
		Twenty-one.	Twenty-two.	Twenty-three.	Twenty-four.	Twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.	Age.	Number of years at work.
GLASS BLOWERS—															
Green, bottle.....	514	0.4	.6	2.2	2.5	4.1	24.0	17.4	12.6	11.5	10.7	13.4	0.6	37.4	18.3
Flint, prescription.....	126	.....	.....	.8	4.0	11.1	24.6	19.9	16.7	8.7	8.7	5.5	.....	34.0	16.8
“ regular.....	39	.....	10.3	2.5	15.4	.....	12.8	7.7	28.2	12.8	7.7	2.6	.....	34.2	15.2
Window.....	149	2.0	5.3	2.7	2.0	3.3	27.8	22.1	13.4	4.	4.7	12.7	.....	35.7	14.1
GLASS—															
Flatteners, window....	39	.....	2.6	2.6	2.6	2.5	12.8	15.4	15.4	7.7	17.9	15.4	5.1	42.4	18.7
Cutters, window.....	76	4.0	7.9	.....	4.0	1.3	18.4	17.1	14.5	5.2	5.2	21.1	1.3	37.2	18.0
Master shearers.....	57	.....	.....	.....	.....	.....	5.3	22.8	21.0	21.0	21.0	3.6	5.3	42.6	12.7
Potmakers.....	15	.....	.....	.....	.....	.....	6.7	6.7	33.3	26.6	.....	26.7	.....	42.7	15.7
Stopper grinders.....	25	.....	.....	.....	4.0	4.0	24.0	44.0	20.0	4.0	.....	.....	.....	32.4	14.2
HAT—															
Finishers.....	1257	3.0	5.0	5.0	6.5	4.0	26.5	17.0	15.0	8.0	5.0	4.4	0.6	32.8	15.0

Makers.....	1247	2.3	2.2	3.4	5.5	4.5	31.9	13.3	12.7	7.5	7.5	5.8	3.4	34.5	15.5
Pouncers.....	73	1.3	1.3	1.3	2.8	4.1	24.7	9.6	30.2	9.6	11.0	2.8	1.3	36.2	16.8
POTTERS—															
Mould makers.....	22	18.2	9.1	.....	.....	.....	9.1	13.6	13.6	22.7	9.1	4.6	.....	34.3	21.6
Jiggermen.....	99	3.0	4.0	5.1	3.0	3.0	20.2	22.2	17.2	14.2	8.1	.....	.....	32.8	18.5
Turners.....	41	9.8	7.3	9.8	2.4	4.8	22.0	12.2	7.3	9.8	9.8	2.4	2.4	32.0	17.0
Handlers.....	31	3.2	3.2	9.7	.....	3.2	38.7	6.5	19.3	6.5	3.2	.....	6.5	28.5	16.4
Pressers.....	455	9.0	5.1	5.7	7.9	4.6	27.0	16.5	13.0	4.6	3.3	3.1	.2	30.5	15.7
Throwers.....	3	.....	.....	.....	.....	.....	.....	33.3	.....	33.3	33.4	.....	.....	42.2	29.3
Saggermakers.....	26	7.7	.....	.....	.....	.....	26.9	30.8	19.3	3.8	3.8	7.7	.....	34.2	16.7
Kilnmen.....	297	2.4	5.1	4.4	4.4	3.4	29.3	19.5	16.5	6.7	4.0	4.0	.3	32.6	14.5
Dippers.....	30	3.3	6.7	.....	.....	.....	20.0	16.7	16.7	16.7	13.3	3.3	3.3	38.0	21.8
Decorators.....	68	7.4	7.4	5.9	4.4	4.4	39.5	17.7	4.4	3.0	5.9	.....	.....	29.3	13.4
Pack's & wareh'sem'n..	50	6.0	2.0	4.0	8.0	8.0	30.0	26.0	10.0	4.0	.....	.....	2.0	30.5	12.5

TABLE II.—SUMMARY.

OCCUPATION.	TOTAL NUMBER.		PER CENT. AMERICAN BORN OF THOSE AT PRESENT AT WORK AT THE AGE OF											Total per cent.	
	At work.	American born.	Twenty-one.	Twenty-two.	Twenty-three.	Twenty-four.	Twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
GLASS BLOWERS—															
Green, bot'tle.....	514	499	100.0	100.0	100.0	100.0	90.5	97.6	97.8	96.9	96.6	92.9	100.0	100.0	97.1
Flint, prescription.....	126	98	.....	.....	100.0	100.0	100.0	87.1	76.0	57.1	45.5	90.9	71.4	.....	77.7
" regular.....	39	20	.....	100.0	100.0	83.0	.....	40.0	66.7	45.5	20.0	.....	.....	.....	51.3
Window.....	149	145	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0	100.0	71.4	100.0	.....	97.3
GLASS—															
Flatteners, window.....	39	39	.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cutters, window.....	76	76	100.9	100.0	.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Master shearers.....	57	52	.....	.....	.....	.....	.....	66.7	84.6	91.6	100.0	91.6	100.0	100.0	91.2
Potmakers.....	15	11	.....	.....	.....	.....	.....	100.0	100.0	80.0	50.0	.....	75.0	.....	73.3
Stopper grinders.....	25	25	.....	.....	.....	100.0	100.0	100.0	100.0	100.0	100.0	.....	.....	.....	100.0
HAT—															
Finishers.....	1257	868	87.0	80.0	70.0	80.0	61.0	78.0	75.0	64.0	56.0	45.0	33.0	62.0	69.0

Makers	1247	547	58.6	74.1	71.4	67.6	66.1	55.3	51.8	27.7	17.2	12.8	5.5	35.7	43.8
Pouncers	73	41	100.0	100.0	100.0	100.0	100.0	61.0	57.0	41.0	86.0	37.0	.....	.....	56.0
POTTERS—															
Mould makers.....	22	5	50.0	50.0	.....	.....	.....	50.0	.....	.....	.....	50.0	.....	.....	22.7
Jiggermen.....	99	35	33.3	50.0	60.0	66.7	33.3	75.0	27.3	23.5	7.1	.....	.....	.....	35.3
Turners.....	41	14	75.0	66.7	75.0	100.0	.....	44.4	20.0	.....	.....	.....	.....	.....	34.1
Handlers.....	31	17	100.0	100.0	100.0	.....	100.0	66.7	50.0	33.3	.....	.....	.....	.....	54.9
Pressers	455	223	56.1	43.5	73.1	61.1	57.1	69.1	40.0	33.9	9.5	.....	.....	.....	49.0
Throwers.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saggermen	26	9	100.0	.....	.....	.....	.....	14.3	62.5	20.0	.....	.....	.....	.....	34.6
Kilnmen.....	297	133	71.4	60.0	38.5	77.0	50.0	52.9	48.3	46.9	.....	16.7	.....	.....	44.8
Dippers.....	30	11	.....	100.0	.....	.....	.....	83.3	20.0	20.0	40.0	.....	.....	.....	36.7
Decorators.....	68	23	100.0	60.0	50.0	33.3	.....	29.7	25.0	.....	50.0	.....	.....	.....	33.8
Packers & wareh'sem'n	50	30	100.0	100.0	50.0	75.0	75.0	73.3	53.8	20.0	.....	.....	.....	.....	60.0

TABLE II—SUMMARY.

OCCUPATION.	TOTAL NUMBER		PER CENT. OF THOSE AT PRESENT AT WORK BEGINNING TO DECLINE AT THE AGE OF											Total per cent.	
	At work.	Beginning to decline.	Twenty-one.	Twenty-two.	Twenty-three.	Twenty-four.	Twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
GLASS BLOWERS—															
Green, bottle.....	514	182	.....	.....	.....	.....	19.0	5.6	11.3	33.8	44.1	76.4	98.2	100.0	35.4
Flint, prescription.....	126	37	.....	.....	.....	.....	.....	10.0	24.0	23.8	72.7	72.7	100.0	.....	29.4
" regular.....	39	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	33.3	100.0	.....	5.1
Window.....	149	9	.....	.....	.....	.....	.....	.....	.....	5.0	.....	.....	42.1	.....	6.0
GLASS—															
Flatteners, window....	39	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16.7	100.0	7.7
Cutters, ".....	76	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.0	18.7	.....	7.9
Master shearers.....	57	10	.....	.....	.....	.....	.....	.....	.....	8.4	8.4	25.0	100.0	100.0	17.5
Pot makers.....	15	8	.....	.....	.....	.....	.....	.....	.....	60.0	50.0	.....	75.0	.....	53.3
HAT—															
Finishers.....	1,257	155	.....	.....	.....	1.2	.....	1.5	8.2	22.6	36.3	38.7	43.6	50.0	12.3
Makers.....	1,247	220	.....	.....	2.4	5.8	1.8	3.3	10.8	24.5	33.3	57.5	53.2	47.6	17.6
Pouncers.....	73	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	14.0	25.0	50.0	7.0

POTTERS—

Mould makers.....	22	3						33.3		50.0	100.0		13.6
Jiggermen.....	99	11					4.5	11.8	28.5	50.0			11.1
Turners.....	41	6							50.0	75.0	100.0		14.6
Handlers.....	31	2								100.0		50.0	6.5
Pressers.....	455	29				0.8	2.7	10.2	9.5	60.0	57.1	100.0	6.4
Throwers.....	3												
Saggermakers.....	26	4					25.0			100.0	50.0		15.4
Kilnmen.....	297	32					1.7	8.1	25.0	75.0	100.0	100.0	10.8
Dippers.....	30	6							20.0	75.0	100.0	100.0	20.0
Decorators.....	68	4								100.0			5.9
P'ck'rs & Wareh'sm'n..	50												

Table 3.—Showing Ages of Journeymen Beginning to Decline.

Glass Blowers—Green (Bottle and Vial).

Age when began to decline.	Number reported.	Average number years at work when began to decline.	Age when began to decline.	Number reported.	Average number years at work when began to decline.
21	2	2.5	37	4	20.5
22	5	5.	38	10	21.
23	1	7.	39	1	23.
24	2	6.	40	31	22.5
25	7	5.6	41	2	23.
27	1	7.	42	6	25.
28	2	10.5	43	8	25.3
29	1	13.	44	3	26.3
30	8	12.9	45	28	27.4
31	.....	.....	46	15	26.
32	2	12.	47	8	29.3
34	2	17.	48	11	30.5
35	7	17.9	50	10	30.8
36	5	14.6			
Total.....	.....	.....	.....	182	22.

TABLE 3.—SHOWING AGES OF JOURNEYMEN BEGINNING TO DECLINE.—Continued.

<i>Glass Blowers, Flint (prescription.)</i>			<i>Window Glass Blowers.</i>		
Age when began to decline.	Number reported.	Average number years at work when began to decline.	Age when began to decline.	Number reported.	Average number years at work when began to decline.
20	2	4.5	40	1	25.
24	4	4.8	50	5	28.6
27	1	9.	52	1	32.
28	2	9	54	1	32.
29	1	12.	55	1	34.
35	1	16.			
36	1	17.	Total...	9	29.6
38	2	22.5			
40	4	23.8	<i>Window Glass Flatteners.</i>		
41	1	26.	50	1	14.
42	3	25.	53	1	37.
43	1	23.	58	1	38.
44	1	26.	Total...	3	27.7
45	4	30.			
46	3	27.7	<i>Window Glass Cutters.</i>		
47	2	28.5	50	3	30.7
48	2	34.	55	3	36.7
49	.....	.....	Total....	6	33.7
50	2	32.			
Total....	.....37	... 21.			
<i>Glass Blowers, Flint (regular.)</i>					
40	1	20.			
54	1	36.			
Total....	2	28.			

TABLE 3.—SHOWING AGES OF JOURNEYMEN BEGINNING TO DECLINE.—Continued.

<i>Glass Workers.—Master Shearers.</i>			<i>Glass Workers—Pot Makers</i>		
Age when began to decline.	Number reported.	Average number of years at work when began to decline.	Age when began to decline.	Number reported.	Average number of years at work when began to decline.
35	1	7.	30	1	10.
41	1	18.	34	4	15.
43	2	14.5	40	1	2.
45	3	12.6	45	1	15.
50	1	15.	50	1	25.
54	1	27			
60	1	10.			
Total.....	10	14.4	Total.....	8	14.4

TABLE 3.—SHOWING AGES OF JOURNEYMEN BEGINNING TO DECLINE.—Continued.

Hct Finishers.

Age when began to decline.	Number.	Average number of years at work when began to decline.	Age when began to decline.	Number.	Average number of years at work when began to decline.
20	1	3.	36	8	17.1
22	2	6.	37	6	19.8
23	1	5.	38	17	20.1
24	6	6.3	39	1	22.
25	3	7.	40	12	23.
26	5	10.	41	1	27.
27	5	11.	42	2	26.
28	7	11.1	43	3	24.
29	4	12.	45	6	26.5
30	12	12.5	47	1	27.
31	5	13.	48	1	32.
32	10	15.1	50	1	22.
33	3	16.6	52	1	25.
34	11	16.7	55	1	38.
35	19	17.2			
Total.....				155	16.6

TABLE 3—SHOWING AGES OF JOURNEYMEN BEGINNING TO DECLINE.—Continued.

Hat Makers.

Age when began to decline.	Number reported.	Average years at work when began to decline.	Age when began to decline.	Number reported.	Average years at work when began to decline.
20	1	2.	38	21	22.1
22	3	6.	39	2	27.
23	1	11.	40	38	24.3
24	3	10.	41	3	27.
25	4	8.8	42	3	23.3
26	5	9.2	43	5	26.4
27	5	8.9	44	3	27.7
28	5	11.6	45	9	25.2
29	3	12.	46	5	30.2
30	12	13.	48	9	30.8
31	1	11.	50	14	33.1
32	8	15.8	52	1	36.
33	3	16.3	53	1	34.
34	20	17.	55	3	38.5
35	11	18.5	56	1	40.
36	7	18.3	60	1	43.
37	8	20.	64	1	50.
Total.....				220	21.5

Hat Pouncers.

40	3	29.7	60	1	47.
47	1	31.			
Total.....				5	33.4

TABLE 3.—SHOWING AGES OF JOURNEYMEN BEGINNING TO DECLINE.—Continued.

Potters—Mould Makers, Jiggermen, Turners, Handlers.

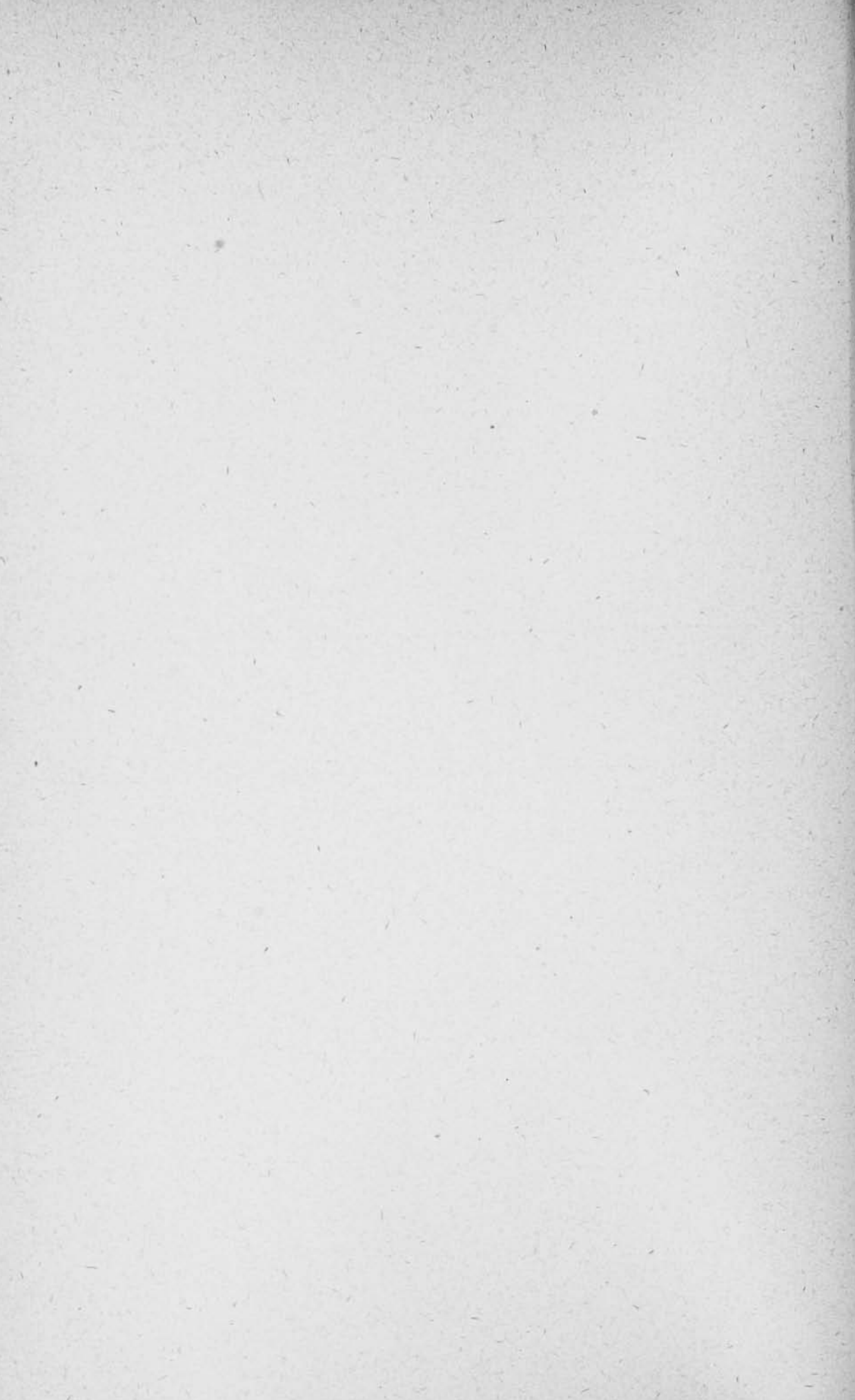
<i>Mould Makers</i>			<i>Turners.</i>		
Age when began to decline.	Number.	Average number of years at work when began to decline.	Age when began to decline.	Number.	Average number of years at work when began to decline.
28	1	25.	35	1	36.
31	1	25.	37	1	31.
40	1	29.	40	3	33.6
.....	.....	.....	42	1	30.
Total.....	3	26.3	Total.....	6	33.
<i>Jiggermen.</i>			<i>Handlers.</i>		
29	1	20.	37	1	12.
30	2	26.5	40	1	46.
35	3	22.3	.....	.....	.....
37	1	32.	.....	.....	.....
40	3	34.	.....	.....	.....
44	1	34.	.....	.....	.....
Total.....	11	28.	Total.....	2	29.

TABLE 3.—SHOWING AGES OF JOURNEYMEN BEGINNING TO DECLINE.—Continued.

<i>Potters—Pressers</i>			<i>Potters—Saggermakers.</i>		
Age when began to decline.	Number reported.	Average number years at work when began to decline.	Age when began to decline.	Number reported.	Average number years at work when began to decline.
25	1	13.	28	1	14.
30	4	27.	30	1	20.
34	2	27.	42	1	30.
35	5	27.2	45	1	30.
37	1	28.	.....	.....	.....
38	1	29.	.....	.....	.....
40	8	36.	.....	.....	.....
41	1	43.	.....	.....	.....
45	3	49.	.....	.....	.....
46	1	35.	.....	.....	.....
48	1	38.	.....	.....	.....
49	1	43.	.....	.....	.....
Total ...	29	33.3	Total....	4	23.5

TABLE 3.—SHOWING AGES OF JOURNEYMEN BEGINNING TO DECLINE.—Continued.

<i>Potters.—Kilnmen.</i>			<i>Potters.—Dippers.</i>		
Age when began to decline.	Number reported.	Average number of years at work when began to decline.	Age when began to decline.	Number reported.	Average number of years at work when began to decline.
30	1	21.	40	4	33.5
33	1	26.	42	1	34.
35	3	22.7	47	1	42.3
36	3	34.	Total....	6	36.6
38	5	31.5	<i>Potters —Decorators.</i>		
40	10	31.2	36	1	35.
41	1	30.	37	1	30.
42	1	35.	40	2	30.
44	2	39.	Total....	2	31.2
45	4	31.			
48	1	42.			
Total....	32	31.1			



SUMMARY OF TABLE III.

TABLE III—SUMMARY.

OCCUPATION.	Total number beginning to decline.	PER CENT. OF THOSE WHO BEGAN TO DECLINE AT THE AGE OF—								Average age when began to decline.	Average number of years at work when began to decline.
		Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.		
GLASS BLOWERS—											
Green, bottle	182	9.3	6.6	6.0	28.0	26.0	24.0	.....	.....	38.5	22.0
Flint, prescription.....	37	16.2	10.9	2.8	19.0	27.0	24.1	.....	.....	38.0	21.0
" regular.....	2	.....	.....	.....	50.0	.....	.....	50.0	.....	47.0	28.0
Window.....	9	.....	.....	.....	11.1	.....	55.6	33.3	.....	50.0	29.6
GLASS—											
Flatteners, window.....	3	.....	.....	.....	.....	.....	33.3	66.7	.....	53.6	27.7
Cutters, ".....	6	.....	.....	.....	.....	.....	50.0	50.0	.....	52.5	33.7
Master shearers.....	10	.....	.....	10.0	.....	60.0	10.0	20.0	.....	46.0	14.4
Potmakers.....	8	.....	12.5	50.0	.....	25.0	.....	12.5	.....	43.0	14.4
HAT—											
Finishers.....	155	21.3	8.4	30.9	28.4	7.8	1.9	1.3	.....	32.4	16.6
Makers.....	220	5.5	13.6	19.5	34.5	10.5	12.7	3.2	0.5	39.4	21.5

Pouncers.....	5				60.0	20.0		20.0		45.4	33.4
POTTERS—											
Mould makers.....	3		33.3	33.3	33.4					33.0	26.3
Jiggersmen.....	11		27.0	27.0	36.0	9.0				35.9	28.0
Turners.....	6			16.7	66.6	16.7				39.0	33.0
Handlers.....	2				100					38.5	49.0
Pressers.....	29	3.5	13.8	24.1	34.4	13.8	10.4			38.0	33.3
Saggermakers.....	4		50.0			50.0				36.2	23.5
Kilnmen.....	32			16.0	56.0	25.0	3.0			39.5	31.1
Dippers.....	6				33.3	33.3	33.4			41.5	36.6
Decorators.....	4				100.0					38.2	31.2

Table 4.—Showing Number of Years Journeymen Have Been at Work.

Glass Workers.

Number of years at work.	BLOWERS.						WINDOW GLASS.		Master shearers.	Pot makers.	Stopper grinders.
	Total.	Total.	Green bottle	FLINT.		Window.	Flatteners.	Cutters.			
				Prescript'n.	Regular.						
1	7	7	.....	.....	.....	7	.....	.....	.....	.....
2	9	7	.....	.....	.....	7	.....	.....	2	.....
3	17	9	.....	.....	.....	9	2	3	1	2
4	17	13	4	.....	5	4	1	1	2	.....
5	31	22	12	3	2	5	2	5	2	.....
6	56	40	32	3	2	3	2	7	7	.....
7	69	60	32	15	2	11	2	2	2	.....
8	69	54	30	10	1	13	4	2	8	.....
9	48	42	30	4	1	7	1	2	1	1	
10	57	41	25	7	.....	9	2	4	6	1
11	27	26	18	4	.....	4	.....	.....	1	.....
12	43	33	18	7	2	6	1	5	1	1	
13	20	15	9	1	.....	5	.....	.....	2	.....
14	38	34	20	3	3	8	1	1	1	.....
15	38	26	17	4	3	2	.....	3	5	3
16	39	28	15	6	3	4	3	4	2	.....
17	40	29	15	6	2	6	1	2	1	1	
18	38	25	12	9	1	3	3	6	4	.....
19	15	15	9	5	.....	1	.....	.....	.....	.....
20	41	28	16	5	2	5	.....	6	5	2
21	16	14	7	3	1	3	1	.....	.....	1
22	23	19	15	2	2	.....	1	1	1	.....
23	28	26	21	2	1	2	.....	.....	.....	1
24	18	16	12	2	.....	2	1	1	.....	.....
25	23	18	13	2	1	2	2	2	.....	1
26	7	7	4	2	1	.....	.....	.....	.....	.....
27	12	11	6	3	.....	2	.....	1	.....	.....
28	13	11	10	.....	1	.....	1	.....	.....	1
29	12	10	5	3	1	1	1	1	.....	.....
30	32	27	21	2	1	3	.....	3	2	.....
31	10	10	8	1	.....	1	.....	.....	.....	.....
32	14	10	7	3	.....	.....	2	2	.....	.....
33	18	17	14	1	.....	2	.....	1	.....	.....
34	10	9	7	1	.....	1	.....	1	.....	.....
35	16	11	8	2	.....	1	1	3	1	.....

TABLE 4.—SHOWING NUMBER OF YEARS JOURNEYMEN HAVE BEEN AT WORK.—Continued.

Glass Workers.—Continued.

Number of years at work.	Total.	BLOWERS.					WINDOW GLASS.		Master shears.	Pot makers.	Stopper grinders.
		Total.	Green bottle.	FLINT.		Window.	Flatteners.	Cutters.			
				Prescript'n.	Regular.						
36	15	13	12	.....	.....	1	.....	2	.....	.....	.....
37	10	10	7	1	.....	2	.....	.....	.....	.....	.....
38	4	3	.....	2	.....	1	.....	1	.....	.....	.....
39	10	9	6	1	.....	2	.....	1	.....	.....	.....
40	13	11	8	1	.....	2	.....	2	.....	.....	.....
41	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....
42	5	3	2	.....	1	.....	1	1	.....	.....	.....
43	4	4	2	.....	.....	2	.....	.....	.....	.....	.....
44	2	1	1	.....	.....	.....	1	.....	.....	.....	.....
45	5	4	4	.....	.....	.....	1	.....	.....	.....	.....
54	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....

TABLE 4.—SHOWING NUMBER OF YEARS JOURNEYMAN HAVE BEEN AT WORK.—Continued.

Hatters.

Number of years at work.	Total.	Finishers.	Makers.	Pouncers.
1	7	1	6	..
2	6	1	5	..
3	38	14	24	..
4	63	40	23	..
5	120	75	45	..
6	141	70	68	3
7	168	84	80	4
8	114	54	58	2
9	125	70	50	5
10	145	70	71	4
11	120	60	57	3
12	109	50	55	4
13	129	72	55	2
14	82	40	39	3
15	85	41	40	4
16	84	50	29	5
17	91	45	42	4
18	108	57	45	6
19	70	40	27	3
20	65	27	34	4
21	73	41	31	1
22	53	23	28	2
23	49	22	27	..
24	59	28	28	3
25	47	28	19	..
26	33	14	16	3
27	29	15	14	..
28	46	19	23	4
29	39	14	25	..
30	32	15	17	..
31	26	13	11	2
32	24	5	12	..
33	14	5	9	..
34	21	6	15	..
35	31	12	18	1
36	19	7	12	..
37	14	7	7	..
38	16	4	12	..

TABLE 4.—SHOWING NUMBER OF YEARS JOURNEYMEN HAVE BEEN AT WORK.—Continued.

Hatters.

Number of years at work.	Total.	Finishers.	Makers.	Pouncers.
39	12	3	9	..
40	5	1	4	..
41	6	2	4	..
42	10	3	7	..
43	3	1	2	..
44	9	2	7	..
45	6	1	5	..
46	3	1	2	..
47	5	..	4	1
48	2	..	2	..
49	1	..	1	..
50	4	1	3	..
51	1	..	1	..
52	4	2	2	..
53	1	..	1	..
54	1	..	1	..
55	2	..	2	..
56	1	..	1	..
57	1	..	1	..
58	1	1	..	..
59	1	..	1	..
61	2	..	2	..
70	1	..	1	..

TABLE 4.—SHOWING NUMBER OF YEARS JOURNEYMEN HAVE BEEN AT WORK.—Continued.

Potters.

No. of years at work.	Total.	Mould makers.	Jiggersmen.	Turners.	Handlers.	Pressers.	Throwers.	Saggermakers.	Kilnmen.	Dippers.	Decorators.	Packers and warehousemen.
3	4				1				3			
4	23		2	1	1	7			9		2	1
5	47	1	4			17			21	1		3
6	68	2	6		1	22			26	1	5	3
7	48	1		2		26		1	10	1	4	3
8	70	2	5	4		29		2	22		5	1
9	60			4	2	30			15		5	4
10	62	1	1	3	1	28		2	17		5	4
11	52		5	3	3	18		2	10	1	8	2
12	65	1	2	2	5	31		3	10	3	4	4
13	54		1	1	2	27			18	1	3	1
14	48		6	1	1	15		4	13	1	5	2
15	45		7	1	1	25		1	7	1	1	1
16	38		2		2	11		1	15	3	2	2
17	35		5	1		13			9		1	6
18	34	2	6		1	10			11		2	2
19	27		2	2	1	11	1		6		2	2
20	63		11	1		26		3	14	1	5	2
21	19		2	1		9		1	3	1	1	1
22	23		1	2	1	7			7	2	1	2
23	22		2		1	11		1	5		2	
24	25		5			9			7	3		1
25	24	3	2	1	1	8		2	4	2	1	
26	16		4		1	5			5		1	
27	15		2		1	7		1	3	1		
28	16	2	3		1	5			4	1		
29	13	1	1			6			3	1		1
30	20	3	2	2	1	4		2	4	1	1	
31	9	1	3	1		3			1			
32	9		1	1		6			1			
33	6		1	2	1	2						
34	9		4			2	1		1	1		

TABLE 4.—SHOWING NUMBER OF YEARS JOURNEYMEN HAVE BEEN AT WORK.—Continued.

Potters.—Continued.

No. of years at work.	Total.	Mould makers.	Jiggersmen.	Turners.	Handlers.	Pressers.	Throwers.	Saggermakers.	Kilnmen.	Dippers.	Decorators.	Packers and warehousemen.
35	14	.....	.....	1	.....	7	1	.....	2	1	2	.....
36	6	.....	.....	1	.....	2	.....	.....	3	.....	.....	.....
37	2	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....
38	5	1	1	.....	.....	2	.....	.....	1	.....	.....	.....
39	6	.....	.....	.....	.....	3	.....	.....	3	.....	.....	.....
40	4	1	.....	.....	.....	2	.....	.....	1	.....	.....	.....
41	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
42	3	.....	.....	.....	.....	1	.....	.....	2	.....	.....	.....
43	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
47	3	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....
50	2	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
57	2	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....

SUMMARY OF TABLE IV.

TABLE IV—SUMMARY.

OCCUPATION.	Total number of journeymen.	PER CENT AT WORK FROM—											Average number of years at work.	
		One to five years.	Five to ten years.	Ten to fifteen years.	Fifteen to twenty years.	Twenty to twenty-five years.	Twenty-five to thirty years.	Thirty to thirty-five years.	Thirty-five to forty years.	Forty to forty-five years.	Forty-five to fifty years.	Fifty to sixty years.		Over sixty years.
GLASS—														
Workers.....	1040	7.8	28.7	16.0	16.6	10.4	7.3	6.6	5.0	1.5	.....	0.1	.....	.....
Blowers	828	6.9	28.4	16.2	15.1	11.2	8.0	6.9	3.6	1.5	.....	.....	.....	17.2
green, bottle.....	514	3.0	29.0	16.0	13.1	13.2	9.0	8.5	6.4	4.0	.....	.....	.....	18.3
flint, prescription..	126	2.4	30.9	15.1	24.6	8.7	7.9	6.4	4.0	.....	.....	.....	.....	15.2
" regular.....	39	17.9	15.4	20.5	20.5	12.8	10.3	.....	.....	2.6	.....	.....	.....	14.1
window.....	149	21.5	28.8	16.8	12.8	6.0	4.0	3.3	5.4	1.4	.....	.....	.....	18.7
Flatteners, window.....	39	12.8	28.2	5.1	18.0	12.8	5.1	7.7	.....	7.7	.....	2.6	.....	18.0
Cutters, "	76	11.8	22.4	11.8	23.7	5.3	6.6	9.2	7.9	1.3	.....	.....	.....	12.7
Master shearers.....	57	12.3	42.1	17.5	21.1	1.8	3.5	1.8	.....	.....	.....	.....	.....	15.7
Pot makers	15	13.3	13.3	26.7	20.0	20.0	6.7	.....	.....	.....	.....	.....	.....	14.2
Stopper grinders.....	25	.....	32.0	28.0	32.1	8.0	.....	.....	.....	.....	.....	.....	.....	.....
HATTERS	2577	9.1	26.8	21.0	16.2	10.9	6.9	4.5	2.1	1.3	0.6	0.5	0.1	.....
Finishers.....	1257	10.4	27.7	20.9	17.4	11.3	6.1	3.3	1.7	0.7	.2	0.3	.....	15.0

Makers.....	1247	8.3	26.2	19.7	14.2	10.6	7.6	5.8	3.5	2.0	0.9	0.8	0.3	15.5
Pouncers	73	.....	24.7	21.9	30.1	8.2	9.6	4.1	.....	.....	1.4	.....	.....	16.8
POTTERS.....	1122	6.6	27.7	23.5	17.6	10.1	7.2	4.2	2.1	0.4	0.4	2.0	.....	.....
Mould makers.....	22	4.5	27.3	4.5	9.1	13.7	27.3	4.5	9.1	.....	.....	.....	.....	21.6
Jiggermen.....	99	6.1	12.1	21.2	26.3	12.1	12.1	9.1	1.0	.....	.....	.....	.....	18.5
Turners.....	41	2.4	36.6	19.5	9.8	9.8	4.9	12.2	2.4	.....	2.4	.....	.....	17.0
Handlers.....	31	6.5	12.9	38.7	12.9	9.7	12.9	3.2	.....	.....	3.2	.....	.....	16.4
Pressers.....	455	5.3	30.1	25.5	15.6	9.7	5.9	4.4	2.2	0.7	0.4	0.2	.....	15.7
Throwers.....	3	.....	.....	.....	33.3	.....	.....	66.7	.....	.....	.....	.....	.....	29.3
Saggermakers.....	26	.....	19.2	38.4	15.4	15.4	11.6	.....	.....	.....	.....	.....	.....	16.7
Kilnmen.....	297	11.1	30.3	19.5	18.5	8.8	6.4	1.7	3.0	0.7	.....	.....	.....	14.5
Dippers.....	30	3.3	6.7	23.4	13.3	26.7	13.3	6.7	.....	.....	3.3	3.3	.....	21.8
Decorators.....	68	2.9	35.3	30.9	17.7	7.4	2.9	2.9	.....	.....	.....	.....	.....	13.4
Packers and warehousemen.....	50	8.0	32.0	20.0	28.0	8.0	2.0	.....	.....	.....	.....	.....	.....	12.8

TABLE 5.—SHOWING NATIVITY OF JOURNEYMEN.

OCCUPATION.	Total number reported.	PLACE OF BIRTH.										Father's occupation the same.
		American.	Foreign.	New Jersey.	Ireland.	England.	Germany.	Austria.	Italy.	Russia.	Other foreign countries.	
GLASS WORKERS	1,040	965	75	878	19	9	42	.....	.....	1	6	218
Blowers.....	828	762	66	692	16	8	38	.....	.....	1	5	184
Green, bottle.....	514	499	15	454	7	2	6	.....	.....	.....	2	112
Flint, prescription.....	126	98	28	80	8	.....	18	.....	.....	1	1	22
regular.....	39	20	19	18	1	4	13	.....	.....	.....	1	6
Window glass.....	149	145	4	140	.....	2	1	.....	.....	.....	1	44
Window Glass flatteners	39	39	.....	39	.....	.....	.....	.....	.....	.....	.....	9
cutters.....	76	76	.....	72	.....	.....	.....	.....	.....	.....	.....	16
Master shearers.....	57	52	5	48	3	1	1	.....	.....	.....	.....	2
Pot makers.....	15	11	4	10	.....	.....	3	.....	.....	.....	1	4
Stopper grinders.....	25	25	.....	17	.....	.....	.....	.....	.....	.....	.....	4
HATTERS	2,577	1,456	1,121	1,152	327	113	336	59	154	49	83	477
Finishers.....	1,257	868	389	693	108	70	107	22	13	20	49	256
Makers.....	1,247	547	700	424	199	41	223	37	140	29	31	211
Pouncers.....	73	41	32	30	20	2	6	.....	1	.....	3	10
POTTERS.....	1,122	500	622	345	99	406	38	2	1	2	74	355
Mould makers.....	22	5	17	3	.....	15	.....	.....	.....	.....	2	18
Jiggers.....	99	35	64	23	4	48	3	.....	.....	.....	9	43

Turners.....	41	14	27	11	2	19	1	.....	.....	.....	5	13
Handlers.....	31	17	14	9	.....	13	1	.....	.....	.....	.....	10
Pressers.....	455	223	232	155	21	162	15	2	.....	.....	32	157
Throwers.....	3	.....	3	.....	.....	3	.....	.....	.....	.....	.....	3
Saggemakers.....	26	9	17	7	6	9	1	.....	1	.....	.....	8
Kilnmen.....	297	133	164	90	55	81	13	.....	.....	1	14	61
Dippers.....	30	11	19	10	6	5	1	.....	.....	.....	7	9
Decorators.....	68	23	45	16	.....	41	3	.....	.....	.....	1	22
Packers and warehousemen.....	50	30	20	21	5	10	.....	.....	.....	1	4	11



SUMMARY OF TABLE V.

TABLE V—SUMMARY.

OCCUPATION.	Total number reported.	PER CENT.—		PER CENT. BORN IN—										Per cent. whose father's occupation was the same.		
		American born.	Foreign born.	New Jersey.	Ireland.	England.	Germany.	Austria.	Italy.	Russia.	Other foreign countries.					
GLASS WORKERS.	1,040	93.2	6.8	84.4	1.8	0.9	4.0	.....	.....	.....	.....	.....	.....	.....	.....	21.0
Blowers.....	828	92.0	8.0	83.6	1.9	1.0	4.6	.....	.....	.....	.....	.....	.....	.....	.....	21.7
Green, bottle.....	514	97.1	2.9	88.3	1.3	0.4	1.1	.....	.....	.....	.....	.....	.....	.....	.....	21.8
Flint, prescription.....	126	77.8	22.2	63.5	6.3	.....	14.3	.....	.....	.....	.....	.....	.....	.....	.....	17.5
" regular.....	39	51.3	48.7	46.1	2.7	10.3	33.3	.....	.....	.....	.....	.....	.....	.....	.....	15.4
Window, glass.....	149	97.3	2.7	94.0	.....	1.4	0.7	.....	.....	.....	.....	.....	.....	.....	.....	29.5
Window glass flatteners.....	39	100.0	.....	100.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23.1
Cutters.....	76	100.0	.....	95.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21.0
Master shearers.....	57	91.2	8.8	84.2	5.3	1.8	1.8	.....	.....	.....	.....	.....	.....	.....	.....	3.5
Potmakers.....	15	73.3	26.7	66.7	.....	.....	20.0	.....	.....	.....	.....	.....	.....	.....	.....	26.7
Stopper grinders.....	25	100.0	.....	68.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16.0
HATTERS.....	2,577	56.5	43.5	44.7	12.6	4.4	13.1	2.3	.....	.....	.....	.....	.....	.....	.....	18.5
Finishers.....	1,257	68.2	31.8	55.5	8.6	5.6	8.7	17.0	.....	.....	.....	.....	.....	.....	.....	20.3
Makers.....	1,247	43.8	56.2	34.0	16.0	3.3	17.9	3.0	.....	.....	.....	.....	.....	.....	.....	16.9

Pouncers	73	56.1	43.9	41.1	27.4	2.7	8.2	.....	1.4	.....	4.2	13.7
POTTERS	1,122	44.5	55.5	30.7	8.8	36.2	3.4	0.2	0.1	0.2	6.6	31.6
Mould makers.....	22	22.7	77.3	13.6	.....	68.2	.....	.....	.....	.....	9.1	81.8
Jiggermen	99	35.4	64.6	23.2	4.0	49.5	3.0	.....	.....	.....	9.1	44.5
Turners.....	41	34.1	65.9	26.8	4.8	46.3	2.4	.....	.....	.....	12.1	31.7
Handlers.....	31	54.8	45.2	28.9	.....	41.3	3.2	.....	.....	.....	.....	32.3
Pressers	455	49.0	51.0	34.1	4.6	35.6	3.3	0.3	.....	.....	7.0	34.5
Throwers.....	3	.....	100.0	.....	.....	100.0	.....	.....	.....	.....	.....	100.0
Saggermakers.....	26	34.6	65.4	26.9	23.1	34.6	3.9	.....	3.9	.....	.....	30.8
Kilnmen.....	297	44.8	55.2	30.3	18.5	27.3	4.4	.....	.....	0.3	4.7	20.5
Dippers.....	30	36.7	63.3	33.3	20.0	16.7	3.3	.....	.....	.....	23.3	30.0
Decorators.....	68	33.8	66.2	23.5	.....	60.3	4.4	.....	.....	.....	1.5	32.3
Packers and warehousemen.....	50	60.0	40.0	42.0	10.0	20.0	.....	.....	.....	2.0	8.0	22.0

Table 6.—Showing the Ages of Incapacitated Workmen, or of Those Who Have Left the Trade.*

Glass Blowers (Green and Bottle.)

Age when became incapacitated.	Number reported.	Average number of years at work.	Number reporting time of decline.	Average number of years at work when began to decline.
20	2	4.	2	3.5
21	2	4.	2	3.
22	3	3.	2	3
23	6	5.8	4	5.1
24	3	7	3	7.
25	6	8.	3	5.3
26	5	8.2	4	7.7
27	5	8.8	4	7.
28	6	10.1	6	9.
29	2	8.	2	6.5
30	19	11.8	9	10.1
31	1	12.	1	11.
32	9	14.1	6	12.4
33	6	14.5	4	9.5
34	6	15.5	4	14.
35	13	17.1	9	14.2
36	6	18.1	3	15.3
37	2	19.	2	16.5
38	4	20	4	19.
39	5	21.4	4	20.2
40	21	21.3	11	18.6
41	4	22.2	1	22.
42	2	24.	1	17.
43	3	25.6	1	22.
44	4	26.5	3	21.
45	15	25.1	4	21.7
47	3	29.	2	28.5
48	12	27.	5	26.
49	9	30.4	7	25.4
50	19	31	8	26.
51	6	21.5	5	26.
52	5	31.4	3	28.
53	5	34	4	28.
54	3	34.3	2	32.5

* Including deaths, but exclusive of those at present at work and reported in preceding tables.

TABLE 6.—SHOWING THE AGES OF INCAPACITATED WORKMEN,
OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.*Glass Blowers—(Green and Bottle.)*

Age when became incapacitated.	Number reported.	Average number of years at work.	Number reporting time of decline.	Average number of years at work when began to decline.
55	13	36.	12	30.6
56	5	37.6	5	31.8
57	3	39.	2	24.5
58	12	37.6	12	28.5
59	4	40.2	4	34.2
60	9	41.3	8	30.7
61	2	42.5	2	31.5
62	6	43.7	6	30.3
63	7	44.	7	30.9
64	2	41.5	2	34.
65	2	39.	2	26.5
67	1	45.	..	.....
70	2	54.	2	35.
Total.....	389	.....	199	.....
Average ... 43.5	.....	24.	.....	20.6

TABLE 6.—SHOWING THE AGES OF INCAPACITATED WORKMEN,
OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.*Glass Blowers.—Flint, Prescription*

Age when began inca- pacitated.	Number reported.	Average number of years at work.	Number reporting time of decline.	Average number of years at work when began to decline.
20	1	3.	1	1.
21	1	2.	1	1.
22	1	6.	1	4.
24	1	7.	1	5.
25	3	7.7	3	5.7
26	1	7.	1	5.
27	4	10.7	4	8.7
28	2	10.	2	8.
29	2	11.5	1	9.
30	1	12.	1	10.
33	1	15.	1	12.
34	2	16.5	2	14.5
35	4	16.	4	14.
36	2	17.5	1	11.
37	2	17.5	2	16.
38	6	19.3	6	15.
39	1	20.	1	18.
40	7	21.4	7	19.4
41	2	20.5	2	18.5
42	2	22.	2	20.5
44	2	25.	2	22.5
45	4	26.	4	23.
46	1	27.	1	22.
47	2	26.5	2	25.5
48	4	29.	3	26.6
49	1	28.	1	25.
50	6	31.5	6	29.
52	4	33.5	4	29.
53	2	32.5	2	28.
54	1	32.	1	28.
55	2	28.	1	28.
56	1	39.	1	30.
58	2	40.	2	29.
59	1	41.	1	33.
60	2	41.	2	34.

TABLE 6.—SHOWING THE AGES OF INCAPACITATED WORKMEN,
OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.*Glass Blowers.—Flint, Prescription.—Continued.*

Age when became incapacitated.	Number reported.	Average number of years at work.	Number reporting time of decline.	Average number of years at work when began to decline.
64	1	44.	1	32.
65	1	45.	1	24.
Total.....	83	.....	79	.....
Average..41.4	.....	22.8	.....	20.

TABLE 6.—SHOWING THE AGES OF INCAPACITATED WORKMEN,
OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.*Window Glass Blowers.*

Age when became inca- pacitated.	Number reported.	Average number of years at work.	Number reporting time of decline.	Average number of years at work when began to decline.
22	1	3.	..	....
23	1	4.	..	....
26	1	5.	1	4
28	3	7.	2	5.
29	1	10.	1	7.
30	1	12.	..	....
34	1	15.	..	....
35	1	15.	..	....
36	1	16.	..	....
38	2	18.	1	16.
39	4	18.7	2	15.5
40	7	20.	5	16.
44	4	24.	2	21.
45	4	25.	2	22.5
48	8	26.	6	24.
49	6	29.	5	25.
50	13	29.3	9	28.
52	1	30.	1	24.
53	3	31.	3	26.6
54	3	33.6	3	31.
55	1	33.	1	29.
56	5	32.4	5	27.2
57	1	34.	1	28.
58	2	37.	2	30.5
59	3	37.6	3	32.6
60	5	39.2	5	32.
61	1	40.	1	31.
62	5	37.2	5	31.4
63	6	40.7	6	33.5
64	1	42.	1	33.
65	5	41.8	5	29.4
66	1	45.	1	34.
69	1	45.	1	34.
73	1	40.	1	30.
Total.....	104	.....	81	.....
Average..49	.....	29.	.....	26.

TABLE 6 —SHOWING THE AGES OF INCAPACITATED WORKMEN,
OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.*Window Glass Cutters*

Age when became incapacitated.	Number reported.	Average number of years worked.	Number reporting time of decline.	Average number of years at work when began to decline.
20	1	1.	1	5.
26	1	7.	1	6.
30	2	10.	2	8.
34	1	15.	1	13.
35	1	15.	..	..
37	1	20.	1	18.
40	1	20.	1	19.
44	2	25	2	23 5
45	2	25.	1	23.
49	2	30 5	1	30.
50	1	30.	..	..
52	1	30.	1	30.
55	1	37.	1	31.
57	1	36.	1	34.
59	3	39 6	3	37.3
60	1	40.	1	33.
63	1	40.	1	39.
64	1	44.	1	38.
66	1	42.	1	38.
Total.....	25	.....	21	.....
Average..47.	.....	27.	.....	25 3

TABLE 6.—SHOWING THE AGES OF INCAPACITATED WORKMEN,
OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.*Glass Flatteners.*

Age when became incapacitated.	Number reported.	Average number of years worked.	Number reporting time of decline.	Average number of years at work when began to decline.
24	2	4.5	1	3.
25	1	5.	1	4.
35	1	15.	..	..
38	1	12.	..	..
44	2	22.5	..	..
45	1	24.	..	..
50	1	26.	1	24.
52	1	33.	1	31.
54	1	34.	1	30.
59	1	39.	1	36.
Total.....	12	.....	6	.....
Average..41.	.....	21	.....	21

TABLE 6.—SHOWING THE AGES OF INCAPACITATED WORKMEN OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.

Hat Finishers.

Age when became incapacitated.	Number reported.	Average number of years worked.	Number reporting time of decline.	Average number of years at work when began to decline.
28	1	11	1	8.
30	1	13.	1	11.
31	3	13.3	3	12.
34	3	17.	3	12.3
35	3	18	3	14.3
36	2	18.5	2	16.5
37	3	21.	3	18.
38	4	19.	4	15.2
41	1	24	1	21.
43	1	26.	1	21.
45	1	25.	1	23.
47	3	27.	1	22.3
49	1	29.	1	25.
54	1	27.	1	21.
55	1	41.	1	31
60	1	37.	1	27.
Total.....	30	.....	30	.....
Average..38.	.....	20.8	.....	17.3

TABLE 6.—SHOWING THE AGES OF INCAPACITATED WORKMEN,
OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.*Hat Makers and Pouncers.*

Age when inca- pacitated.	Number reported.	Average number of years at work.	Number reporting time of decline.	Average number of years at work when began to decline.
32	2	15.5	2	12
33	3	16.3	3	13.5
38	2	22.	2	18.
48	1	34.	1	29.
50	1	36.	1	32.
52	1	35.	1	11.
54	1	36.	1	29.
57	1	40.	1	23.
70	1	53.	1	43.
Total.....	13	.....	12	.....
Average..48.	.....	27.4	.....	20.6

TABLE 6.—SHOWING THE AGES OF INCAPACITATED WORKMEN, OR OF THOSE WHO HAVE LEFT THE TRADE.—Continued.

Potters.

Age when began incapacitated.	Number reported.	Average number of years at work.	Number reporting time of decline.	Average number of years at work when began to decline.
30	2	14.5	2	14.
34	2	20.5	2	14.5
37	1	28.	1	21.
42	1	28.	1	26.
43	1	26.	1	18.
45	1	27.	1	17.
47	1	32	1	29.
50	2	28.	1	27.
53	1	20.	1	7.
Total.....	12	.....	11	.....
Average..41.	.....	23.6	.....	18.4

SUMMARY OF TABLE VI.

TABLE VI—SUMMARY.

OCCUPATION	Total number incapacitated.	PER CENT. OF THOSE REPORTED INCAPACITATED AT THE AGE OF—								Average age when became incapacitated.	Average number of years at work when became incapacitated.	Average number of years at work when began to decline.
		Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.			
GLASS BLOWERS, green bottle.....	289	7.7	12.8	11.8	13.2	9.7	14.6	22.5	7.7	43.5	24.0	20.6
flint, prescription ...	83	8.4	12.1	8.4	21.7	12.1	16.8	18.1	2.4	41.4	22.8	20.0
window	104	1.9	5.8	1.9	13.4	7.7	26.0	23.1	20.2	49.0	29.0	26.0
Flatteners, window.....	12	25.0	.....	8.3	8.3	25.0	8.3	25.0	.....	41.0	21.0	21.0
Cutters, "	25	4.0	12.0	8.0	8.0	16.0	12.0	28.0	12.0	47.0	27.0	25.3
HAT FINISHERS	30	.....	6.7	30.0	30.0	10.0	13.3	10.0	.....	38.0	20.8	17.3
Makers and pouncers.....	13	.....	.....	38.4	15.5	.....	15.5	23.1	7.7	48.0	27.4	20.6
POTTERS.....	12	.....	16.6	16.6	8.4	25.0	25.0	8.4	.....	41.0	23.6	18.4

TABLE VII. GENERAL SUMMARY.

Table VII.—Showing Summary of Causes of Decline of Journeymen at Trade.

Glass Blowers—Green Bottle and Vial.

CAUSE OF DECLINE.	Total Number.	Per Cent.	AGE OF DECLINE.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Stiffening of joints.....	71.	39.0	.....	.....	.....	14	27	30	.....	.....	44.9
Throat and lung affected.....	35	19.3	9	4	6	13	.....	2	1	.....	33.8
Liver complaint.....	5	2.7	1	1	.....	2	.....	1	.....	.....	35.0
Dyspepsia.....	11	6.1	2	3	1	2	3	.....	.....	.....	35.1
Rheumatism.....	15	.3	.....	4	1	2	5	2	.....	.....	39.3
Eyesight failed.....	19	10.5	.....	.....	.....	9	7	3	.....	.....	42.0
General debility.....	12	7.0	.....	.....	1	4	4	3	.....	.....	41.8
Kidney disease.....	2	1.1	1	.....	1	.....	.....	.....	.....	.....	30.0
Heart trouble.....	1	0.5	1	.....	.....	.....	.....	.....	.....	.....	22.0
Breast affected.....	2	1.1	1	.....	.....	.....	1	.....	.....	.....	33.5
Overheating.....	2	1.1	.....	1	.....	1	.....	.....	.....	.....	33.5
Rupture.....	1	0.5	.....	.....	1	.....	.....	.....	.....	.....	35.0
Wounded in war.....	1	0.5	.....	.....	.....	1	.....	.....	.....	.....	1.0
Head affected.....	2	1.1	.....	.....	.....	1	.....	1	.....	.....	43.0
Piles.....	1	0.5	.....	.....	.....	1	.....	.....	.....	.....	40.0
Asthma.....	1	0.5	.....	.....	.....	.....	1	.....	.....	.....	40.0
Paralysis.....	1	0.5	.....	.....	.....	.....	.....	1	.....	.....	41.0

TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT WORK.—Continued.

Glass Blowers—Flint Prescription.

CAUSE OF DECLINE.	Total number.	Per cent.	AGE OF DECLINE							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Stiffening of joints.....	18	50.0				2	6	10			45.0
Throat and lung affected.....	11	30.6	6	2		2	1				29.0
Liver complaint.....	1	2.8					1				43.0
Dyspepsia.....	1	2.0			1						34.0
Rheumatism.....	2	5.5		1			1				35.5
Eyesight failed.....	1	2.8					1				44.0
General debility.....	2	5.5				1	1				45.0

Window Glass Blowers.

General debility.....	4	40.0				1		3			47.0
Stiffening of joints.....	5	50.0						3	2		52.0
Pain in back.....	1	10.0				1					40.0

TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Glass Workers—Master Shearers.

CAUSE OF DECLINE.	Total Number.	Per Cent.	AGE OF DECLINE.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Eyesight failed.....	1	10.0					1				41.0
General debility.....	5	50.0			1		4				42.0
Stiffening of joints.....	3	30.0					1		2		52.0
Weak back.....	1	10.0						1			50.0

Glass Workers—Pot Makers.

Throat and lung affected.....	8	10.0		1	4	1	1	1			43.0
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TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT TRADE—Continued.

Hat Finishers.

CAUSE OF DECLINE.	Total Number.	Per Cent.	AGE OF DECLINE.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Hatters' Shakes.....	111	71.6	8	19	35	38	8	3	.....	.....	34.9
Lung and throat affected.....	22	14.2	1	11	7	2	.....	1	.....	.....	31.5
Consumption.....	4	2.6	1	.....	1	.....	1	1	.....	.....	37.0
Rheumatism.....	9	5.8	1	1	2	4	1	.....	.....	.....	37.0
Catarrh.....	2	1.3	1	.....	1	.....	.....	.....	.....	.....	27.5
Bright's disease.....	2	1.3	1	.....	1	.....	.....	.....	.....	.....	29.5
Nervousness.....	1	.7	.....	.....	.....	.....	1	.....	.....	.....	42.0
Unknown.....	1	.7	.....	1	.....	.....	.....	.....	.....	.....	27.0
Stomach affected.....	1	.7	1	.....	.....	.....	.....	.....	.....	.....	25.0
Pleurisy.....	1	.7	.....	.....	1	.....	.....	.....	.....	.....	31.0
Kidney affected.....	1	.7	.....	.....	.....	1	.....	.....	.....	.....	38.0

TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT WORK.—Continued.

Hat Makers.

CAUSE OF DECLINE.	Total Number	Per Cent.	AGE OF DECLINE.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Hatters' shakes.....	117	51.8	5	7	16	51	14	17	7	.....	39.5
Lung and throat affected.....	15	6.7	2	3	4	4	.....	2	.....	.....	33.5
Consumption.....	2	.9	.....	1	.....	.....	1	.....	.....	.....	36.5
Rheumatism.....	86	38.5	4	18	23	23	9	9	.....	.....	38.2
Hemorrhage.....	1	.4	1	.....	.....	.....	.....	.....	.....	.....	25.0
Cough.....	1	.4	1	.....	.....	.....	.....	.....	.....	.....	26.0
Kidney affected.....	1	.4	.....	.....	.....	1	.....	.....	.....	.....	39.0
General debility.....	3	1.3	.....	.....	.....	.....	.....	3	.....	.....	58.0

TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Potters—Mould Makers.

CAUSE OF DECLINE.	Total Number.	Per Cent.	AGE OF DECLINE.								
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.	Average.
Rheumatism.....	2	50.0	.....	.....	.....	2	.....	.....	.....	.....	38.5
Asthma.....	2	50.0	.....	.....	.....	1	1	.....	.....	.....	38.5

Potters—Jiggersmen.

Lungs affected.....	3	27.3	.....	1	1	1	.....	.....	.....	.....	35.0
Asthma.....	1	9.1	.....	.....	.....	1	.....	.....	.....	.....	40.0
Rheumatism.....	1	9.1	.....	1	.....	.....	.....	.....	.....	.....	29.0
Loss of strength.....	3	27.3	.....	1	.....	1	1	.....	.....	.....	38.0
Throat affected.....	1	9.1	.....	.....	1	.....	.....	.....	.....	.....	35.0
Bronchitis.....	1	9.1	.....	.....	1	.....	.....	.....	.....	.....	35.0
Breathing affected.....	1	9.1	.....	.....	.....	1	.....	.....	.....	.....	37.0

TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMAN AT TRADE.—Continued.

Potters—Pressers.

CAUSE OF DECLINE.	Total Number.	Per Cent.	AGE OF DECLINE.							Average.		
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.	
Lungs affected.....	5	17.8			4	1						35.8
Asthma.....	8	28.6				5	2	1				41.7
Bronchial breathing affected.....	11	39.3	1	4	1	5						34.3
General debility.....	4	14.3			1		2	1				42.2

Potters—Kilnmen.

Affected by lead.....	10	31.3				8	2					40.0
Rheumatism.....	2	6.2		1	1							35.5
Stiffening of joints.....	3	9.4		1	1		1					34.3
General debility.....	8	25.0			1	4	3					43.2
Bowel trouble.....	4	12.5				4						38.6
Breathing affected.....	2	6.2			1	1						37.5
Affected by dust.....	2	6.2					1	1				45.0
Soreness in chest and back.....	1	3.1					1					45.0

TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT WORK.—Continued.

Potters.—Dippers.

CAUSE OF DECLINE.	Total fatal number.	Per cent.	AGE OF DECLINE.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Constipation.....	1	20.0						1			47.0
Lead colic.....	2	40.0				2					40.0
General debility.....	1	20.0				1					40.0
Hands paralyzed.....	1	20.0				1					40.0

Potters.—Saggermakers.

Rheumatism.....	3	75.0		2			1				33.0
Stiffness of joints.....	1	25.0					1				45.0

Potters.—Turners.

Breathing affected.....	2	33.3			1	1					37.5
Throat affected.....	1	16.7				1					37.0
Asthma.....	1	16.7				1					40.0
Stiffness of joints.....	2	33.3				1	1				41.0

TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Potters—Decorators.

CAUSE OF DECLINE	Total Number.	Per Cent.	AGE OF DECLINE.							Average.	
			Twenty to twenty-five.	Twenty five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Lung affected.....	1	20	.....	1	.....	.....	.....	.....	.....	.....	30.0
Constipation.....	1	20	.....	.....	1	.....	.....	.....	.....	.....	36.0
General debility.....	2	40	.....	.....	.....	2	.....	.....	.....	.....	38.5
Lead colic.....	1	20	.....	.....	.....	1	.....	.....	.....	.....	40.0

TABLE VIII. GENERAL SUMMARY.

Table VIII.—Showing Summary of Diseases of Journeymen Contracted at Trade.*

Glass Blowers.—Green (Bottle and Vial.)

DISEASES,	Total Number.	Per Cent.	AGE WHEN CONTRACTED.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty five to fifty.	Fifty to sixty.		Over sixty.
Throat.....	28	25.2	4	9	6	5	2	2	.....	.....	32.0
Dyspepsia.....	47	42.3	3	14	7	12	9	2	.....	.....	35.3
Liver complaint.....	22	20.0	2	6	5	4	4	1	.....	.....	34.7
Rheumatism.....	6	5.4	1	.....	3	2	.....	.....	.....	.....	33.3
Kidney affection.....	3	2.7	.....	1	1	.....	1	.....	.....	.....	33.3
Asthma.....	2	1.8	1	.....	.....	.....	1	.....	.....	.....	32.5
Billiousness.....	3	2.7	.....	2	1	.....	.....	.....	.....	.....	28.3

Glass Blowers—Flint, Prescription.

Throat disease.....	10	43.5	.....	4	3	3	.....	.....	.....	.....	29.3
Dyspepsia.....	7	30.4	.....	5	1	1	.....	.....	.....	.....	30.0
Liver complaint.....	3	13.0	.....	1	.....	2	.....	.....	.....	.....	32.3
Rheumatism.....	2	8.7	.....	2	.....	.....	.....	.....	.....	.....	28.5
Kidney disease.....	1	4.4	.....	1	.....	.....	.....	.....	.....	.....	30.0

*These data are compiled from answers to question 14 of blank (see above). They refer to diseases of journeymen actively engaged, who have been only temporarily affected, not seriously enough to be classed as having "declined."

TABLE VIII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued

Hat Finishers.

DISEASE.	Total Number.	Per Cent.	AGE WHEN CONTRACTED.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Consumption.....	4	57.1	1	3	.....	.....	1	.....	.....	.....	28.0
Catarrh.....	1	14.3	.....	.....	1	.....	.....	.....	.....	.....	33.0
Shakes.....	1	14.3	.....	.....	.....	.....	1	.....	.....	.....	44.0
Rheumatism.....	1	14.3	.....	.....	.....	.....	.....	1	.....	.....	46.0

Hat Makers.

Cold.....	1	33.3	1	.....	.....	.....	.....	.....	.....	.....	25.0
Rheumatism.....	1	33.3	1	35.0
Poisoning.....	1	33.3	1	57.0

Potters.—Throwers.

Asthma.....	1	100.0	1	50.0
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TABLE VIII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.
Potters—Jiggersmen.

CAUSE OF DECLINE.	Total Number.	Per Cent.	AGE OF DECLINE.								
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.	Average.
Asthma.....	6	86.0	.....	1	1	2	1	1	.....	.....	39.0
Bronchitis.....	1	14.0	.....	.....	.....	.....	1	.....	.....	.....	41.0
<i>Potters.—Turners</i>											
Asthma.....	2	66.6	.....	.....	.....	1	1	.....	.....	.....	39.0
Bronchitis.....	1	33.4	.....	.....	.....	1	.....	.....	.....	.....	38.0
<i>Potters—Handlers.</i>											
Asthma.....	3	100.0	.....	.....	.....	1	2	.....	.....	.....	41.0
<i>Potters.—Pressers.</i>											
Asthma.....	15	74.0	.....	3	4	4	3	2	.....	.....	37.0
Bronchitis.....	4	19.0	.....	.....	.....	4	.....	.....	.....	.....	37.0
Lung affected.....	1	3.5	.....	.....	.....	.....	1	.....	.....	.....	43.0
Breast affection.....	1	3.5	.....	.....	.....	.....	.....	.....	1	.....	56.0

TABLE VII.—SHOWING SUMMARY OF CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Potters—Saggermen.

CAUSE OF DECLINE.	Total Number.	Per Cent.	AGE OF DECLINE.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Rheumatism.....	1	100.							1	.....	51.

Potters.—Kilnmen.

Lead colic.....	8	80.0			3	2	3				37.0
Paralysis.....	1	10.0		1							30.0
Stiff limbs.....	1	10.0			1						36.0

Potters—Dippers.

Bowel.....	1	20.0			1						33.0
Lead colic.....	4	80.0				1	2	1			43.0

Potters.—Decorators.

Lead colic.....	1	100.0			1						31.0
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Potters.—Packers.

Asthma.....	1	100.0				1					36.0
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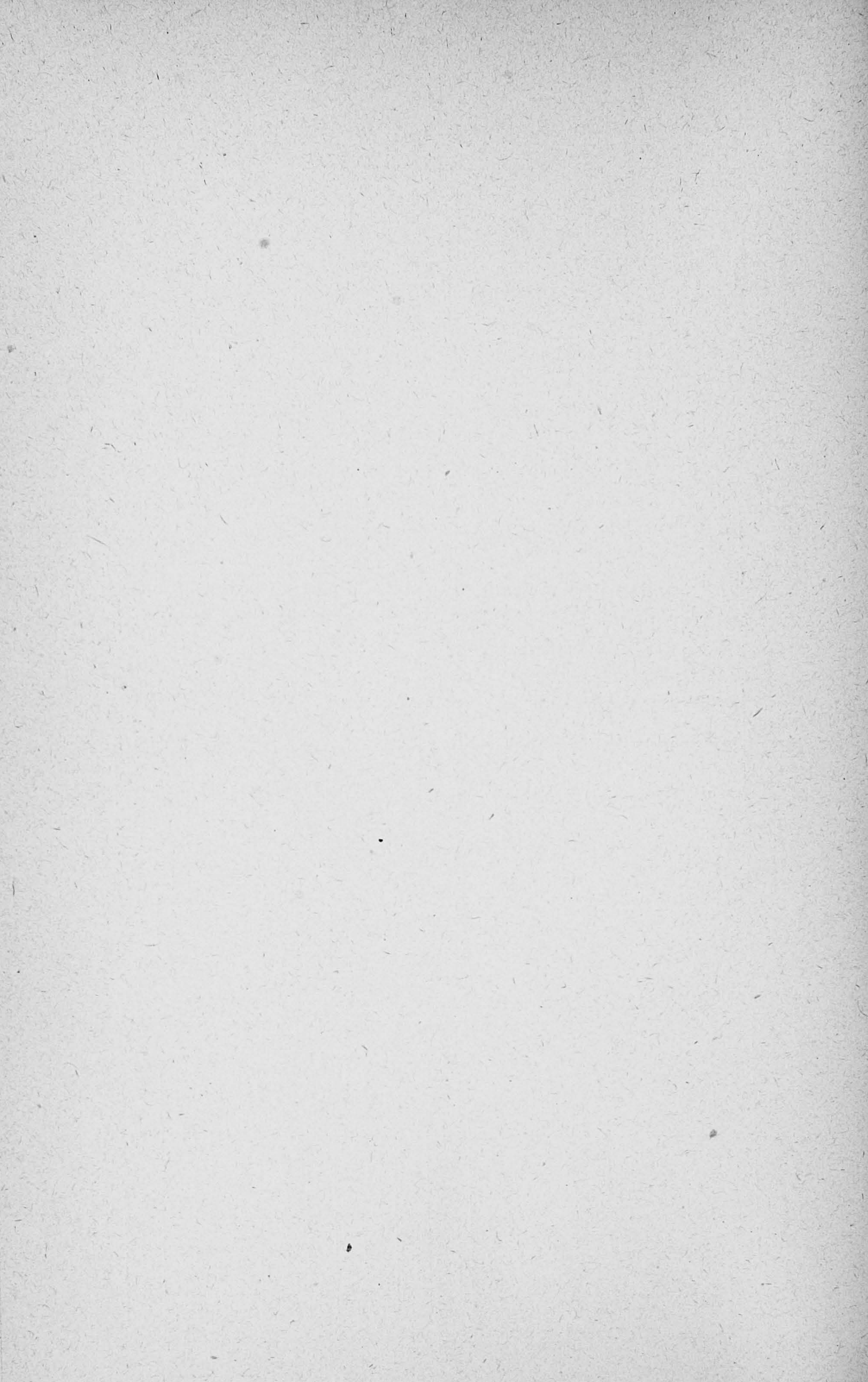


TABLE IX. GENERAL SUMMARY.

Table IX.—Showing Summary of Causes of Incapacity of Workmen.

Glass Blowers,—Green (Bottle and Vial).

CAUSE OF INCAPACITY.	Total number.	Per cent.	AGE OF INCAPACITY.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Consumption.....	61	44.8	12	20	7	15	3	2	2	.....	32.2
General debility.....	19	14.0	2	3	4	.....	1	6	3	.....	39.6
Throat affected.....	14	10.3	4	1	3	2	2	.....	2	.....	34.8
Liver complaint.....	12	8.8	2	1	3	3	.....	2	.....	.....	37.0
Stiffening of joints.....	7	5.1	.....	.....	.....	.....	2	4	.....	.....	48.0
Dyspepsia.....	6	4.5	.....	2	2	.....	.....	.....	.....	.....	39.1
Heart trouble.....	3	2.3	.....	.....	.....	.....	.....	.....	3	.....	53.3
Typhoid fever.....	3	2.3	1	.....	1	.....	.....	1	.....	.....	35.3
Kidney disease.....	2	1.5	.....	1	1	.....	.....	.....	.....	.....	32.5
Bowel trouble.....	2	1.5	.....	.....	.....	1	1	.....	.....	.....	42.0
Paralysis.....	1	.7	1	.....	.....	.....	.....	.....	.....	.....	23.0
Dissipation.....	1	.7	.....	.....	1	.....	.....	.....	.....	.....	34.0
Softening of brain.....	1	.7	.....	.....	.....	1	.....	.....	.....	.....	37.0
Cancer.....	1	.7	.....	.....	.....	1	.....	.....	.....	.....	38.0

TABLE IX.—SHOWING SUMMARY OF CAUSES OF INCAPACITY OF WORKMEN.—Continued.

Glass Blowers.—Green (Bottle and Vial).—Continued.

CAUSE OF INCAPACITY.	Total Number.	Per Cent.	AGE OF INCAPACITY.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Overheated.....	1	.7				1					40.0
Eyesight failed.....	1	.7						1			50.0
Nervous prostration.....	1	.7					1				43.0

Glass Blowers.—Flint, (Prescription).

Dyspepsia.....	15	26.3		1	1	4	5	1	3		42.7
Consumption.....	13	22.8	5	3	1	2	1	1			30.9
General debility.....	10	17.5		1		3	1	4	1		43.0
Throat affected.....	7	12.3	1	2	2		1		1		34.8
Liver complaint.....	4	7.0		1		3					34.7
Heart trouble.....	4	7.0		1	1			1	1		41.7
Eyesight failed.....	3	5.3					1	1	1		49.0
Spinal disease.....	1	1.8						1			50.0

TABLE IX.—SHOWING SUMMARY OF CAUSES OF INCAPACITY OF WORKMEN.—Continued.

Glass Blowers.—Window.

CAUSE OF INCAPACITY.	Total Number.	Per Cent.	AGE OF INCAPACITY.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
General debility.....	21	33.9	.....	.....	.....	2	2	.....	5	12	58.6
Dissipation and exposure.....	10	16.1	1	1	1	2	4	1	.....	.....	39.0
Consumption.....	9	14.5	.....	3	.....	2	2	2	.....	.....	40.0
Liver complaint.....	6	9.7	1	.....	.....	.....	.....	4	1	.....	45.0
Kidney disease.....	4	6.5	.....	.....	.....	.....	.....	.....	3	1	58.0
Dyspepsia.....	4	6.5	.....	.....	.....	1	2	.....	1	.....	49.0
Heart trouble.....	2	3.2	.....	.....	.....	1	.....	.....	1	.....	47.0
Head affected.....	2	3.2	.....	.....	.....	.....	.....	.....	1	1	58.0
Bronchitis.....	1	1.6	.....	.....	.....	1	.....	.....	.....	.....	38.0
Brain fever.....	1	1.6	.....	.....	.....	1	.....	.....	.....	.....	40.0
Rheumatism.....	1	1.6	.....	.....	.....	.....	1	.....	.....	.....	44.0
Paralysis.....	1	1.6	.....	.....	.....	.....	.....	.....	1	.....	55.0

TABLE IX.—SHOWING SUMMARY OF CAUSES OF INCAPACITY OF WORKMEN.—Continued.

Window Glass Flatteners.

CAUSE OF INCAPACITY.	Total Number.	Per Cent.	AGE OF INCAPACITY.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Rheumatism	2	29.0						1	1		54.0
Exposure	2	29.0	2								24.5
Consumption	1	14.0	1								24.0
Typhoid fever	1	14.0					1				44.0
General debility	1	14.0							1		52.0

Window Glass Cutters.

General debility	6	33.2							2	4	61.0
Consumption	3	16.6	1	1	1						28.0
Liver complaint	3	16.6		1		1	1				87.0
Throat affected	1	5.6			1						35.0
Rheumatism	1	5.6					1				45.0

TABLE IX.—SHOWING SUMMARY OF CAUSES OF INCAPACITY OF WORKMEN.—Continued.

Window Glass Cutters.

CAUSE OF INCAPACITY..	Total Number.	Per Cent.	AGE OF INCAPACITY.							Average.	
			Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.		Over sixty.
Bronchitis.....	1	5.6					1				30.0
Kidney disease.....	1	5.6						1			49.0
Apoplexy.....	1	5.6							1		59.0
Bilious fever.....	1	5.6					1				44.0

Table 10.—Showing Record and Cause of Deaths

Of Members of the Orange (New Jersey) Hat Finishers' Association.*

CAUSE OF DEATH.	NUMBER OF DEATHS.		AGE AT DEATH.									
	Total Number.	Per Cent.	Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.	Average.	Average number of years at work at death.
Consumption.....	79	74.6	21	22	17	16	1	2			31.	13.9
Bright's disease.....	6	5.7	1		3	2					34.	17.7
Heart failure.....	4	3.9			2	2					36.	21.2
Coma of brain.....	2	1.9	1				1				35.	18.
Cancer.....	1	.9				1					40.	23.
Dropsy.....	1	.9					1				42.	25.
Paralysis.....	1	.9			1						34.	17.
Peritonitis.....	1	.9				1					37.	20.
Pneumonia.....	1	.9					1				41.	24.
Rheumatism, chronic.....	1	.9			1						35.	20.
General debility.....	4	3.9						1	3		51.	35.5

* From 1880 to 1889, compiled from the official records of the local association. The average number of members has been 589.

TABLE 10.—SHOWING RECORD AND CAUSE OF DEATHS

Of Members of the Orange (New Jersey) Hat Finishers' Association.—Continued.

CAUSE OF DEATH.	NUMBER OF DEATHS.		AGE AT DEATH.									
	Total Number.	Per Cent.	Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.	Average.	Average number of years at work at death.
Accident.....	4	3.9	1	1	2	.....	.....	.....	.....	.....	31.	14.2
Suicide.....	1	.9	.....	.....	1	.....	.....	.....	.....	.....	35.	18.
Total.....	106	.....	24.	23	27	22	4	3	3	.....	33.	16.
Per Cent.....	.....	100.	23.	22.	26.	21.	4.	2.	2.	.....	.....	.....

Table 11.—Showing Record and Cause of Deaths.

*Of Members of the International Hat Finisher's Association.**

CAUSE OF DEATH.	NUMBER OF DEATHS.			AGE AT DEATH.									Total reported.	Average.
	Total.	Per Cent.	Per 100 members.†	Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.			
Consumption.....	34	44.0	1.2	4	8	6	5	2	1	1	.....	27	22.2
Heart disease.....	4	5.	.....	.....	.....	.....	1	.....	1	1	.....	3	47.
Typhoid fever.....	4	5.	.....	.....	.....	.....	1	1	.....	.....	.....	2	39.5
Pneumonia.....	4	5.	.....	.....	.....	1	.....	.....	2	1	.....	4	41.5
Bright's disease.....	3	4.	.....	.....	.....	.....	.....	1	1	.....	1	3	47.6
Dropsy.....	2	2.5	.....	.....	.....	1	.....	.....	.....	1	.....	2	29.
Hemorrhage of lungs.....	2	2.5	.....	.....	.....	.....	.....	.....	.....	1	.....	1	58.
Paralysis.....	2	2.5	.....	.....	.....	.....	.....	.....	.....	.....	1	1	62.
Typhoid malaria with heart disease...	2	2.5	.....	.....	.....	.....	1	.....	.....	.....	.....	2	45.5
Apoplexy.....	1	1.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cancer.....	1	1.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coma of brain.....	1	1.3	.....	.....	.....	.....	.....	.....	.....	1	.....	1	56.
Dysentery.....	1	1.3	.....	.....	1	.....	.....	.....	.....	.....	.....	1	47.
Gastric fever.....	1	1.3	.....	1	.....	.....	.....	.....	.....	.....	.....	1	28.
												1	24.	

* Total membership from September, 1888, to November, 1889. Compiled from the Official Semi-Annual Reports. † Total membership, 3,687.

TABLE 11.—SHOWING RECORD AND CAUSE OF DEATHS.

Of Members of the International Hat Finisher's Association.—Continued.

CAUSE OF DEATH.	NUMBER OF DEATHS			AGE AT DEATH.								Total reported.	Average.
	Total.	Per Cent.	Per 100 members.	Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.		
Heart failure.....	1	1.3							1			1	41.
Inflammation of bowels.....	1	1.3										1	73.
Liver complaint.....	1	1.3									1	1	23.
Peritonitis.....	1	1.3		1								1	36.
Remittent fever.....	1	1.3					1					1	60.
Rheumatism of bowels.....	1	1.3								1		1	69.
Rheumatism, chronic.....	1	1.3									1	1	70.
Tuberculosis.....	1	1.3									1	1	80.
Typhoid pneumonia.....	1	1.3									1	2	46.
Old age.....	1	1.3									1	2	34.
General debility.....	2	2.5					1		1			2	
Accident.....	4	5.0			1			1				2	
Total.....	78		2.1	6	10	8	10	5	8	8	6	61	39
Per cent.....		100.		10.	16.	13.	16.	9.	13	13.	10.	100.	

Table 12.—Showing the Record and Cause of Deaths

Of Members of the Newark N. J. Hat Finisher's Association*

CAUSE OF DEATH.	NUMBER OF DEATHS.		AGE AT DEATH.								
	Total.	Per Cent.	Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to sixty.	Over sixty.	Average age.
Consumption.....	9	65.	.....	3	3	1	1	.....	1	.....	34.4
Pneumonia.....	1	7.	.....	.....	.....	.....	1	.....	.....	.....	41.
Heart failure.....	1	7.	.....	.....	.....	.....	1	.....	.....	.....	41.
Rheumatism, chronic.....	1	7.	.....	.....	.....	.....	.....	.....	.....	1	69.
Paralysis.....	1	7.	.....	.....	.....	.....	.....	.....	.....	1	63.
Old age.....	1	7.	.....	.....	.....	.....	.....	.....	.....	1	80
Total.....	14	.....	.....	3	3	1	3	.....	1	3	43.1
Per cent.....		100.	.....	21.	21.	8.	21.	.....	8.	21.	.....

*For 1888-9.

Table No. 13.—Showing Membership and Number of Deaths

Of the Newark (N. J.) Hat Finisher's Association.

YEARS.	Membership.	Deaths.	Per cent.
1880.....	412	19	4.6
1881.....	462	9	2.
1882.....	526	18	3.4
1883.....	421	9	2.1
1884.....	505	7	1.4
1885.....	457	20	4.4
1886.....	479	10	2.1
1887.....	400	9	2.2
1888.....	381	7	1.8
1889.....	394	14	3.5
Average.....	443	12 2	2.7

Table 14.—Showing in Detail the Ages and Causes of Decline of Journeymen at Trade.

Glass Blowers.—Green (Bottle and Vial.)

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
21	Throat and lungs.	34	Throat, eyesight.
21	Lungs.	35	Kidneys.
22	Breast.	35	Throat.
22	Bronchitis.	35	Throat.
22	Heart and muscle.	35	Throat.
23	Bronchitis.	35	General decline, throat.
24	Throat, dyspepsia.	35	Rheumatism.
24	Dyspepsia, liver.	35	Rupture.
25	Kidneys.	36	Liver, kidneys.
25	Throat.	36	Eyesight.
25	Liver.	36	Indigestion, billiousness.
25	Dyspepsia.	36	Throat.
25	Throat.	36	Throat.
25	Throat.	37	Wounded in war.
25	Throat.	37	General debility.
27	Overheated.	37	Stiffness of joints.
28	Dyspepsia, catarrh.	38	Throat.
28	Rheumatism.	38	Eyes, liver.
29	Rheumatism.	38	Throat.
30	Liver.	38	Throat, lungs.
30	Rheumatism.	38	Lungs.
30	Rheumatism.	38	Stiffness of joints.
30	Throat.	38	Rheumatism.
30	Dyspepsia.	38	Throat.
30	Throat.	38	Liver, general debility.
30	Throat, general debility.	38	Indigestion, asthma.
30	Throat.	39	Eyesight.
30	Dyspepsia, liver.	39	Stiffness of joints, liver.
32	Throat.	40	Throat.
32	Dyspepsia, general debility.	40	Head affected.
34	Throat.	40	Stiffness of joints.
		40	Stiffness of joints.
		40	General debility.
		40	Stiffness of joints.

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Glass Blowers — Green (Bottle and Vial).—Continued.

AGE OF DECLINE.	CAUSE OF DECLINE	AGE OF DECLINE	CAUSE OF DECLINE.
40	General debility.	43	Stiffness of joints.
40	Throat.	43	Eyesight, dyspepsia.
40	Stiffness in joints.	43	Rheumatism.
40	Stiffness in joints.	43	Eyesight.
40	Overheated.	43	Eyesight.
40	General debility.		
40	Eyesight.	44	General debility.
40	Stiffness of joints.	44	Stiffness of joints.
40	Stiffness of joints, throat.	44	General debility, rheumatism.
40	Rheumatism.		
40	Eyesight, stiffness of joints.	45	Rheumatism.
40	Stiffness of joints.	45	Stiffness of joints in hand.
40	Piles, general debility.	45	Weakness in breast.
40	Throat.	45	Stiffness of joints, throat.
40	Throat.	45	Stiffness of joints, indigestion.
40	Throat.	45	Stiffness of joints, billiousness.
40	Throat.	45	Stiffness of joints, liver.
40	Rheumatism.	45	Stiffness of joints, liver.
40	Eyesight.	45	Eyesight.
40	Stiffness of joints.	45	Stiffness in joints, liver.
40	Eyesight.	45	Dyspepsia.
40	Stiffness of joints.	45	General debility.
40	Eyesight.	45	Dyspepsia.
40	Stiffness of joints.	45	Stiffness of joints, liver.
40	Eyesight.	45	Eyesight, stiffness of joints.
		45	Eyesight, stiffness of joints.
41	Eyesight.	45	Rheumatism.
41	Asthma.	45	Stiffness of joints.
		45	Stiffness of joints.
42	Dyspepsia, general debility.	45	Stiffness of joints, liver.
42	Stiffness of joints.	45	Rheumatism.
42	Stiffness of joints, throat.	45	Stiffness of joints.
42	Stiffness of joints, indigestion.	45	Rheumatism, eyesight.
42	Stiffness of joints, eyesight.	45	Stiffness of joints.
42	General debility.	45	Stiffness of joints, liver.
		45	Stiffness of joints in hand.
43	Stiffness of joints.	45	Stiffness of joints.
43	Stiffness of joints.	45	Stiffness of joints.
43	Stiffness of joints, eyesight.	46	Stiffness of joints.

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Glass Blowers — Green (Bottle and Vial).—Continued.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
46	Liver, piles.	48	Stiffness of joints, eyesight.
46	General debility.	48	Stiffness of joints, eyesight.
46	Liver.	48	Stiffness of joints, eyesight.
46	Affection in head, dizziness.	48	Stiffness of joints, dyspepsia.
46	Throat.	48	Stiffness of joints, eyesight.
46	Stiffness of joints.	48	Stiffness of joints, eyesight.
46	Eyesight, stiffness of joints.	48	Stiffness of joints, eyesight.
46	Throat, stiffness of joints.	48	Stiffness of joints, eyesight.
46	Eyesight.	48	Stiffness of joints.
46	Stiffness of joints.	48	Eyesight.
46	Stiffness of joints.	50	Rheumatism.
46	General debility.	50	Stiffness of joints
46	Rheumatism.	50	Stiffness of joints.
47	Stiffness of joints.	50	Stiffness of joints, eyesight.
47	Stiffness of joints, eyesight.	50	Stiffness of joints, eyesight.
47	Stiffness of joints, eyesight.	50	Stiffness of joints, eyesight.
47	Stiffness of joints, dyspepsia.	50	Stiffness of joints, eyesight.
47	Stiffness of joints.	50	Stiffness of joints, eyesight.
47	Stiffness of joints.	50	Stiffness of joints, eyesight.
47	Stiffness of joints, eyesight.	50	Stiffness of joints, dyspepsia.
47	General debility.	52	Throat.
48	Paralysis.		

TABLE 14—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Glass Blowers.—Flint, Prescription.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
20	Throat.	42	Stiffened joints, rheumatism.
20	Throat.	42	Stiffened joints, throat.
24	Lungs, kidneys.	43	Sunstroke.
24	Throat, lungs	43	Rheumatism.
24	Lungs, kidneys.	44	Stiff joints, kidneys.
24	Throat, lungs.	44	Eyesight, nervous.
27	Throat.	45	Stiffened joints, throat.
28	Rheumatism.	45	General debility.
29	Throat, dyspepsia.	45	Stiffness of joints, lame back.
34	Dyspepsia, liver.	46	Stiffness of joints, liver.
36	General debility.	46	Stiffness of joints.
38	Throat, liver.	46	Stiffness of joints.
38	Throat.	47	Stiffness of joints.
40	Stiffening of joints.	47	Stiffness of joints.
40	Stiffening of joints.	47	Stiffness of joints.
41	Stiffening of joints.	48	Stiffness of joints, throat.
42	Throat.	48	Stiffness of joints, dyspepsia.
		48	Stiffness of joints, eyesight.
		48	Stiffness of joints.

Glass Blowers.—Window.

40	General debility.	50	Stiffness of joints.
40	Pain in back, eyesight.	50	General debility.
48	General debility, weakness.	50	General debility.
50	Stiffness of joints.	54	Stiffness of joints.
50	Stiffness of joints.	55	Stiffness of joints, lame back.

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Glass Workers—Master Shearers.

Age when began to decline.	Number of years worked.	Present age.	CAUSE OF DECLINE.
35	7	38	General debility.
41	18	43	Eyesight.
43	12	47	Stiffness.
45	3	50	General debility.
45	20	50	General debility.
43	17	50	General debility.
45	15	50	General debility.
50	15	50	Weak back, general debility.
54	27	65	Stiffness.
60	10	65	Stiffness.

Pot Makers.

35	15	37	Throat, lungs.
35	15	40	Lungs.
35	15	40	Throat, lungs.
30	10	42	Lungs.
35	15	42	Lungs.
40	2	53	Lungs.
45	15	53	Lungs.
50	25	55	Lungs.

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Hat Finishers.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
20	Catarrh.	29	Lungs.
22	Lead and quicksilver poisoning, consumption.	29	Lungs, consumption
22	Hatters' shakes.	29	Lungs.
23	Lungs.	29	Shakes.
23	Hatters' shakes.	30	Shakes.
24	Shakes.	30	Shakes.
24	Bright's disease.	30	Shakes.
24	Shakes.	30	Shakes.
24	Shakes.	30	Poisoning, shakes.
24	Shakes.	30	Lungs.
24	Shakes.	30	Shakes.
24	Shakes.	30	Shakes.
24	Shakes.	30	Lungs.
24	Shakes.	30	Lungs.
25	Stomach first, afterwards shakes.	30	Lungs.
25	Shakes.	31	Rheumatism, shakes.
25	Rheumatism.	31	Pleurisy.
26	Shakes.	31	Shakes.
26	Shakes.	31	Lungs.
26	Shakes.	31	Lungs.
26	Shakes.	32	Shakes.
26	Shakes.	32	Shakes.
27	Unknown disease.	32	Shakes.
27	Shakes.	32	Shakes.
27	Lungs.	32	Shakes.
27	Lungs.	32	shakes.
27	Lungs.	32	Shakes.
27	Lungs.	32	Shakes.
28	Shakes.	32	Lungs.
28	Shakes.	32	Shakes.
28	Shakes.	33	Hatters' consumption.
28	Shakes.	33	Lungs.
28	Catarrh, shakes.	34	Mercurial poisoning, shakes.
28	Rheumatism.	34	Shakes.
28	Lungs.		

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Hat Finishers —Continued.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
34	Shakes	37	Shakes.
34	Shakes	37	Shakes.
34	Shakes.	37	Shakes.
34	Shakes.	37	Shakes.
34	Shake.	37	Shakes.
34	Shakes.	37	Shakes.
34	Shakes.		
34	Shakes	38	Shakes.
34	Shakes.	38	Shakes.
34	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Catarrh.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Rheumatism.
35	Shakes.	38	Kidneys.
35	Rheumatism.	38	Shakes.
35	Shakes.	38	Shakes.
35	Lungs.	38	Shakes.
35	Shakes.		
35	Shakes.	39	Rheumatism.
35	Bright's disease.		
35	Lungs.	40	Shakes.
35	Throat, lungs.	40	Shakes.
		40	Shakes.
36	Shakes.	40	Shakes.
36	Rheumatism.	40	Shakes.
36	Shakes.	40	Shakes.
36	Shakes.	40	Shakes.
36	Shakes.	40	Shakes.
36	Shakes.	40	Shakes.
36	Shakes.	40	Lungs.
36	Shakes.	40	Shakes.
36	Throathemorrhage.	40	Shakes.
		40	Shakes.
37	Shakes.	40	Shakes, rheumatism.

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Hat Finishers.—Continued.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
41	Rheumatism.	45	Shakes, sore mouth.
42	Nervousness.	45	Shakes.
42	Consumption.	47	Lungs.
43	Shakes.	50	Consumption.
43	Shakes.	50	Shakes.
45	Shakes.	52	Shakes.
45	Shakes.	55	Shakes.
45	Shakes.		
45	Shakes.		

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Hat Makers.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
20	Throat, lungs.	30	Shakes.
22	Shakes.	30	Shakes.
22	Shakes.	30	Shakes.
22	Rheumatism.	30	Lungs.
23	Shakes.	30	Rheumatism.
24	Shakes.	30	Rheumatism.
24	Shakes.	30	Rheumatism.
24	Rheumatism.	30	Rheumatism.
25	Lungs.	30	Rheumatism.
25	Rheumatism.	30	Rheumatism.
25	Rheumatism.	30	Rheumatism.
25	Hemorrhage.	30	Rheumatism.
26	Rheumatism.	30	Rheumatism.
26	Rheumatism.	30	Rheumatism.
26	Cough, pain in side.	30	Rheumatism.
26	Rheumatism.	30	Rheumatism.
26	Shakes.	30	Rheumatism.
27	Shakes.	31	Shakes.
27	Lungs.	32	Lungs.
27	Rheumatism.	32	Shakes.
27	Lungs.	32	Rheumatism.
27	Rheumatism.	32	Lungs.
28	Shakes.	32	Rheumatism.
28	Rheumatism.	32	Shakes.
28	Shakes.	32	Shakes, rheumatism.
28	Hatters' consumption.	32	Shakes.
28	Rheumatism.	33	Rheumatism.
29	Rheumatism.	33	Rheumatism.
29	Rheumatism.	33	Rheumatism.
29	Rheumatism.	34	Rheumatism.
30	Rheumatism.	34	Shakes.
		34	Shakes.
		34	Rheumatism.
		34	Rheumatism.
		34	Rheumatism.
		34	Rheumatism.
		34	Lungs.
		34	Rheumatism.
		34	Shakes.
		34	Rheumatism.
		34	Rheumatism.
		34	Rheumatism.
		34	Rheumatism.
		34	Lungs

TABLE 14—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Hat Makers.—Continued

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
34	Shakes.	38	Kidneys.
34	Rheumatism.	38	Shakes.
34	Shakes.	38	Rheumatism.
34	Shakes.	38	Shakes.
34	Rheumatism.	38	Rheumatism.
34	Rheumatism.	38	Rheumatism.
34	Rheumatism.	38	Shakes.
		38	Shakes.
35	Rheumatism.	38	Shakes.
35	Rheumatism.	38	Shakes.
35	Rheumatism.	38	Shakes, Rheumatism.
35	Shakes.	38	Shakes.
35	Rheumatism.	38	Shakes.
35	Shakes.	38	Shakes.
35	Rheumatism.	38	Shakes.
35	Shakes.	38	Shakes.
35	Shakes.	38	Shakes.
35	Rheumatism.	39	Rheumatism.
35	Rheumatism.	39	Shakes.
36	Rheumatism.	40	Shakes.
36	Lungs.	40	Rheumatism.
36	Rheumatism, shakes.	40	Shakes.
36	Rheumatism.	40	Shakes.
36	Shakes.	40	Rheumatism.
36	Shakes.	40	Shakes.
36	Shakes.	40	Shakes.
36	Shakes.	40	Shakes.
		40	Lungs.
37	Shakes.	40	Shakes.
37	Shakes.	40	Rheumatism.
37	Rheumatism.	40	Shakes.
37	Shakes.	40	Lungs.
37	Shakes.	40	Shakes.
37	Shakes.	40	Shakes.
37	Shakes.	40	Shakes.
		40	Shakes.
38	Rheumatism.	40	Shakes.
38	Shakes.	40	Shakes.
38	Lungs.	40	Rheumatism, shakes.
38	Shakes.	40	Shakes.

TABLE 14—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Hat Makers.—Continued.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
40	Shakes.	44	Rheumatism.
40	Shakes.	44	Rheumatism.
40	Shakes		
40	Rheumatism.	45	Hatters' consumption.
40	Shakes.	45	Rheumatism.
40	Rheumatism.	45	Rheumatism.
40	Rheumatism, shakes.	45	Shakes.
40	Shakes.	45	Shakes.
40	Shakes.	45	Shakes.
40	Shakes.	45	Shakes.
40	Shakes.	45	Shakes.
40	Shakes.	45	Shakes.
40	Rheumatism.	45	Shakes
40	Rheumatism.		
40	Rheumatism.	46	Shakes.
40	Rheumatism.	46	Shakes.
40	Rheumatism.	46	Shakes
40	Rheumatism.	46	Shakes.
40	Rheumatism.	46	Shakes.
40	Rheumatism.	46	Rheumatism.
40	Rheumatism.		
40	Shakes.	47	Shakes.
40	Shakes.		
40	Shakes.	48	Shakes.
40	Shakes	48	Lungs.
		48	Shakes.
41	Rheumatism, shakes.	48	Shakes.
41	Shakes.	48	Rheumatism.
41	Shakes.	48	Rheumatism.
		48	Rheumatism.
42	Rheumatism.	48	Rheumatism.
42	Rheumatism.	48	Rheumatism.
42	Shakes.		
42	Shakes.	50	Shakes.
		50	Shakes.
43	Shakes.	50	Shakes.
43	Shakes.	50	Shakes.
43	Shakes.	50	Shakes.
43	Rheumatism.	50	Shakes.
43	Rheumatism.	50	Shakes.
		50	Shakes.
44	Shakes.	50	Shakes.

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Hat Makers.—Continued.

AGE OF DECLINE.	CAUSE OF DECLINE,	AGE OF DECLINE.	CAUSE OF DECLINE.
50	Rheumatism.	55	Shakes.
50	Rheumatism.	55	Shakes.
50	Rheumatism.	56	Shakes.
50	Lungs.	60	Shakes.
50	Loss of energy, general debility.	60	Loss of energy, general debility.
52	Shakes.	64	Heart, kidneys, nervousness.
52	Shakes.		
53	Shakes.		

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Potters.—Pressers.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
25	Bronchitis.	40	Asthma, lungs, flesh.
30	Breathing affected.	40	Bronchitis.
30	Breathing affected from dust.	40	Asthma.
30	Breathing affected, loss of strength.	40	Asthma, rheumatism.
30	Breathing affected, loss of strength.	40	Lungs, heart, asthma.
30	Breathing affected, loss of strength.	40	Breathing affected.
30	Breathing affected, loss of strength.	40	Breathing affected.
30	Breathing affected, loss of strength.	40	Bronchitis, stiffness.
30	Breathing affected, loss of strength.	40	Asthma.
34	Lungs and throat.	41	Asthma, loss of energy.
35	Loss of strength.	45	Asthma.
35	Lungs, hemorrhages.	45	Loss of vitality.
35	Throat, lungs.	45	Loss of vitality, short breath.
35	Throat, lungs.	48	Asthma.
35	Bronchitis, kidneys.	49	Loss of energy, strength failed.
37	Asthma.		
38	Shortening of breath, lungs.		

Potters.—Mould Makers

40	Rheumatism.	41	Asthma, eyesight.
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Potters.—Jiggermen.

29	Rheumatism, asthma.	37	Breathing affected.
30	Lungs.	40	Loss of strength.
30	Loss of strength.	40	Lungs.
35	Throat, chest.	40	Asthma.
35	Lungs.	44	Loss of strength.
35	Bronchitis.		

TABLE 14—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Potters.—Kilnmen.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
30	Stiffness.	40	General debility.
33	Stiffness of limbs.	40	Lead colic, lungs.
35	General health affected.	40	Breathing affected.
35	Rheumatism, stiffness.	40	Constipation.
35	Breathing affected.	40	Bowels.
36	Rheumatism.	40	General debility.
36	Lead colic.	41	Stiff joints, general debility.
36	Bowels affected by lead.	42	Dust from glaze affected system.
38	Lack of vigor.	44	Lead colic.
38	Affected by lead and dust.	44	Lead poison.
38	Pains in bowels, stiffness.	45	General debility.
38	Loss of strength.	45	General debility, stiff limbs.
38	Lead colic, stiffness of limbs.	45	General debility.
40	Lead colic, rheumatism.	45	Soreness in chest and back.
40	General health affected by lead.	48	Lungs affected by dust.
40	Lead colic, stiff joints.		
40	Whole system affected by lead and dust.		

Potters.—Dippers.

47	Constipation.	40	Lead colic, paralysis in hands.
40	Lead colic.	40	General debility.
		40	Hands paralyzed.

Potters.—Saggermakers.

30	Rheumatism.	42	Rheumatism, asthma.
28	Rheumatism, stiffness.	45	Stiff joints.

TABLE 14.—SHOWING IN DETAIL THE AGES AND CAUSES OF DECLINE OF JOURNEYMEN AT TRADE.—Continued.

Potters.—Turners.

AGE OF DECLINE.	CAUSE OF DECLINE.	AGE OF DECLINE.	CAUSE OF DECLINE.
35	Shortness of breath, catarrh.	40	Damp floors caused sore feet.
37	Throat, short breath.	40	Asthma, sore feet.
40	Breathing affected.	42	Stiffness, sore feet.

Potters.—Handlers.

40	Catarrh, throat.		
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Potters.—Modellers.

36	General debility, loss of strength.	37	Breathing affected.
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Potters.—Decorators.

30	Lungs, paralysis in hands.	37	General health affected.
36	Constipation.	40	Lead colic.
		40	General debility from dust and confinement

Table 15.—Showing in Detail the Diseases of Journeymen Contracted at Trade.*

Glass Blowers.—Green (Bottle and Vial).

AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.	AGE WHEN CONTRACTED	DISEASES CONTRACTED AT TRADE.
22	Dyspepsia.	29	Dyspepsia.
23	Dyspepsia, kidney trouble.	29	Dyspepsia.
23	Rheumatism.	30	Catarrh, sore throat.
23	Dyspepsia.	30	Dyspepsia.
24	Asthma.	30	Throat.
24	Liver.	30	Dyspepsia.
24	Throat.	30	Dyspepsia.
24	Throat.	30	Throat.
24	Throat.	30	Liver.
25	Throat.	30	Dyspepsia.
25	Liver.	30	Throat.
26	Throat.	30	Dyspepsia.
26	Billiousness.	30	Throat.
26	Dyspepsia.	30	Dyspepsia.
27	Liver.	30	Dyspepsia.
27	Throat.	30	Dyspepsia.
27	Liver.	30	Dyspepsia.
27	Liver.	31	Liver, kidneys.
27	Throat, eyes.	31	Billiousness.
27	Liver.	31	Dyspepsia.
27	Kidneys.	31	Dyspepsia.
28	Billiousness.	31	Throat.
28	Throat.	32	Throat.
28	Dyspepsia.	32	Dyspepsia.
28	Dyspepsia, throat.	32	Rheumatism.
28	Dyspepsia.	33	Throat.
28	Liver.	33	Rheumatism.
28	Throat.	33	Dyspepsia.
		33	Dyspepsia.
		33	Dyspepsia, kidneys.
		34	Throat.
		35	Throat.

* See foot note to Summary. Table VIII.

TABLE 15.—SHOWING IN DETAIL THE DISEASES OF JOURNEYMEN
CONTRACTED AT TRADE.—Continued.*Glass Blowers.—Green (Bottle and Vial).—Continued.*

AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.	AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.
35	Liver.	40	Rheumatism.
35	Liver.	40	Liver
35	Liver.	40	Dyspepsia.
35	Dyspepsia.	40	Liver.
35	Liver.		
35	Throat.	41	Asthma.
35	Rheumatism.	41	Dyspepsia.
35	Kidneys.		
36	Liver.	42	Throat.
		42	Dyspepsia.
		42	Dyspepsia.
37	Dyspepsia.	43	Liver.
37	Dyspepsia and throat.	43	Dyspepsia.
37	Throat.	43	Liver.
37	Rheumatism.	43	Liver.
37	Dyspepsia.	43	Liver.
37	Throat.		
38	Throat.	44	Liver.
38	Dyspepsia.	44	Dyspepsia.
38	Dyspepsia.	44	Dyspepsia.
39	Catarrh, kidneys.	45	Throat.
39	Throat.	45	Dyspepsia.
		45	Dyspepsia.
		45	Dyspepsia, liver.
40	Dyspepsia.	47	Throat.
40	Dyspepsia.		
40	Dyspepsia.		
40	Throat, dyspepsia.	48	Liver.
40	Liver.	48	Dyspepsia.
40	Dyspepsia.		
40	Dyspepsia.	50	Throat.
40	Dyspepsia.	50	Dyspepsia.

TABLE 15.—SHOWING IN DETAIL THE DISEASES OF JOURNEY-
MEN CONTRACTED AT TRADE.—Continued.*Glass Blowers—Flint, Frescription.*

AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.	AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.
26	Dyspepsia.	32	Throat.
26	Liver.	33	Throat.
27	Rheumatism.	35	Throat.
27	Dyspepsia.	35	Dyspepsia.
27	Dyspepsia.	35	Liver.
28	Dyspepsia.	35	Throat.
29	Throat.	36	Liver.
30	Dyspepsia.	37	Dyspepsia.
30	Throat.	38	Throat.
30	Throat.	38	Throat.
30	Rheumatism.		
30	Throat.		
30	Kidneys.		

Glass Workers.—Stopper Grinders.

26	Nasal catarrh.	29	Catarrh.
26	Throat.	37	Nasal catarrh.
27	Nasal catarrh.	38	Nasal catarrh.

Glass Workers—Pot Makers.

37	Throat and lungs.	45	Cough.
40	Lungs.	52	Pot makers' disease, lungs.
40	Lungs.	53	Lungs.
42	Lungs.	53	Lungs.
42	Lungs.	55	Lungs.

TABLE 15.—SHOWING IN DETAIL THE DISEASES OF JOURNEY-
MEN CONTRACTED AT TRADE.—Continued.*Hat Finishers.*

AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.	AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.
25	Consumption.	33	Catarrh.
26	Consumption.	44	Shakes.
28	Consumption.	46	Rheumatism.
29	Consumption.		

Hat Makers.

25	Colds.	57	Poisoned by coloring matter.
35	Rheumatism.		

TABLE 15.—SHOWING IN DETAIL THE DISEASES OF JOURNEY-
MEN CONTRACTED AT TRADE.—Continued.*Potters.—Throwers.*

AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.	AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.
50	Asthma.		

Potters—Jiggermen.

29	Asthma.	41	Bronchitis.
35	Asthma, potters' rot.	42	Asthma, potters' rot.
38	Asthma.	48	Asthma.
40	Asthma.		

Potters.—Turners

38	Bronchitis.	42	Asthma.
40	Asthma.		

Potters.—Handlers.

39	Asthma.	42	Asthma.
41	Asthma.		

Potters.—Pressers.

28	Asthma.	38	Asthma.
28	Asthma.	39	Asthma.
29	Asthma.	39	Bronchitis.
31	Asthma.	41	Asthma.
34	Asthma.	41	Asthma.
34	Asthma.	43	Lungs.
35	Asthma.	45	Asthma.
36	Bronchitis.	47	Asthma.
37	Asthma.	49	Asthma.
37	Bronchitis.	56	Breast affected.
38	Bronchitis.		

TABLE 15.—SHOWING IN DETAIL THE DISEASES OF JOURNEY-
MEN CONTRACTED AT TRADE.—Continued.*Potters.—Saggermakers.*

AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.	AGE WHEN CONTRACTED.	DISEASES CONTRACTED AT TRADE.
51	Rheumatism.		

Potters.—Kilnmen.

30	Hands partly paralyzed.	36	Stiff limbs.
31	Lead colic.	37	Lead colic.
31	Lead colic.	41	Lead colic.
34	Lead colic, costiveness.	43	Lead colic.
36	Lead colic.	43	Lead colic.

Potters —Dippers.

33	Bowels, stomach affected.	44	Lead colic.
39	Lead colic.	46	Lead colic.
43	Lead colic, hands paralyzed.		

Potters.—Decorators.

31	Lead colic.		
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Potters.—Packers.

	Asthma.		
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Table 16.—Showing in Detail the Ages and Causes of Incapacity of Journeymen.

Glass Blowers.—Green (Bottle and Vial).

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
20	16	4	.....	4	.....	20	Consumption.
20	16	4	.....	3	.....	20	Consumption.
21	18	3	19	1	.....	23	Consumption.
21	16	5	19	3	.....	22	Consumption.
22	20	2	21	1	.....	22	Throat, consumption.
22	20	2	.....	.....	.....	22	Consumption.
22	17	5	22	5	.....	.....	Throat.
23	16	7	22	6	.....	39	Paralysis.
23	17	6	22	5	.....	25	Consumption.
23	17	5	22	5	.....	30	Consumption.
23	17	6	.....	.....	.....	.....	Throat.
23	18	5	23	5	.....	23	Consumption.
23	17	6	.....	.....	.....	23	Consumption.
24	17	7	24	7	.....	24	Typhoid.
24	17	7	24	7	.....	24	Consumption.
24	17	7	24	7	56	.....	General debility.
25	16	9	23	7	40	.....	Throat.
25	21	4	21	4	.....	25	Consumption.
25	19	6	24	5	30	.....	Consumption.
25	20	5	.....	.....	50	.....	General debility.
25	18	7	.....	.....	.....	.....	Liver.
25	17	8	.....	.....	.....	25	Abscess of liver.
26	18	8	.....	.....	.....	26	Consumption.
26	16	10	25	9	.....	27	Consumption.
26	20	6	25	5	.....	27	Consumption.
26	17	9	26	9	.....	26	Consumption.
26	18	8	26	8	.....	26	Consumption.
27	17	8	25	8	32	.....	.....
27	18	9	25	7	30	.....	Consumption.
27	19	8	25	6	.....	28	.....
27	17	10	24	7	27	.....	.....
27	18	9	.....	.....	30	.....	General decline.

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers, Green (Bottle and Vial)—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
28	18	10	25	7	.....	29	Consumption.
28	20	8	28	8	.....	28	Consumption.
28	18	10	28	10	.....	.....	.....
28	17	11	25	8	.....	29	Consumption.
28	16	12	27	11	.....	40	Consumption.
28	18	10	28	10	.....	28	Consumption.
29	19	10	26	7	47	.....	Liver.
29	23	6	29	6	.....	29	Consumption.
30	16	12	.....	.....	55	.....	.....
30	15	15	30	15	.....	60	General debility.
30	18	12	.....	.....	62	.....	General debility.
30	20	12	.....	.....	58	.....	.....
30	16	14	25	9	60	.....	.....
30	20	10	.....	.....	.....	30	Consumption.
30	18	12	28	10	40	.....	Dyspepsia,
30	14	16	29	15	.....	38	Consumption.
30	16	14	28	12	.....	35	Consumption.
30	20	10	.....	.....	.....	.....	Indigestion.
30	19	11	.....	.....	.....	.....	Throat.
30	14	14	20	6	32	.....	.....
30	18	12	.....	.....	.....	30	Consumption.
30	20	4	30	4	34	.....	.....
30	18	12	28	10	.....	37	Kidneys.
30	20	10	30	10	.....	30	Consumption.
30	18	12	.....	.....	.....	30	Consumption.
30	19	11	.....	.....	.....	30	Consumption.
30	18	12	.....	.....	.....	30	Consumption.
31	19	12	30	11	48	.....	General debility.
32	16	12	30	12	.....	38	.....
32	18	14	30	12	.....	.....	Liver.
32	18	14	29	11	50	.....	.....
32	18	14	.....	.....	.....	32	Typhoid fever.
32	16	16	30	14	.....	35	Consumption.
32	16	16	30	14	.....	35	Throat, consumption.
32	16	15	30	14	58	.....	General debility.
32	20	12	.....	.....	.....	32	Consumption.

TABLE 16—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers.—Green (Bottle and Vial).—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
33	18	14	30	12	40	.....	Dyspepsia.
33	18	15	28	10	45	.....
33	18	15	30	12	.....	37	General debility.
33	21	12	25	4	.....	33	Consumption.
33	19	14	.....	.....	.....	33	Consumption.
33	16	17	.....	.....	.....	33	
34	18	16	.....	.....	40	.....
34	16	18	30	16	.....	35	Dissipation.
34	19	15	32	13	.....	35	
34	18	16	.....	.....	.....	35	
34	18	16	33	15	.....	35	
34	18	12	30	12	.....	54	
35	16	17	30	14	.....	55	Suicide.
35	15	20	.....	.....	.....	45	
35	16	19	30	14	.....	50	Kidneys.
35	20	15	.....	.....	.....	40	Consumption.
35	16	19	34	18	40	.....	Liver.
35	15	20	.....	.....	50	.....	Throat.
35	18	17	32	14	.....	38	Consumption.
35	20	15	.....	.....	40	.....	General debility.
35	20	15	34	14	40	.....	Throat, dyspepsia.
35	17	18	33	16	54	.....
35	16	15	30	14	54	.....	Liver.
35	18	17	30	12	36	.....	Consumption.
35	19	16	31	12	65	.....	Dyspepsia.
36	18	18	.....	.....	.....	50	Liver.
36	18	18	30	12	.....	36	Consumption.
36	17	19	.....	.....	.....	56	
36	19	17	32	14	.....	36	Consumption.
36	16	20	36	20	57	.....
36	19	17	.....	.....	.....	36	Consumption.
37	18	19	34	16	.....	38	Softening of brain.
37	18	19	35	17	.....	38	Consumption.
38	16	21	37	21	.....	38	Consumption.
38	18	19	37	19	.....	38	Consumption.

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN—Continued.

Glass Blowers.—Green (Bottle and Vial).—Continued

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
38	18	20	34	16	50	.....	Throat.
38	18	20	38	20	.....	38	Cancer.
39	15	24	39	24	63	.....
39	18	20	36	18	.....	40	
39	16	23	36	23	.....	39	Consumption.
39	19	20	35	16	.....	40	
39	16	20	.....	.....	.....	40	
40	25	15	40	15	.....	76	Bowels.
40	20	20	38	18	41	.....	Consumption.
40	27	13	38	11	.....	50	Consumption.
40	18	20	.....	.....	.....	55	Consumption.
40	16	24	40	24	.....	50	Consumption.
40	16	24	30	14	.....	52	Consumption.
40	18	22	.....	.....	50	.....
40	17	23	35	18	.....	50	Liver.
40	18	22	40	.....	.....	40	
40	18	22	.....	.....	.....	.....	Throat.
40	20	20	.....	.....	.....	40	Consumption.
40	17	23	.....	.....	.....	40	Accident.
40	19	21	.....	.....	.....	41	Overheated.
40	18	22	36	18	.....	40	Consumption.
40	18	22	35	17	.....	54	
40	18	22	.....	.....	56	.....
40	20	20	.....	.....	.....	40	Consumption.
40	16	24	.....	.....	.....	59	
40	18	22	38	26	.....	40	
40	16	24	40	24	53	.....
40	18	22	38	20	.....	50	Heart, liver.
41	18	18	.....	.....	.....	77	Throat.
41	18	23	40	22	.....	42	
41	16	25	.....	.....	63	.....	Left trade.
41	18	23	.....	.....	48	.....
42	18	24	35	17	44	.....	Throat.
42	18	24	.....	.....	.....	.....

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY JOURNEYMEN.—Continued.

Glass Blowers — Green (Bottle and Vial).—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
43	17	26	.....	.....	56	.....	Stiffness of joints.
43	.....	27	.....	.....	.....	48	Nervous prostration.
43	.....	24	35	22	.....	44	Consumption.
44	16	28	42	26	.....	45	
44	18	26	30	12	44	.....
44	18	26	.....	.....	.....	45	
44	18	26	43	25	45	.....
45	20	25	45	25	82	.....	Left trade.
45	22	23	.....	.....	.....	56	Consumption.
45	28	15	.....	.....	65	.....	General debility.
45	20	25	.....	.....	.....	60	Congestion of bowels.
45	20	25	.....	.....	.....	59	Consump'ion.
45	18	27	.....	.....	.....	60	Left trade.
45	18	27	.....	.....	50	.....
45	18	22	33	15	.....	70	Left trade.
45	22	23	.....	.....	.....	65	Stiffness of joints.
45	18	27	40	22	74	.....	Left trade.
45	16	29	.....	.....	77	.....	Left trade.
45	18	27	43	25	50	.....
45	17	28	.....	.....	49	.....	Left trade.
45	16	27	.....	.....	.....	55	
45	18	27	.....	.....	.....	.....
47	18	29	47	29	.....	48	Consumption.
47	17	30	45	28	.....	48	
47	19	28	.....	.....	73	.....
48	17	23	46	23	65	.....	General debility.
48	18	30	.....	.....	73	.....	Left trade.
48	16	25	.....	.....	.....	65	
48	17	31	45	28	60	.....	General debility.
48	16	20	.....	.....	56	.....	Stiffness of joints.
48	17	27	.....	.....	54	.....	Left trade.
48	16	32	46	32	.....	49	Liver.
48	18	30	.....	.....	.....	.....	General debility.
48	19	30	45	27	.....	49	
48	18	20	46	20	.....	71	

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers.—Green (Bottle and Vial).—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.	
48	18	30	Liver. Stiff joints.	
48	20	28	.....	.....	.....	60
49	19	30	55	Consumption.	
49	20	29	.....	.....	.....	49
49	18	31	43	25	.....	50	
49	17	32	45	28	.....	50	
49	18	31	45	27	.....	50	
49	18	31	45	27	.....	50	
49	20	29	44	24	.....	50	
49	20	29	45	25	.....	60	
49	17	32	40	23	.....	40	
50	17	33	42	25	.....	65	
50	22	24	.....	.....	.....	82
50	16	34		Heart.
50	17	33	46	29	70		Stiffness of joints. Congestion of liver. Eyesight. General debility. Typhoid fever. Stiffness of joints.
50	16	34	46	30	.....	72	
50	21	25	46	25	.....	54	
50	18	32	45	27	68	.....	
50	18	31	44	26	.....	58	
50	18	32	.....	.....	.....	50
50	20	30	.....	.....	.....	70
50	18	32	42	24	62	.....	
50	16	34	.....	.....	70	.....	
50	18	32	40	22	54	.....	
50	16	34	.....	.....	.....	50
50	22	28	.....	.....	.....	.....
50	20	30	General debility.	
50	20	30	60	General debility.	
50	18	32	.....	.....	.....	60
50	20	30	General debility.	
51	17	34	75	General debility. General debility. Stiffness of joints. Throat.	
51	16	35	45	29	.....	66	
51	16	25	40	24	.....	52	
51	16	27	42	26	75	.....	
51	18	33	40	22	68	.....	
51	18	33	40	22	68	.....	
51	16	35	45	29	70	.....	

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers.—Green (Bottle and Vial).—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
52	18	34	45	27	60	Throat.
52	17	34	47	30	67	Dyspepsia.
52	18	34	45	27	.....	54
52	17	22	.....	.....	59	.....
52	19	33	.....	.....	.....	.....
53	21	32	.....	.....	.....	.....
53	16	35	45	29	54	Consumption.
53	17	36	46	29	54	Consumption.
53	17	36	45	28	56
53	16	31	42	26	53	.....
54	16	31	50	31	62	.....
54	16	38	50	34	.....	70
54	20	34	.....	.....	.....	.....
55	20	35	48	28	60	Heart.
55	15	36	50	35	77
55	16	37	50	34	.....	75
55	16	35	48	32	.....	55
55	18	36	45	27	60	.....
55	18	37	47	29	.....	65
55	20	35	46	26	62	General debility.
55	17	36	48	31	64	.....
55	18	35	45	27	.....	60
55	18	32	50	32	.....	70
55	16	39	50	34	.....	75
55	18	37	50	32	60	Dyspepsia.
55	18	37	.....	.....	.....	55
56	14	42	45	31	72	.....
56	15	30	40	30	70	.....
56	16	40	50	34	.....	75
56	18	41	48	30	75
56	16	35	45	29	.....	70
57	14	42	40	26	58	.....
57	19	38	42	23	63	.....
57	20	37	.....	.....	.....	60

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers.—Green (Bottle and Vial).—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
58	29	29	47	18	60	.....
58	16	41	47	32	60	.....
58	16	40	50	34	63	.....
58	21	35	50	29	.....	59	
58	17	41	50	33	.....	62	
58	19	39	47	28	.....	60	
58	16	42	49	33	.....	60	
58	18	38	45	27	.....	65	
58	16	42	46	30	59	.....
58	14	39	46	32	71	.....
58	16	42	47	31	59	.....
58	33	23	48	15	60	.....
59	18	41	48	30	.....	65	
59	16	43	48	32	.....	60	
59	16	34	50	34	73	.....
59	16	43	57	41	60	.....
60	15	45	50	35	.....	70	
60	18	40	48	30	.....	70	
60	20	39	47	27	.....	61	
60	16	42	48	32	.....	72	
60	18	40	50	32	.....	68	
60	19	46	45	26	.....	64	
60	18	42	50	32	.....	70	
60	16	44	48	32	62	.....
60	20	40	.....	.....	73	.....
61	16	45	50	34	63	.....
61	21	40	50	29	61	.....
62	18	44	48	30	.....	70	
62	16	45	50	34	.....	70	
62	16	43	45	29	.....	65	
62	19	43	48	29	70	.....
62	20	40	45	25	62	.....
62	15	47	50	35	62	.....
63	17	46	50	33	63	.....
63	16	44	56	34	70	.....
63	15	46	49	34	.....	69	

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers.—Green (Bottle and Vial).—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline	Present age.	Age at death.	CAUSE OF INCAPACITY.
63	17	43	50	33	.....	75	
63	18	46	48	30	68	.....
63	19	43	46	27	68	.....
63	18	45	43	25	65	.....
64	16	44	50	34	.....	76	
64	16	39	50	34	.....	78	
65	15	33	38	23	73	.....
65	20	45	50	30	.....	70	
67	20	45	.....	.....	68	.....
70	14	56	50	36	71	.....
70	16	52	50	34	.....	73	

Glass Blowers.—Flint (Prescription).

20	17	3	19	1	.....	21	Consumption (hereditary).
21	19	2	20	1	.....	23	Consumption (hereditary).
22	16	6	20	4	.....	23	Consumption.
24	17	7	22	5	.....	26	Consumption.
25	18	7	22	4	.....	26	Throat, consumption.
25	17	8	23	6	.....	29	Consumption.
25	17	8	24	7	.....	26	Accident.
26	19	7	24	5	.....	31	Throat, consumption.
27	16	11	25	9	.....	28	Liver, dyspepsia.
27	15	12	25	10	.....	28	General debility, liver.
27	15	12	25	10	.....	30	Consumption.
27	19	8	25	6	.....	28	Consumption (hereditary).
28	18	10	27	9	.....	30	Dyspepsia, general debility.

TABLE 16—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.

Glass Blowers.—Flint (Prescription).—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
28	18	10	25	7	.....	30	Heart.
29	17	12	.....	.....	50	.....	Left trade.
29	18	11	27	9	30	.....	Consumption—hereditary.
30	18	12	28	10	.....	33	Throat, consumption.
33	18	15	30	12	.....	35	Heart.
34	17	16	30	13	55	.....	Dyspepsia—recovered.
34	17	17	33	16	.....	35	
35	18	17	30	12	.....	40	
35	18	16	34	15	.....	36	Consumption.
35	17	17	32	15	.....	36	Throat.
35	19	14	33	13	.....	43	Throat.
36	19	17	30	11	.....	37	Liver.
36	18	18	.....	.....	.....	36	Dyspepsia, consumption.
37	20	17	35	15	.....	38	Liver.
37	18	18	36	17	.....	38	Liver.
38	18	20	30	12	.....	41	
38	17	20	35	18	.....	40	General debility.
38	17	21	30	13	.....	40	Dyspepsia, throat, consumpt'n.
38	18	20	37	19	.....	39	Dyspepsia, billious fever.
38	19	19	30	11	.....	40	Consumption.
38	19	18	35	16	.....	40	General debility.
39	17	20	35	18	.....	40	
40	18	20	35	17	50	.....
40	17	22	38	21	.....	43	Consumption.
40	20	20	37	17	.....	42	
40	16	22	38	20	.....	45	
40	18	22	40	22	.....	40	
40	17	22	38	21	.....	40	General debility.
40	18	22	35	17	50	.....	Dyspepsia.

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers.—Window.—Continued

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
41	20	21	38	18	.....	42	Throat, consumption.
41	19	20	39	19	.....	42	Dyspepsia, liver.
42	20	21	38	18	50	.....	Eyesight.
42	16	23	42	23	42	.....	General debility.
44	17	26	40	23	.....	45	Consumption.
44	18	24	40	22	.....	45	Dyspepsia, general debility.
45	18	26	35	17	50	.....	Dyspepsia, liver.
45	18	26	42	24	54	.....	Dyspepsia, eyesight.
45	16	27	42	26	.....	47	Dyspepsia, liver.
45	18	25	42	24	.....	48	
46	18	27	40	22	.....	47	Dyspepsia, bronchitis.
47	20	26	43	25	.....	48	General debility.
47	17	27	45	26	60	.....
48	18	28	46	26	50	.....	General debility.
48	20	27	47	27	55	.....	General debility.
48	18	30	45	27	50	.....	General debility.
48	17	31	.....	.....	.....	48	Heart.
49	20	28	45	25	.....	51	Consumption.
50	17	28	45	27	.....	58	
50	16	30	46	30	55	.....
50	16	33	46	30	65	.....
50	16	34	48	32	65	.....
50	18	31	45	27	60	.....	Eyesight.
50	16	33	45	29	.....	60	Spinal
52	16	33	49	33	.....	53	Throat, consumption.
52	17	34	44	27	.....	65	General debility.
52	17	35	45	28	.....	60	
52	17	32	46	29	58	.....	Dyspepsia, liver.
53	18	32	45	27	.....	54	Dyspepsia, general debility.
53	16	33	45	29	.....	63	

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers — Flint (Prescription).—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
54	19	32	47	28	55	.....
55	16	28	40	24	60	56	Dyspepsia. liver.
55	16	28	48	28	60	.....	Eyesight
56	16	39	46	30	60	.....
58	16	40	47	31	60	.....
58	18	40	45	27	60	60	Heart.
59	15	41	48	38	60	.....
60	16	40	50	34	65	65	
60	16	42	50	34	65	.....
64	16	44	48	32	66	.....
65	16	45	40	24	66	.....

Glass Blowers — Window.

22	19	3	.....	.....	.....	23	Liver, kidneys.
23	19	4	.....	.....	.....	25	Exposure.
26	21	5	25	4	.....	30	
28	21	5	25	4	.....	31	Consumption.
28	20	8	.....	.....	.....	30	Dissipation.
28	20	8	26	6	.....	30	Consumption.
29	19	10	26	7	.....	30	Consumption.
30	17	12	.....	.....	.....	31	Exposure.
34	19	15	.....	.....	.....	35	Exposure.
35	20	15	.....	.....	.....	35	Killed in army.
36	19	16	.....	.....	.....	45	General debility.

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers.—Window.—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
38	19	18	36	16	.....	38	Exposure.
38	20	18	.....	.....	.....	40	Bronchitis.
39	20	19	35	15	.....	40	Consumption.
39	20	19	36	16	.....	40	Dyspepsia, liver.
39	20	19	.....	.....	.....	40	Consumption.
39	19	18	.....	.....	.....	40	Dissipation.
40	20	20	30	10	.....	45	General debility.
40	20	20	35	15	.....	55	
40	20	20	40	20	60	.....	Left trade.
40	20	20	36	16	.....	50	Brain fever.
40	19	20	.....	.....	70	.....
40	18	22	36	18	.....	40	Heart.
40	20	18	.....	.....	.....	60	Wounded in army.
44	18	26	40	22	.....	45	Consumption.
44	20	24	40	20	.....	45	Rheumatism.
44	20	24	.....	.....	.....	45	Dissipation.
44	21	22	.....	.....	.....	45	Consumption (hereditary).
45	21	24	.....	.....	58	.....	Left trade.
45	20	25	.....	.....	10	.....
45	21	24	40	19	.....	.....	Dissipation.
45	19	26	45	26	50	.....	Exposure.
48	20	28	45	25	.....	50	Liver.
48	18	30	45	27	70	.....
48	20	25	.....	.....	68	.....
48	20	21	38	18	.....	50	
48	20	25	.....	.....	72	.....
48	22	25	45	23	.....	50	Dyspepsia, liver.
48	19	28	45	26	.....	70	General debility.
48	20	26	44	24	.....	.....
49	19	30	48	29	.....	50	
49	22	27	40	18	.....	50	Consumption.
49	20	29	.....	.....	.....	50	
49	19	30	48	29	.....	50	Liver.

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN —Continued

Glass Blowers.—Window.—Continued.

Age when became incapacitated.	Age when began to work	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
49	19	30	42	23	.....	.....
49	20	28	45	25	.....	50	Dyspepsia, liver.
50	20	30	48	28	.....	60	Liver.
50	21	29	48	27	58	.....
50	20	28	49	28	60	.....
50	18	32	50	32	.....	58	Liver.
50	19	31	.....	.....	.....	57	Dissipation.
50	20	29	45	25	.....	53	
50	19	30	47	28	.....	62	General debility.
50	19	31	47	28	52	.....	Consumption.
50	20	29	.....	.....	54	.....
50	20	28	.....	.....	60	.....
50	21	28	48	27	60	.....
50	20	28	.....	.....	.....	65	
50	21	28	48	27	60	.....
52	19	33	49	30	.....	53	Liver.
53	21	30	45	24	65	.....
53	22	30	50	28	.....	56	Kidneys.
53	20	32	48	28	62	.....
54	19	35	50	31	.....	55	Paralysis.
54	21	33	53	32	70	.....
54	20	33	50	30	.....	55	Heart.
55	21	33	50	29	.....	57	Head.
56	20	32	40	20	59	.....
56	20	29	50	29	.....	60	
56	20	36	50	30	.....	65	
56	22	32	50	28	60	.....
56	21	33	50	29	.....	65	General debility.
57	21	34	49	28	.....	60	
58	21	36	51	30	.....	60	Kidneys, liver.
58	19	38	50	31	.....	60	General debility.

TABLE 14—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Glass Blowers — Window.—Continued.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
59	20	38	54	34	.....	60	Kidneys.
59	20	38	52	32	.....	60	
59	21	37	50	29	.....	60	Dyspepsia.
60	19	40	50	31	.....	70	General debility.
60	22	38	54	32	.....	70	
60	19	41	55	34	.....	70	General debility.
60	21	39	50	29	70	.....
60	19	38	52	33	.....	75	General debility.
61	19	40	50	31	.....	61	Head.
62	19	40	54	35	.....	80	
62	18	44	54	36	.....	70	General debility.
62	20	42	52	32	.....	65	
62	20	35	49	29	.....	70	General debility.
62	25	25	50	25	.....	.....
63	20	42	53	33	.....	66	General debility.
63	20	40	54	34	.....	70	General debility.
63	20	42	54	34	.....	70	General debility.
63	20	39	52	32	.....	65	General debility.
63	21	40	55	34	.....	65	General debility.
63	20	40	54	34	.....	69	Kidneys.
64	20	42	53	33	.....	65	General debility.
65	20	40	35	15	.....	70	General debility.
65	20	43	54	34	.....	70	General debility.
65	20	42	51	31	77	.....
65	20	44	55	35	.....	70	General debility.
65	21	40	53	32	.....	70	General debility.
66	20	45	54	34	69	.....
67	20	45	54	34	73	.....
73	20	40	50	30	.....	80	

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Window Glass Cutters

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY.
24	18	5	23	5	.....	26	Consumption.
26	18	7	25	6	.....	27	Consumption (hereditary.)
30	18	10	28	10	.....	56	Liver, dyspepsia
30	20	10	26	6	.....	33	Bronchitis.
34	17	15	30	13	.....	35	Consumption (hereditary.)
35	18	15	.....	.....	.....	38	Throat, consumption.
37	17	20	35	18	.....	39	Liver.
40	17	20	36	19	.....	62	
44	16	25	40	24	.....	44	Liver, kidneys.
44	17	25	40	23	.....	45	Bilious fever.
45	18	27	.....	.....	60	.....
45	17	23	40	23	.....	50	Rheumatism.
49	18	31	.....	.....	.....	50	
49	17	30	48	30	.....	50	Kidneys, liver.
50	17	30	.....	.....	60	.....
52	17	30	50	30	55	.....	Left trade.
55	19	37	50	31	65	.....
57	20	36	54	34	.....	58	
59	18	41	58	40	.....	60	Apoplexy.
59	17	39	54	37	.....	60	General debility.
59	20	39	55	35	.....	60	General debility.
60	17	40	50	33	.....	70	General debility.
63	17	40	56	39	.....	64	General debility.
64	18	44	56	38	.....	65	General debility.
66	17	42	55	38	.....	75	General debility.

TABLE 16.—SHOWING IN DETAIL THE AGES AND CAUSES OF INCAPACITY OF JOURNEYMEN.—Continued.

Window Glass Flatteners.

Age when became incapacitated.	Age when began to work.	Number of years at work.	Age when began to decline.	Number of years at work when began to decline.	Present age.	Age at death.	CAUSE OF INCAPACITY
24	20	4	.....	.....	.....	25	Exposure.
24	20	5	23	3	.....	25	Consumption.
25	20	5	24	4	.....	25	Exposure.
35	19	15	.....	.....	56	.....	Left trade.
38	25	12	.....	.....	.....	38	
44	23	20	.....	.....	.....	45	
44	19	25	.....	.....	.....	45	Typhoid fever.
45	21	24	.....	.....	.....	45	Killed—accident.
50	24	26	48	24	.....	.....	Rheumatism.
52	19	33	50	31	.....	62	General debility.
54	20	34	50	30	.....	55	
59	20	39	56	36	.....	60	Rheumatism.

APPENDIX II.

APPENDIX II.

Mortality in Different Occupations.*

Dr. Ogle gives, for each of about 400 occupations, the death-rate per 1,000 living at five-age periods; but of these the groups comprising the forty years between the 26th and 66th birthdays are the largest, and show the influence of occupation most markedly, and have been selected in the following table, compiled from Dr. Ogle's larger table.

Before 25 the influence of occupation has not had time fully to develop, and after 65 the influence of retirement comes into play. In the first and second columns are given, for the sake of comparison, the corresponding mean annual death-rates, calculated from the data in Dr. Farr's two preceding decennial reports. It will be noticed that the death-rate at ages 25-45 in nearly every case has declined in the latter period 1880-1-2. In 65 of the 73 industries, for which the death-rates of the two periods are comparable, there is a reduction in this age-period; in one it is stationary, and in only 7 has it risen. In the second age period (45-65) of the industries comparable, in only 35 has there been a fall, while in the remaining 38 the rate has risen. This is in strict accordance with the table on page 101,† which shows that, independently of occupation, there has been a fall in the death-rate of males in the earlier, and some degree of rise in the later age periods. The fifth column,

* From "Elements of Vital Statistics," by Dr. Arthur Newsholme; pp. 154-164. The information given above is based on the important report of Dr. Ogle, in his Supplement to the 45th Annual Report of the Registrar-General (England).

† Of work quoted here.

headed *Comparative Mortality Figure*, requires some explanation. There were during 1880-1-2, in England and Wales, 1,000 annual deaths per 64,641 males, aged 26-65, of whom 41,920 were under, and 22,721 were over, 45 years of age. The figures in this column are the number of deaths that would have occurred in the several occupations out of 64,641 males, distributed according to age, as in England and Wales. For instance, 41,920 of the clergy aged 25-45; and 22,721, aged 45-65, with a death-rate respectively of 4.64 and 15.93 per 1,000, gave 556 deaths. Thus the figure 556 represents the mean mortality of the clergy between 25 and 65, as compared with the mortality of all males of similar ages in England and Wales, which is 1,000.

The mortality figure for "all males" being 1,000, the death-rate of more than three-fifths of the industries is below this. The standard furnished by "all males," however, is a very unsatisfactory one, as it includes an enormous number permanently enfeebled in health and not engaged in any definite occupation :

DEATH RATES OF MALES, TWENTY-FIVE TO SIXTY-FIVE YEARS
OF AGE, IN DIFFERENT OCCUPATIONS IN 1860-1861-1871
AND IN 1880-1882, AND THEIR COMPARATIVE
MORTALITY FIGURES IN 1880-1882.

OCCUPATION.	MEAN ANNUAL DEATH RATES PER 1,000 LIVING.				Comparative mortality figures 1880-1-2.
	1860-1-1871.		1880-1-1882.		
	Years of Age.		Years of Age.		Years of Age.
	25-45.	45-65.	25-45.	45-65.	25-65.
All males.....	11.27	23.98	10.16	25.27	1,000
Occupied males.....			9.71	24.63	967
Unoccupied males.....			32.43	36.20	2,182
Males in selected healthy districts.....			8.47	19.74	804
Clergyman, priest, minister.....	5.96	17.31	4.64	15.93	556
Gardner, nurseryman.....	6.74	17.54	5.52	16.19	599
Farmer, grazier.....	7.66	17.32	6.09	16.53	631
Laborer in agricultural county.....			7.13	17.68	701
Schoolmaster, teacher.....	9.82	23.56	6.41	19.93	719
Grocer.....	9.49	17.15	8.00	19.16	771
Fisherman.....	11.26	15.84	8.32	19.74	797
Carpenter, joiner.....	9.44	21.36	7.77	21.74	820
Bookseller, stationer.....	10.84	21.36	8.53	20.57	825
Barrister, solicitor.....	9.87	22.97	7.54	23.13	842
Draper and Manchester warehouseman.....	14.34	26.33	9.70	20.96	883
Groom, domestic coachman.....			8.53	23.28	887
Coal miners (as represented by miners in six districts).....			7.64	25.11	891
Plasterer, whitewasher.....	9.50	27.90	7.79	25.67	896
Watch and clockmaker.....	10.78	24.90	9.26	22.64	903
Tanner, pellmonger.....	10.43	26.52	7.97	25.37	911
Shoemaker.....	10.39	22.30	9.31	23.36	921
Artist, engraver, sculptor, architect.....	11.73	22.91	8.39	25.07	921
Commercial traveller.....	12.28	29.00	9.04	25.03	948
Corn miller.....	9.32	26.65	8.40	20.62	957
Baker, confectioner.....	10.72	26.39	8.70	26.12	958
Builder, mason, bricklayer.....	11.43	27.16	9.25	25.59	969
Blacksmith.....	10.07	23.88	9.29	25.67	973
Commercial clerk and insurance service.....	14.28	28.88	10.48	24.49	996
Tobacconist.....	13.19	21.76	11.14	23.46	1,000
Chemist, druggist.....	13.92	23.56	10.58	25.16	1,015
Tailor.....	12.92	24.79	10.73	26.47	1,051
Printer.....	13.02	29.38	11.12	26.69	1,071
Wool, worsted manufacture (West Riding).....			9.71	27.50	1,032
Hatter.....	12.81	31.76	10.78	26.95	1,064
Cotton, linen manufacture (Lancashire).....			9.99	29.44	1,088
Physician, surgeon, general practitioner.....	13.81	24.55	11.57	28.03	1,122
Law clerk.....	18.75	37.05	10.77	30.79	1,151
Butcher.....	13.19	28.37	12.16	29.08	1,170
Glass manufacture.....	13.19	29.32	11.21	31.71	1,190
Plumber, painter, glazier.....	12.48	34.66	11.07	32.49	1,202
Cutter, scissors, needle, saw, tool-maker.....	11.88	32.74	11.71	34.42	1,273
Carter, carrier, hauler.....			12.52	33.00	1,275
Bargeman, lighterman, waterman.....	14.99	30.78	14.25	31.13	1,305
Musician, music master.....	18.94	34.76	13.78	32.39	1,314
Hairdresser.....	15.11	30.10	13.64	33.25	1,327
Brewer.....	19.26	36.86	13.90	34.25	1,361
Cab, omnibus, service.....	15.94	35.28	15.39	36.83	1,482
Chimney sweep.....	17.53	42.87	13.73	41.54	1,519
Inkeeper, publican.....	18.01	34.14	18.02	33.68	1,521
Messenger, porter, watchman.....			17.07	37.37	1,565
File maker.....	16.27	42.30	15.29	45.14	1,667
Earthenware manufacture.....	12.69	41.75	13.70	51.39	1,742
Miner (Cornwall).....	11.94	41.73	14.77	53.69	1,839
Costermonger, hawkker, street seller.....	20.09	37.82	20.26	45.33	1,879
General laborer (London).....	18.35	40.64	20.62	58.85	2,020
Inn, hotel, servant.....	21.91	42.19	22.63	55.30	2,205

The preceding table gives the mortality from all causes in the several industries. To obtain a comparative mortality in each occupation from separate diseases or groups of diseases is an even more complicated task. It would form too gigantic a task to abstract all the deaths of males distributed as to ages, occupations and cause of death in combination; and samples of causes of death must be selected for each industry. Dr. Ogle gives a table founded on this basis in the same report (pages xxx-xxxiii). The minimum number of deaths with causes is fixed at 500, in order to contribute a sufficiently wide basis for calculations. Not only must the sample be large enough, but, as Dr. Ogle points out, it must be so extensively taken as to be free from peculiarities due to locality or season. We do not reproduce here Dr. Ogle's elaborate table founded on this basis, but in the following remarks shall incorporate some of its results.

In the preceding table the occupations selected are given in the order of the lowness of the mortality, as shown by the comparative mortality figure.

The lowest mortality is enjoyed by the church (556), and the mortality has fallen considerably since 1860-61-71, at both the two age-periods.

Schoolmasters (719) are below lawyers (842), and still more below doctors (1,122) in mortality. This is probably due in part to the fact that the teachers in the public service (forming a great majority of the whole profession) have to undergo rigid medical examination before being admitted.

Gardeners are represented by a mortality figure of 599, farmers of 631, and agricultural laborers of 701. The higher mortality of laborers is largely due to their greater liability to phthisis and respiratory diseases. On the other hand, the farmer has a higher mortality under the headings of gout, alcoholism, and liver disease. There is some doubt in regard to fisherman, because of the possibility of some escaping both the census and death registration. Taking the figures as they stand, fishermen have a very low mortality from diseases of the nervous and respiratory system and from phthisis, but a high mortality from accidents, rivaling coal miners in this respect.

The figures as to cabmen (1,482), bargemen (1,305), carters (1,275),

and costermongers (1,879), show that an open air life in itself is not sufficient to ensure healthfulness. Probably many engaged in these occupations have been driven to them by comparative unhealthiness. They also show a high mortality from alcoholic diseases, as well as from accident, phthisis, and respiratory diseases. Commercial travellers stand at 948, a considerable proportion of their mortality being due to intemperance.

Brewers (1,361), inkeepers (1,521), and inn servants (2,205), have an excessive mortality, which is chiefly due to alcoholism. For inn keepers and publicans the mortality from alcoholism is more than five times higher than the average, and from liver diseases is six times as high as the average. They also show the highest mortality from gout and from urinary diseases, with the exception of occupations dealing with lead. Spite of these high figures, a large proportion of both publicans and brewers must be of temperate habits, for the comparative mortality figure for recognized intemperate persons is, according to Mr. Neison's data, 3,240.

There is a decline in the mortality of all the following shop keepers, the comparative mortality of which is now for coal merchant, 758; grocer; 771; stationer and bookseller, 825; general shopkeeper, 865; draper, 883; ironmonger, 895; fishmonger, 974; tobacconist, 1,000; milk, butter, cheesemonger, 1,009; chemist, 1,015; green grocer, 1,015. Grocers suffer much less than drapers from phthisis and respiratory diseases, and slightly more from alcoholism and suicide. The mortality of grocers from phthisis is one of the lowest; that of drapers one of the highest.

Butchers have a high mortality (1,170), which is largely due to excessive indulgence, their mortality from alcoholism, liver and urinary diseases respectively, being almost identical with that of brewers. Like other trades in which there is evidence of alcoholic excess, their mortality is high from phthisis (the figure being 261 against an average of 220 for all males).

The mortality figure of bakers and confectioners is 958, almost the same as that of millers. Their mortality from alcoholism and suicide is very high, but phthisis is hardly above the average, notwithstanding their exposure to dust.

Hatters (1,064), are subjected to great alternation of temperature,

and, like hairdressers (1,327), have a high mortality from phthisis and from the effects of alcoholism.

For both tailors (1,051) and shoemakers (921), the mortality must be regarded as high. Their mortality from phthisis and from diseases of the circulating and nervous systems is high, as well as from alcoholism and suicide.

Printers (1,071), and bookbinders (1,167), have both a high mortality. The high mortality of printers is entirely due to phthisis (461 against 220 for all males). Except costermongers, and occupations subject to dust inhalation, no mortality from phthisis approaches that of printers. The mortality of printers from lead poisoning, even if renal and nervous diseases be included, is but slight.

The earthenware and china manufacturer was noted by Dr. Farr in 1871 as one of the unhealthiest trades in England. Now its mortality figure is 1,742, which is only exceeded by costermongers, Cornish miners, and inn and hotel servants. This excessive mortality is chiefly from phthisis and respiratory diseases (1,118 as against 402 for all males). Only in one occupation, that of Cornish miners, is the mortality from these two causes higher. Circulatory diseases also rank very high, the "potters' asthma" in turn giving rise to cardiac disease.

In the textile manufactures there appears to be a gradation in mortality, probably connected with the amount of dust and the temperature in each process, from cotton manufacture, 1,088; woolen and worsted, 1,032; carpet manufacture, 945; silk, 845; lace, 755; to hosiery manufacture, 717:

	All Males	Cotton.	Woolen.	Hosiery.
Total mortality figure.....	1,000	1,088	1,032	717
Mortality figure for phthisis and respiratory disease	402	543	463	283

Plumbers have a high mortality (1,202), which is mainly determined by lead poisoning, though alcoholism and accidents also range high. The mortality figure under lead poisoning is 21, the

highest for any occupation except that for filemakers. It would probably be higher, were it practicable to take painters separately. The mortality figure from urinary diseases is 100, only exceeded by filemakers. Gout and diseases of the nervous and circulatory systems also range very high. As early as 1854, Garrod found that 30 per cent. of his hospital patients with gout had been subjected to lead poisoning.

Cutlers (1,309) and filemakers (1,667) each inhale metallic dust mixed with stone dust. The mortality figure for cutlers from phthisis and respiratory diseases is 760, for file makers 782. Filemakers are also exposed to lead poisoning, caused by the use of a cushion of lead on which to strike their files, their comparative mortality figure from plumbism being 41, as compared with 21 for plumbers and painting.

Miners constitute an important portion of the industrial community, as 1 in every 19 males between 25 and 65 is a miner. Owing to the unfortunate fact that the death returns commonly do not distinguish between the different kinds of miners, it is impracticable to estimate separately the mortality of each kind of miners. At least one-fifth of their total mortality is due to accident. In the following statements a geographical classification has been adopted, which roughly differentiates the nature of the mineral in which miners work. Coal miners, as thus distinguished, have a surprisingly low mortality, except in South Wales, where it is slightly higher than for all males in the same district, and even here the low mortality would be maintained if accidents were excluded. If accidents were excluded for all miners, they would have a mortality only slightly higher than that of all agriculturalists (farmers, agricultural laborers and gardeners). It must be remembered, however, that coal miners are a picked body of men, while the general population comprises numerous sick and weakly ones. But even when compared with quarrymen or blacksmiths, who must be picked in the same sense, the mortality of coal miners, excluding accident, is low. Coal miners have an appalling mortality from accident, only approached by other forms of mining, stone and slate quarrying, and fishing. Nearly one half of the accidental deaths were from the falling in of the sides or roofs of mines, and one-fourth by fire-damp or by choke-damp. Under other headings

they are below the average, except for respiratory diseases, for which they stand at 202 as against 182 for all males in England and Wales. Probably many cases of so-called "miners' phthisis" should come under this head; though even allowing these to stand as at present, the figure for phthisis among coal miners is only 126. Coal dust is comparatively free from sharp angles, and does not therefore cause such irritation of the lungs as metallic dust. English, Belgian and German evidence all shows a comparative immunity of coal miners from phthisis, and it has been supposed that coal dust possesses some inhibitory power on the development of tubercles. Partly owing to the fact that there is some doubt whether miners' phthisis is tubercular or bronchitic in character, it is still however dubious whether the low mortality of coal miners from phthisis is a part of their general healthiness and exemption from diseases of all kinds, or whether coal miners possess some special immunity from phthisis.

Among Cornish miners the mortality figure is 1,839 as compared with 887 for all Cornish males, having considerably increased since Dr. Farr's last report on the subject for 1861-70. This increase is probably due in part to emigration of the more robust, consequent on the decadence of the industry, just the opposite of what happens in other mining districts; but this does not entirely explain why mining in Cornwall is apparently so much more unhealthy than elsewhere. The great bulk of the excessive mortality among Cornish miners is from phthisis and respiratory disease, which stand at 1,148 as against 368 for all Cornish males, and 459 for the miners of South Wales and Monmouthshire.

Chimney sweeps have a mortality figure of 1,519, and an excessive mortality under nearly all the chief headings. Their liability to cancer appears to be eight times as great as that of all males.

We may summarize in conclusion some of the most important facts bearing upon the influence of foul air, of dust, alcoholic excess, and lead poisoning on the health of those exposed to their effects. The following tables, given by Dr. Ogle, will illustrate these points:

COMPARATIVE MORTALITY OF MALES WORKING IN AIR OF DIFFERENT DEGREES OF PURITY, FROM PHTHISIS AND DISEASES OF THE RESPIRATORY ORGANS.

OCCUPATION.	PHTHISIS.	DISEASES OF RESPIRATORY SYSTEM.	THE TWO TOGETHER.
Fishermen	108	90	198
Agriculturists	115	122	237
Grocers	167	116	283
Drapers	301	129	430
Tailors	285	186	471
Printers	461	166	627

COMPARATIVE MORTALITY OF MALES IN CERTAIN DUST INHALING OCCUPATIONS FROM PHTHISIS AND DISEASES OF THE RESPIRATORY ORGANS.

OCCUPATION.	COMPARATIVE MORTALITY FIGURE (1880-1-2) THAT OF ALL MALES BEING 1,000.	PHTHISIS.	DISEASES OF RESPIRATORY ORGANS.	THE TWO TOGETHER.
Coal miner	891	126	202	328
Carpenter, joiner	820	204	133	337
Baker, confectioner	958	212	186	398
Mason, builder, bricklayer	969	252	201	453
Wool manufacture	1,032	257	205	463
Cotton manufacture	1,088	272	271	543
Quarrymen	1,122	308	274	582
Cutter	1,309	371	389	760
Filemaker	1,647	433	350	783
Earthenware manufacture	1,742	473	645	1,118
Cornish miner	1,839	690	458	1,148
Fishermen		108	90	198

Fishermen form, in the preceding tables, a convenient standard of comparison, as they have no exposure to dust, and enjoy a pure atmosphere for their work. It will be seen that the dust from textile fabrics is much more dangerous than that from coal or wood or flour, while the dust of stone and metals is still more deleterious. The high mortality among Cornish miners and pottery makers is due in part to their working in confined spaces, and consequently inhaling the stone dust in much larger amount.

APPENDIX III.

APPENDIX III.

The Factories Act of Switzerland, 1877.*

I—General Provisions.

1. The term factory, as used in this act, includes every industrial establishment in which a number of work people are employed, regularly and at the same time, in closed rooms, outside of their own dwellings. In case of doubt the Bundesrath [Federal administrative council], on receipt of a report from the cantonal government, shall finally decide whether any particular establishment is to be considered a factory.

2. In every factory the work rooms, machinery, and implements shall be so constructed and kept in repair as to insure as far as possible the health and lives of the work people. Particular care shall be given to the proper lighting of the work rooms during work hours; that the air, as far as possible, is free from dust, and that the ventilation is always regulated with due regard to the number of work people and lighting machines and the generation of impurities. Dangerous parts of machinery and belting shall be carefully inclosed. In general, all measures for the protection of health and security against injury, which experience, the present state of scientific advance as well as the surrounding conditions make possible, shall be adopted.

3. Any one who proposes to erect and operate a factory, or to

*Bundesgesetz betreffend der Arbeit in den Fabriken, March 23, 1877. The act as given above is a translation made for the Bureau from the original pamphlet edition (German).

alter one already established, shall give notice of such purpose, and of the nature of the industry it is intended to carry on therein, to the cantonal government, as well as submit the plans of the building and internal arrangements, in order to show that the establishment of the factory shall satisfy every legal requirement. The factory shall not be opened or the new industry begun without a special government permit, which, in case of operations involving special risk to the health and lives of the operatives or of the neighboring population, shall be qualified with proper reservations. If carrying on the operations cause nuisances, endangering the health and lives of the operatives or of the neighboring population, the authorities shall order their peremptory abatement, or if the case require, the suspension of the operations.

Disputes between the cantonal authorities and factory owners shall be decided by the Bundesrath.

The Bundesrath shall promulgate general ordinances and special regulations for the uniform carrying out of the provisions of this section. The cantonal laws shall still remain in force in respect to the building police (*Baupolizei*), subject, however, to the legal regulations herein provided for.

4. The factory occupier shall immediately notify the proper local authorities of every considerable bodily injury or death occurring in his factory. The said authorities thereupon shall institute an official investigation into the cause and effects of the accident, and report thereon to the cantonal government.

5. [This section relates to the extent of the employers' liability to their employes (*Haftpflicht*). The provisions herein have been superseded by the more comprehensive acts of 1881 and 1887, substantially reproduced on pages 126-138 of the eleventh annual report of the Bureau (1888)].

6. Factory occupiers shall keep according to the form prescribed by the Bundesrath, a register of all workers employed in their establishments.

7. It shall be the duty of the factory occupier to establish shop rules regulating the whole system of working, the factory police, the conditions of obtaining and quitting the employ, and the payment of wages. If fines are provided for, they shall not exceed one-half of the daily wages of the person fined; when imposed, they

shall be expended only for the benefit of the operatives, particularly for relief funds. Wage deductions (*Lohnabzuege*) for poor work or spoiled material are not included under the term fines as herein used.

The factory occupier further shall watch over the morals and public conduct of his male and female workers.

8. The shop rules, as well as amendments thereto, shall be submitted to the respective cantonal government for approval, which shall only be granted if they contain nothing contrary to law, and after opportunity has been given to the workmen to be heard on the subject. The approved rules shall be binding, both on the factory occupier and the work people. The penalties provided for in Section 19, following attach in case of their infringement by the former.

If any inconveniences result from the enforcement of the shop rules, the cantonal government may require their amendment. The printed shop rules, with the approval of the cantonal government, shall be posted in a conspicuous place in the factory, and information thereof shall be given to each operative on his entering the employment.

9. If there is no written agreement to the contrary, the relations between factory occupier and operative may be freely dissolved by either party on a fourteen days' notice, expiring on pay-day or Saturday. When there are no especial difficulties in the way, any piecework which has been begun must at least be finished. But until the expiration of the above-mentioned notice, no factory occupier shall, on his own motion, discharge his workman, unless the latter has shown himself to be incompetent to perform work begun or is guilty of some grave infraction of the shop rules; and the operative is only justified in immediately leaving the employment if the factory occupier fails to perform his stipulated obligations or is guilty of or has permitted an illegal treatment of such operative, or one inconsistent with the contract.

Disputes over the respective notices to leave and all the other contract relations, shall be decided by the competent judge.

10. Factory occupiers shall pay their operatives at least once every two weeks in cash, lawful money, and at the factory. Monthly payments are permitted, however, if a special agreement is made to that effect between employer and employe. On pay-day not more

than the last week's wages (*der letzte Wochenlohn*) shall be retained. Part payments on uncompleted piecework shall be made as mutually agreed upon by the parties interested. No wage dues, except under mutual agreement, shall be retained for special purposes.

11. Regular work shall not continue longer than eleven hours a day (on Saturdays, and days preceding holidays, ten hours), and shall be performed between 6 o'clock in the morning, (in the months of June, July and August, respectively, 5 o'clock in the morning), and 8 o'clock in the evening. The work hours shall be timed by the public clock, and notified to the local authorities.

For trades which are injurious to the health, as well as for those in which an eleven hour work day, by reason of existing arrangements or on account of the operations carried on, endangers the health and lives of the operatives, the Bundesrath shall reduce the number of hours as far as may be necessary, only, however, until it is shown that the existing dangers to health have been removed.

Permission to prolong the work hours in exceptional cases, or temporarily, in factories or industries, provided such permission be granted for no longer than two weeks, shall be obtained from the competent district authorities (*Bezirksbehoerden*), or, if none, from the local authorities (*Ortsbehoerden*); otherwise, from the cantonal government.

For dinner, at least one hour at midday shall be allowed. Work-people who bring their dinners with them, or have them sent, shall be furnished gratis outside of the regular work rooms with suitable apartments, heated in winter.

12. The provisions of Section 11 shall not apply to work which is merely auxiliary, preceding or following the fabrication proper, and is performed by male or unmarried female operatives over 18 years of age.

13. Night work, that is, work performed between 8 o'clock at night and 6 o'clock (or 5 o'clock, Section 11) in the morning, shall only be permitted in exceptional cases, and only with the consent of the workmen to be employed thereat. Except where it is required only once for making pressing and necessary repairs, permission to do night work must in every case be obtained from the authorities, and if the night work is to continue for longer than two weeks, only from the cantonal government.

In those branches of manufacture, which from their nature require continuity of production, night work may regularly be performed. When it is desired to take advantage of this provision for any enterprise, the necessity of continuous operations shall be shown to the Bundesrath by petition, and at the same time a statement must be presented making clear the work regulations as well as the number of work hours to be required, under no circumstances to exceed eleven out of twenty-four for any single workman. In case of changed manufacturing conditions the permit may be either recalled or modified.

14. Sunday work is forbidden, except in cases of necessity, and in those establishments which, from the nature of the manufacture carried on, require continuous operations and for which the permission has been obtained from the Bundesrath, as provided in Section 13. But even in such establishments workmen must have every other Sunday free.

Cantonal legislation may provide for further festival days, on which factory work shall be forbidden, the same as on Sundays. These holidays, however, shall not exceed eight annually and shall only be binding on the members of the religious confessions which they affect. Anyone declining to work on other church holidays shall not be fined for such refusal.

II—Employment of Women in Factories.

15. Females under no circumstances shall be employed on Sundays or at night work. If they attend to domestic affairs, they shall be dismissed an half hour previous to the mid-day interval, provided that does not exceed one and a half hours. Women in child birth shall not be employed in a factory for the eight weeks embracing the period preceding and succeeding their confinement. Their re-entry into the same is conditioned on proof that at least six weeks have elapsed since confinement. The Bundesrath shall designate those branches of factory employment in which pregnant women shall not be allowed to work at all.

Women shall not be employed in cleaning of motors, transmitters and dangerous machinery in motion.

III—Employment of Minors in Factories.

16. Children who have not passed their 14th year of age, shall not be employed in factories. In case of children between the ages of 15 and 16 years inclusive, the time of daily secular and religious instruction and factory labor shall not together exceed 11 hours. Secular and religious instruction shall not be encroached upon by factory work.

Sunday and night work is forbidden for young people under 18 years of age. In trades where the necessity of continuous operations has been established in accordance with Section 13, the Bundesrath, provided that it, at the same time, is shown that the co-labor of young people is indispensable, may, in exceptional cases, also permit boys from 14 to 16 years of age to be employed, especially if it appears that it is requisite for a thorough learning of the trade. In such cases, however, the Bundesrath shall fix the time of night work for the young people below the maximum of 11 hours, prescribe alternations, employment by shifts and the like regulations; in general, according to the circumstances of the case, annex to this exceptional permission every prescription and guarantee in the interest of the young people and necessary for the preservation of their health.

The Bundesrath is empowered to designate those branches of factory work in which children shall not be employed at all.

A factory occupier shall not be permitted to plead ignorance of the age or the legal school obligations (*Schulpflichtigkeit*) of his minor workers.

IV—Enforcement and Penalties.

[Sections 17-18 provide for cantonal reports on the carrying out of the provisions of this act, which is enforced by factory inspectors appointed by the Bundesrath].

APPENDIX IV.

APPENDIX IV.

The Factory and Workshop Act, 1878, (ENGLAND).

AN ACT TO CONSOLIDATE AND AMEND THE LAW RELATING TO
FACTORIES AND WORKSHOPS.*

PRELIMINARY.

1. This act may be cited as the Factory and Workshop Act, 1878.

2. This act shall come into operation on the 1st day of January, 1879, which day is in this act referred to as the commencement of this act: Provided that at any time after the passing of this act, any appointment, regulation, or order may be made, any notice issued, form prescribed and act done which appears to a secretary of state necessary or proper to be made, issued, prescribed, or done for the purpose of bringing this act into operation at the commencement thereof.

PART I.—GENERAL LAW RELATING TO FACTORIES AND WORKSHOPS.

1—Sanitary Provisions.

3. A factory and a workshop shall be kept in a cleanly state and free from effluvia arising from any drain, privy, or other nuisance.

A factory or workshop shall not be so overcrowded while work is carried on therein as to be injurious to the health of the persons

41 and 42 Vict. C, 16, May 27, 1878. And see the Factory and Workshop Act, 1833, (46 and 47 Vict. C, 53,) *post*.

employed therein and shall be ventilated in such a manner as to render harmless, so far as is practicable, all the gases, vapors, dust, or other impurities generated in the course of the manufacturing process or handicraft carried on therein that may be injurious to health.

A factory or workshop in which there is a contravention of this section, shall be deemed not to be kept in conformity with this act.

4 Where it appears to an inspector under this act that any act, neglect, or default in relation to any drain, water closet, privy, ash pit, water supply, nuisance or other matter in a factory or workshop is punishable or remediable under the law relating to public health, but not under this act, that inspector shall give notice in writing of such act, neglect or default to the sanitary authority in whose district the factory or workshop is situate, and it shall be the duty of the sanitary authority to make such inquiry into the subject of the notice and take such action thereon, as to that authority may seem proper for the purpose of enforcing the law.

An inspector under this act may for the purpose of this section, take with him into a factory or workshop a medical officer of health, inspector of nuisances, or other officer of the sanitary authority.

2—*Safety.*

5. With respect to the fencing of machinery in a factory, the following provisions shall have effect:

(1). Every hoist or teagle near to which any person is liable to pass or be employed, and every fly-wheel directly connected with the steam or water or other mechanical power, whether in the engine house or not, and every part of a steam engine and water wheel, shall be securely fenced; and

(2). Every wheel-race not otherwise secured, shall be securely fenced close to the edge of the wheel-race; and

(3). Every part of the mill gearing* shall either be securely fenced or be in such position or of such construction as to be equally safe to every person employed in the factory, as it would be if it were securely fenced; and

* See *post*, sect. 96, and *Holmes v. Clarke*, 30 L. J., Exc. 135; 31 L. J., Exc. 356.

(4). All fencing shall be constantly maintained in an efficient state while the parts required to be fenced are in motion, or used for the purpose of any manufacturing process.

A factory in which there is a contravention of this section shall be deemed not to be kept in conformity with this act.

6. When an inspector considers that in a factory any part of the machinery of any kind moved by steam, water, or other mechanical power, to which the foregoing provisions of this act, with respect to the fencing of machinery do not apply, is not securely fenced, and is so dangerous as to be likely to cause bodily injury to any person employed in the factory, the following provisions shall apply to the fencing of such machinery.

(1). The inspector shall serve on the occupier of the factory a notice requiring him to fence the part of the machinery which the inspector so deems to be dangerous.

(2). The occupier, within seven days after the receipt of the notice, may serve on the inspector a requisition to refer the matter to arbitration; and thereupon the matter shall be referred to arbitration, and two skilled arbitrators shall be appointed, the one by the inspector and the other by the occupier; and the provisions of the Companies' Clause Consolidation Act, 1845, with respect to the settlement of disputes by arbitration shall, subject to the express provisions of this section, apply to the said arbitration, and the arbitrators or their umpire shall give the decision within twenty-one days after the last of the arbitrators, or, in the case of the umpire, after the umpire is appointed, or within such further time as the occupier and inspector, by writing, allow; and if the decision is not so given the matter shall be referred to the arbitration of an umpire, to be appointed by the judge of the county court within the jurisdiction of which the factory is situate.

(3). If the arbitrators or their umpire decide that it is unnecessary or impossible to fence the machinery alleged in the notice to be dangerous, the notice shall be cancelled, and the occupier shall not be required to fence in pursuance thereof, and the expenses of the arbitration shall be paid as the expenses of the inspector under this act.

(4). If the occupier does not, within the said seven days, serve on the inspectors a requisition to refer the matter to arbitration or

does not appoint an arbitrator within seven days after he served that requisition, or if neither the arbitrators nor the umpire decide that it is unnecessary or impossible to fence the machinery alleged in the notice to be dangerous, the occupier shall securely fence the said machinery in accordance with the notice, or with the award of the arbitrators, or umpire, if it modifies the notice, and the expenses of the arbitration shall be paid by the occupier and shall be recoverable from him by the inspector in the county courts.

(5). Where the occupier of a factory fails to comply within a reasonable time with the requirements of this section as to securely fencing the said machinery in accordance with the notice or award, or fails to keep the said machinery securely fenced in accordance therewith, or fails constantly to maintain such fencing in an efficient state while the machinery required to be fenced is in motion for the purpose of any manufacturing process, the factory shall be deemed not to be kept in conformity to this act.

(6). For the purpose of this section and of any provisions of this act relating thereto, "machinery" shall be deemed to include any driving strap or band.

7. Where an inspector considers that in a factory or workshop a vat, pan, or other structure, which is used in the process or handicraft carried on in such factory or workshop, and near to or over which children or young persons are liable to pass or to be employed, is so dangerous, by reason of its being filled by hot liquor or molten metal or otherwise, as to be likely to be a cause of bodily injury to any child or young person employed in the factory or workshop, he shall serve on the occupier of the factory or workshop a notice requiring him to fence such vat, pan, or other structure.

The provisions of this act with respect to the fencing of machinery which an inspector considers not to be securely fenced and to be dangerous shall apply in like manner as if they were re-enacted in this section, with the substitution of the vat, pan, or other structure, for machinery, and with the addition of workshop, and if the occupier of a factory or workshop fails constantly to maintain the fencing required under this section in an efficient state, while such vat, pan, or other structure is so filled or otherwise dangerous as aforesaid, the factory or workshops shall be deemed not to be kept in conformity with this act.

8. Where an inspector observes in a factory that any grindstone, worked by steam, water, or other mechanical power is in itself so faulty, or is fixed in so faulty a manner as to be likely to cause bodily injury to the grinder using the same, he shall serve on the occupier of the factory a notice requiring him to replace such faulty grindstone, or to properly fix the grindstone fixed in the faulty manner.

The provisions of this act with respect to the fencing of machinery which an inspector considers not to be securely fenced and to be dangerous, shall apply in like manner as if they were re-enacted in this section with the necessary modifications.

Where the occupier of a factory fails to keep the grindstone mentioned in the notice or award, in such a state and fixed in such a manner as not to be dangerous, the factory shall be deemed not to be kept in conformity with this act.

9. A child shall not be allowed to clean any part of the machinery of a factory while the same is in motion by the aid of steam, water or other mechanical power.

A young person or woman shall not be allowed to clean such part of the machinery in a factory as mill-gearing, while the same is in motion for the purpose of propelling any part of the manufacturing machinery.

A child, young person, or woman shall not be allowed to work between the fixed and traversing part of any self-acting machine while the machine is in motion by the action of steam, water, or other mechanical power.

A child, young person or woman allowed to clean or to work in contravention of this section, shall be deemed to be employed contrary to the provisions of this act.

3—Employment and Meal Hours.

10. A child, young person, or woman shall not be employed in a factory or a workshop, except during the period of employment hereinafter mentioned.

11. With respect to the employment of young persons and women in a textile factory the following regulations shall be observed :

(1). The period of employment, except on Saturday, shall either begin at six o'clock in the morning and end at six o'clock in the evening, or begin at seven o'clock in the morning and end at seven o'clock in the evening; and

(2). The period of employment on Saturday shall begin either at six o'clock or seven o'clock in the morning; and

(3). Where the period of employment on Saturday begins at six o'clock in the morning, that period

(a). If not less than one hour is allowed for meals, shall end at one o'clock in the afternoon as regards employment in any manufacturing process, and at half-past one o'clock in the afternoon as regards employment for any purpose whatever; and

(b). If less than one hour is allowed for meals, shall end at half an hour after noon as regards employment in any manufacturing process, and at one o'clock in the afternoon as regards employment for any purpose whatever; and

(4). Where the period of employment on Saturday begins at seven o'clock in the morning, that period shall end at half-past one in the afternoon as regards any manufacturing process, and at two o'clock in the afternoon as regards employment for any purpose whatever; and

(5). There shall be allowed for meals during the said period of employment in the factory

(a). On every day except Saturday not less than two hours, of which one hour at the least, either at the same time or at different times, shall be before three o'clock in the afternoon; and

(b). On Saturday not less than half an hour; and

(6). A young person or woman shall not be employed continuously for more than four hours and a half without an interval of at least half an hour for a meal.

12. With respect to the employment of children in a textile factory, the following regulations shall be observed:

(1). Children shall not be employed except on the system either of employment in morning and afternoon sets, or of employment on alternate days only; and

(2). The period of employment for a child in a morning set shall, except on Saturday, begin at the same hour as if the child were a young person, and end at one o'clock in the afternoon; or if the

dinner time begins before one o'clock at the beginning of dinner time ; and

(3). The period of employment for a child in an afternoon set shall, except on Saturday, begin at one o'clock in the afternoon, or at any later hour at which the dinner time terminates, and end at the same hour as if the child were a young person* ; and

(4). The period of employment for any child on Saturday shall begin and end at the same hour as if the child was a young person ; and

(5). A child shall not be employed in two successive periods of seven days in a morning set ; and a child shall not be employed on two successive Saturdays, nor on Saturday in any week if on any other day in the same week his period of employment has exceeded five hours and a half ; and

(6). When a child is employed on the alternate day system, the period of employment for such child and the time allowed for meals shall be the same as if the child were a young person ; but the child shall not be employed on two successive days, and shall not be employed on the same day of the week in two successive weeks ; and

(7). A child shall not on either system be employed continuously for any longer period than he could be if he were a young person without an interval of at least half an hour for a meal.

13. With respect to the employment of young persons and women in a non-textile factory, and of young persons in a workshop, the following regulations shall be observed :

(1). The period of employment, except on Saturday shall (save as in this act specially excepted), either began at six o'clock in the morning and end at six o'clock in the evening, or begin at seven o'clock in the morning and end at seven o'clock in the evening, and

(2). The period of employment on Saturday shall (save as in this act specially excepted) begin at six o'clock in the morning or at seven o'clock in the morning, and end at two o'clock in the afternoon, and

(3). There shall be allowed for meals during the said period of employment in the factory or workshop—

(a). On every day except Saturday not less than one hour and a

*And see the Factory and Workshop Act, 1883 (46 and 47) Vict. c. 53, s.14), *post*.

half, of which one hour at least, either at the same time or at different times, shall be before three o'clock in the afternoon, and

(b). On Saturday not less than half an hour, and

(4). A young person or a woman in a non-textile factory and a young person in a workshop shall not be employed continuously for more than five hours without an interval of at least half an hour for a meal.

14. With respect to the employment of children in a non-textile factory and a workshop the following regulations shall be observed:

(1). Children shall not be employed except either on the system of employment in morning and afternoon sets,* or (in a factory or workshop in which not less than two hours are allowed for meals on every day except on Saturday) on the system of employment on alternate days only; and

(2). The period of employment for a child in a morning set on every day, including Saturday, shall begin at six or seven o'clock in the morning and end at one o'clock in the afternoon or, if the dinner time begins before one o'clock, at the beginning of dinner time; and

(3). The period of employment for a child in an afternoon set on every day, including Saturday, shall begin at one o'clock in the afternoon, or at any hour later than half-past twelve o'clock at which the dinner time terminates, and end on Saturday at two o'clock in the afternoon, and on any other day at six or seven o'clock in the evening, according as the period of employment for children in the morning set began at six or seven o'clock in the morning; and

(4). A child shall not be employed in two successive periods of seven days in a morning set, nor in two successive periods of seven days in an afternoon set, and a child shall not be employed on Saturday in any week in the same set in which he has been employed on any other day of the same week; and

(5). When a child is employed on the alternate day system—

(a). The period of employment for such child shall, except on Saturday, either begin at six o'clock in the morning and end at six o'clock in the evening, or begin at seven o'clock in the morning and end at seven o'clock in the evening; and

*See Factory and Workshops Act, 1883, *post*.

(*b*). The period of employment for such child shall on Saturday begin at six or seven o'clock in the morning and end at two o'clock in the afternoon; and

(*c*). There shall be allowed to such child for meals during the said period of employment not less, on any day except Saturday, than two hours, and on Saturday than half an hour; but

(*d*). The child shall not be employed in any manner on two successive days, and shall not be employed on the same day of the week in two successive weeks; and

(6). A child shall not on either system be employed continuously for more than five hours without an interval of at least half an hour for a meal.

(15). With respect to the employment of women in workshops, the following regulations shall be observed:

(1). In a workshop which is conducted on the system of employing therein children and young persons, or either of them, a woman shall not be employed except during the same period and subject to the same restrictions as if she were a young person; and regulations of this act with respect to the employment of young persons in a workshop shall apply accordingly to the employment of women in that workshop; and

(2). In a workshop which is conducted on the system of not employing therein either children or young persons—

(*a*). The period of employment for a woman shall, except on Saturday, begin at six o'clock in the morning and end at nine o'clock in the evening, and shall on Saturday begin at six o'clock in the morning and end at four o'clock in the afternoon; and

(*b*). There shall be allowed to a woman for meals and absence from work during the period of employment not less, except on Saturday, than four hours and a half, and on Saturday than two hours and a half.

A workshop shall not be deemed to be conducted on the system of non-employing therein children or young persons until the occupier has served on an inspector notice of his intention to conduct his workshop on that system.

16. Where persons are employed at home, that is to say, in a private house, room, or place which, though used as a dwelling, is by reason of the work carried on there a factory or workshop within

the meaning of this act, and in which neither steam, water nor other mechanical power is used in aid of the manufacturing process carried on there, and in which the only persons employed are members of the same family dwelling there, the foregoing regulations of this act with respect to the employment of children, young persons, and women, shall not apply to such factory or workshop, and in lieu thereof the following regulations shall be observed therein :

(1). A child or young person shall not be employed in the factory or workshop except during the period of employment hereinafter mentioned ; and

(2). The period of employment for a young person shall, except on Saturday, begin at six o'clock in the morning and end at nine o'clock in the evening, and shall on Saturday begin at six o'clock in the morning and end at four o'clock in the afternoon ; and

(3). There shall be allowed to every young person for meals and absence from work during the period of employment not less, except on Saturday, than four hours and a half, and on Saturday than two hours and a half ; and

(4). The period of employment for a child on every day either shall begin at six o'clock in the morning and end at one o'clock in the afternoon, or shall begin at one o'clock in the afternoon and end at eight o'clock in the evening, or on Saturday at four o'clock in the afternoon ; and for the purposes of the provisions of this act respecting education, such child shall be deemed according to circumstances, to be employed in a morning or afternoon set ; and

(5) A child shall not be employed before the hour of one in the afternoon in two successive periods of seven days, nor after that hour in two successive periods of seven days ; and a child shall not be employed on Saturday in any week before the hour of one in the afternoon, if on any other day in the same week he has been employed before that hour, nor after that hour if on any other day of the same week he has been employed after that hour ; and

(6). A child shall not be employed continuously for more than five hours without an interval of at least half an hour for a meal.

17. With respect to meals the following regulations shall (save as in this act specially excepted) be observed in a factory and workshop :

(1) All children, young persons, and women employed therein shall have the times allowed for meals at the same hour of the day ; and

(2). A child, young person, or woman shall not, during any part of the times allowed for meals in the factory or workshop, be employed in the factory or the workshop, or be allowed to remain in a room in which a manufacturing process or handicraft is then being carried on.

18. The period of employment on Saturday for a young person or woman in a non-textile factory or workshop may be of the same length as on any other day, if the period of employment of such young person or woman has not exceeded eight hours on any day of the same week, and if notice has been affixed in the factory or workshop, and served on the inspector.

19. The occupier of a factory or workshop may from time to time fix within the limits allowed by this act, and shall (save as is in this act specially excepted) specify in a notice affixed in the factory or workshop, the period of employment, the times allowed for meals, and whether the children are employed on the system of morning and afternoon sets or of alternate days.

The period of employment and the times allowed for meals in the factory or workshop shall be deemed to be the period and times specified in the notice affixed in the factory or workshop ; and all the children in the factory or workshop shall be employed either on the system of morning and afternoon sets, or on the system of alternate days, according to the system for the time being specified in such notice :

Provided that a change in such period or times or system of employment shall not be made until after the occupier has served on an inspector and affixed in the factory or workshop notice of his intention to make such change, and shall not be made oftener than once a quarter, unless for special cause allowed in writing by an inspector.

20. A child under the age of ten years shall not be employed in a factory or workshop.

21. A child, young person, or women, shall not (save as is in

this act specially excepted) be employed on Sunday in a factory or workshop.

4—Holidays.

22. The occupier of a factory or of a workshop shall (save as in this act specially excepted) allow to every child, young person and woman employed therein the following holidays; that is to say

(1). The whole of Christmas Day, and the whole of Good Friday, or if it is so specified by the occupier in the notice affixed in the factory or workshop, of the next public holiday under the Holidays Extension Act, 1875; and in addition

(2). Eight half holidays in every year, but a whole holiday may be allowed in lieu of any two such half holidays; and

(3). At least half of said half holidays or whole holidays shall be allowed between the fifteenth day of March, and the first day of October in every year; and

(4). Cessation from work shall not be deemed to be a half holiday or whole holiday, unless a notice of the half holiday or whole holiday has been affixed in the factory or workshop for at least the whole period of employment of young persons and women on the last previous workday but one; and

(5). A half holiday shall comprise at least one-half of the period of employment for young persons and women on some day other than Saturday.

A child, young person, or woman who—

(a). on a whole holiday fixed by or in pursuance of this section for a factory or workshop is employed in the factory or workshop, or

(b) on a half holiday fixed in pursuance of this section for a factory or workshop is employed in the factory or workshop during the portion of the period of employment assigned for such half holiday, shall be deemed to be employed contrary to the provisions of this act.

If in a factory or workshop such whole holidays or half holidays as required by this section are not fixed in conformity therewith, the occupier of the factory or workshop shall be liable to a fine not exceeding £5.

5—Education of Children.

23. The parent of a child employed in a factory or in a workshop shall cause that child to attend some recognized efficient school (which school may be selected by such parent), as follows :

(1). The child, when employed in a morning or afternoon set, shall in every week, during any part of which he is so employed, be caused to attend on each work day for at least one attendance ; and

(2). The child, when employed on the alternate day system, shall on each work day preceding each day of employment in the factory or workshop be caused to attend for at least two attendances ;

(3). An attendance for the purpose of this section shall be an attendance as defined for the time being by a secretary of state with the consent of the Education Department, and be between the hours of eight in the morning and six in the evening.

Provided that—

(a). A child shall not be required by this act to attend school on Saturday, or on a holiday or half holiday allowed under this act in the factory or workshop in which the child is employed ; and

(b). The non-attendance of the child shall be excused on every day on which he is certified by the teacher of the school to have been prevented from attending by sickness or other unavoidable cause, also when the school is closed during the ordinary holidays or for any other temporary cause, and

(c). Where there is not within the distance of two miles, measured according to the nearest road, from the residence of the child a recognized efficient school which the child can attend, attendance at a school temporarily, approved in writing by an inspector under this act, although not a recognized efficient school, shall for the purposes of this act be deemed attendance at a recognized efficient school until such recognized efficient school as aforesaid is established, and with a view to such establishment the inspector shall immediately report to the Education Department every case of the approval of a school by him under this section.

A child who has not in any week attended school for all the attendances required by this section shall not be employed in the

following week until he has attended school for the deficient number of attendances.

The Education Department shall from time to time, by the publication of lists or by notices or otherwise, as they think expedient, provide for giving to all persons interested information of the schools in each school district which are recognized efficient schools.

24. The occupier of a factory or workshop in which a child is employed shall on Monday in every week (after the first week in which such child began to work therein), or on some other day appointed for that purpose by an inspector, obtain from the teacher of the recognized efficient school attended by the child, a certificate, according to the prescribed form and directions, respecting the attendance of such child at school in accordance with this act.

The employment of a child without obtaining such certificate as is required by this section shall be deemed to be employment of a child contrary to the provisions of this act.

The occupier shall keep every such certificate for two months after the date thereof, if the child so long continues to be employed in his factory or his workshop, and shall produce the same to an inspector when required during that period.

25. The board authority or persons who manage a recognized efficient school attended by a child employed in a factory or workshop, or some person authorized by such board authority or person, may apply in writing to the occupier of the factory or workshop to pay a weekly sum specified in the application, not exceeding threepence, and not exceeding one-twelfth part of the wages of the child, and after that application the occupier, so long as he employs the child, shall be liable to pay to the applicants, while the child attends their school, the said weekly sum, and the sum may be recovered as a debt, and the occupier may deduct the sum so paid by him from the wages payable for the services of the child.

26. When a child of the age of thirteen years has obtained from a person authorized by the Education Department a certificate of having attained such standard of proficiency in reading, writing and arithmetic or such standard of previous due attendance at a certified efficient school, as hereinafter mentioned, that child shall be deemed to be a young person for the purposes of this act.

The standards of proficiency and due attendance for the purposes of this section, shall be such as may be from time to time fixed for the purposes of this act by secretary of state, with the consent of the Educational Department, and the standards so fixed shall be published in the *London Gazette*, and shall not have effect until the expiration of at least six months after such publication.

Attendance at a certified day industrial school shall be deemed for the purposes of this section to be attendance at a certified efficient school.

6—*Certificates of Fitness for Employment.*

27. In a factory a child or a young person under the age of sixteen years shall not be employed for more than seven, or if the certifying surgeon for the district resides more than three miles from the factory, thirteen work days, unless the occupier of the factory has obtained a certificate, in the prescribed form, of the fitness of said child or young person for employment in that factory.

A certificate of fitness for employment for the purposes of this act shall be granted by the certifying surgeon for the district, and shall be to the effect that he is satisfied, by the production of a certificate of birth or other sufficient evidence, that the person named in the certificate of fitness is of the age therein specified, and has been personally examined by him, and is not incapacitated by disease or bodily infirmity for working daily for the time allowed by law in the factory named in the certificate.

28. In order to enable occupiers of workshops to better secure the observance of this act, and prevent the employment in their workshops of children and young persons under the age of sixteen years who are unfitted for that employment, an occupier of a workshop is hereby authorized to obtain if he thinks fit, from the certifying surgeon for the district, certificates of the fitness of children and of young persons under the age of sixteen years for employment in his workshop, in like manner as of that workshop were a factory, and the certifying surgeon shall examine the children and young persons, and grant certificates accordingly.

29. Where an inspector is of opinion that a child or a young person under the age of sixteen years is by disease or bodily infirmity incapacitated for working daily for the time allowed by

law in the factory or workshop in which he is employed, he may serve written notice thereof on the occupier of the factory or workshop requiring that the employment of such child or young person be discontinued from the period named therein, not being less than one nor more than seven days after the service of such notice, and the occupier shall not continue after the period named in such notice to employ such child or young person (notwithstanding a certificate of fitness has been previously obtained for such child or young person), unless the certifying surgeon for the district has, after the service of the notice, personally examined such child or young person, and has certified that such child or young person is not so incapacitated as aforesaid.

30. All factories and workshops, in the occupation of the same occupier, and in the district of the same certifying surgeon, or any of them, may be named in the certificate of fitness for employment, if the surgeon is of opinion that he can truly give the certificate for employment therein.

The certificate of birth (which may be produced to a certifying surgeon) shall either be a certified copy of the entry in the register of births, kept in pursuance of the acts relating to the registration of births, of the birth of the child or young person (whether such copy be obtained in pursuance of the Elementary Education Act, 1876, or otherwise), or be a certificate from a local authority within the meaning of the Elementary Education Act, 1876, to the effect that it appears from the returns transmitted, to such authority in pursuance of the said act by the register of births and deaths that the child was born at the date named in the certificate.

When a certificate of fitness for employment is to the effect that the certifying surgeon has been satisfied of the age of a child or young person by evidence other than the production of a certificate of birth, an inspector may, by notice in writing, annul the surgeon's certificate, if he has reasonable cause to believe that the real age of the child or young person named in it is less than that mentioned in the certificate, and thereupon that certificate shall be of no avail for the purposes of this act.

When a child becomes a young person a fresh certificate of fitness must be obtained.

The occupier shall, when required, produce to an inspector at the

factory or workshop in which a child or young person is employed, the certificate of fitness of such child or young person for employment, which he is required to obtain under this act.

7—*Accidents.*

31. Where there occurs in a factory or workshop any accident which either

(a). Causes loss of life to a person employed in the factory or in the workshop, or

(b) Causes bodily injury to a person employed in the factory or workshop, and is produced either by machinery moved by steam, water or other mechanical power, or through a vat, pan or other structure filled with hot liquid or molten metal, or other substance, or by explosion, or by escape of gas, steam or metal, and is of such a nature as to prevent the person injured by it from returning to his work in the factory or workshop within forty-eight hours after the occurrence of the accident, written notice of the accident shall forthwith be sent to the inspector and to the certifying surgeon for the district, stating the residence of the person killed or injured, or the place to which he may have been removed, and if any such notice is not sent, the occupier of the factory or workshop shall be liable to a fine not exceeding five pounds.*

If any such accident as aforesaid occurs to any person employed in an iron mill or blast furnace, or other factory or workshop where the occupier is not the actual employer of the person killed or injured, the actual employer shall immediately report the same to the occupier, and in default shall be liable to a fine not exceeding five pounds.

A notice of an accident, of which notice is required by Section sixty-three of Explosives Act, 1875, to be sent to a government inspector, need not be sent to the certifying surgeon in pursuance of this section.

32. When a certifying surgeon receives in pursuance of this act notice of an accident in a factory or workshop, he shall with the least possible delay proceed to the factory or workshop, and make a full investigation as to the nature and cause of the death or injury

*See *Lakeman v. Stephens*, 34 L.J., M.C. 54; 9 Best & S. 54.

caused by that accident, and within the next twenty-four hours send to the inspector a report thereof. The certifying surgeon, for the purpose only of an investigation under this section, shall have the same powers as an inspector, and shall also have power to enter any room in a building to which the person killed or injured has been removed.

There shall be paid to the said surgeon for the investigation such fee, not exceeding ten nor less than three shillings, as a secretary of state considers reasonable, which fee shall be paid as expenses incurred by a secretary of state in the execution of this act.

PART II.—SPECIAL PROVISIONS RELATING TO PARTICULAR CLASSES OF FACTORIES AND WORKSHOPS.

1—Special Provisions for Health in Certain Factories and Workshops.

33. For the purpose of securing the observance of the requirements of this act as to cleanliness in every factory and workshop, all the inside walls of the rooms of a factory or workshop, and all ceilings or tops of such rooms, whether such walls, ceilings, or tops be plastered or not, and all the passages and staircases of a factory or workshop, if they have not been painted with oil or varnished once at least within seven years, shall be limewashed once at least within every fourteen months, to date from period when last limewashed, and if they have been so painted or varnished shall be washed with hot water and soap once at least within every fourteen months, to date from period when last washed.

A factory or workshop in which there is a contravention of this section shall be deemed not to be kept in conformity with this act.

Where it appears to a secretary of state that in any class of factories or workshops, or parts thereof, the regulations in this section are not required for the purpose of securing therein the observance of the requirements of this act as to cleanliness, or are by reason of special circumstances inapplicable, he may, if he thinks fit, by order made under this part of this act, grant to such class of factories or workshops, or parts thereof, a special exception that the regulations in this section shall not apply thereto.

34. Where a bakehouse is situate in any city, town, or place containing, according to the last published census for the time being, a population of more than five thousand persons, all the inside walls of the rooms of such bakehouse, and all the ceilings or tops of such rooms, whether such walls, ceilings, or tops be plastered or not, and all the passages and staircases of such bakehouse shall either be painted with oil, or varnished, or be limewashed, or be partly painted or varnished and partly limewashed; where painted with oil or varnished there shall be three coats of paint or varnish, and the paint or varnish shall be renewed once at least in every seven years, and shall be washed with hot water and soap once at least in every six months; where limewashed the limewashing shall be renewed once at least in every six months.

A bakehouse in which there is any contravention of this section shall be deemed not to be kept in conformity with this act.

35. Where a bakehouse is situate in any city, town, or place containing, according to the last published census for the time being, a population of more than five thousand persons, a place on the same level with the bakehouse, and forming part of the same building, shall not be used as a sleeping place, unless it is constructed as follows; that is to say,

unless it is effectually separated from the bakehouse by a partition extending from the floor to the ceiling; and

unless there be an external glazed window of at least nine superficial feet in area, of which, at least, four and a half superficial feet are made to open for ventilation.

Any person who lets or occupies, or continues to let or knowingly suffers to be occupied, any place contrary to this section, shall be liable to a fine not exceeding, for the first offence, twenty shillings, and for every subsequent offence five pounds.

36. If in a factory or workshop where grinding, glazing or polishing on a wheel, or any process is carried on, by which dust is generated and inhaled by the workers to an injurious extent, it appears to an inspector that such inhalation could be to a great extent prevented by the use of a fan or other mechanical means, the inspector may direct a fan or other mechanical means of a proper construction for preventing such inhalation to be provided within a reasonable time; and if the same is not provided, main-

tained and used, the factory or workshop shall be deemed not to be kept in conformity with this act.

37. A child, young person or woman shall not be employed in any part of a factory in which wet spinning is carried on, unless sufficient means be employed and continued for protecting the workers from being wetted, and where hot water is used, for preventing the escape of steam into the room occupied by the workers. A factory on which there is a contravention of this section shall be deemed not to be kept in conformity with this act.

2—Special Restriction as to Employment, Meals and Certificates of Fitness.

38. A child or young person shall not, to the extent mentioned in the first schedule to this act, be employed in the factories or workshops or parts thereof named in that schedule.

Notice of the prohibition in this section shall be affixed in a factory or workshop to which it applies.

39. A child, or young person, or woman shall not be allowed to take a meal or to remain during the times allowed for meals in the parts of factories or workshops to which this section applies; and a child, young person or woman allowed to take a meal or to remain in contravention of this section shall be deemed to be employed contrary to the provisions of this act.

Notice of the prohibition in this section shall be affixed in a factory or workshop to which it applies.

This section applies to the parts of factories or workshops named in the second schedule of this act.

Where it appears to a secretary of state that by reason of the nature of process in any class of factories or workshops or parts thereof not named in the said schedule, the taking of meals therein is especially injurious to health, he may, if he thinks fit, by order made under this part of this act extend the prohibition in this section to the said class of factories or workshops or parts thereof.

If the prohibition in this section is proved to the satisfaction of a secretary of state to be no longer necessary for the protection of the health of children, young persons, and women in any class of factories or workshops or parts thereof to which the prohibition has

been extended by an order, he may, by an order made under this part of this act, rescind the order of extension, without prejudice nevertheless to the subsequent making of another order.

40. In print works and bleaching and dyeing works the period of employment for a child, young person, and woman, and the times allowed for meals, shall be the same as if the said works were a textile factory, and the regulations of this act with respect to the employment of children, young persons, and women in a textile factory shall apply accordingly, as if print works and bleaching and dyeing works were textile factories; save that nothing in this section shall prevent the continuous employment of a child, young person, or woman in the said works without an interval of half an hour for a meal, for the period allowed by this act in a non textile factory.

41. When it appears to a secretary of state that by reason of special circumstances affecting any class of workshops, it is expedient for protecting the health of the children and of the young persons under sixteen years of age employed therein, to extend thereto the prohibition in this section mentioned, he may, by order made under this part of this act, extend to such class of workshops the prohibition in this act of the employment of children and young persons under the age of sixteen years without a certificate of the fitness of such child or young person for employment, and thereupon the provisions of this act with respect to certificates of fitness for employment shall apply to the class of workshops named in the order in like manner as if they were factories.

If the prohibition is proved to the satisfaction of the secretary of state to be no longer necessary for the protection of the health of the children and the young persons under the age of sixteen years employed in any class of workshops to which it has been extended under this section, he may by order made under this part of this act rescind the order of extension, without prejudice nevertheless to the subsequent making of another order.

3—Special Exceptions Relaxing General Law in Certain Factories and Workshops.

a—Period of Employment.

42. In the factories and workshops, or parts thereof, to which this exception applies, the period of employment for young persons and women, if so fixed by the occupier and specified in the notice, may, except on Saturday, begin at eight o'clock in the morning and end at eight o'clock in the evening, and on Saturday may begin at eight o'clock in the morning and end at four o'clock in the afternoon, or where it begins at seven o'clock in the morning may end at three o'clock in the afternoon, and the period of employment for a child in a morning set may begin at the same hour, and the period of employment for a child in an afternoon set may end at the same hour.

This exception applies to the factories and workshops and parts thereof specified in part one of the third schedule to this act

Where it is proved to the satisfaction of a secretary of state that the customs or exigencies of the trade carried on in any class of non-textile factories or workshops, or parts thereof, either generally or when situate in any particular locality, require the extension thereto of this exception, and that the extension can be made without injury to the health of the children, young persons, and women affected thereby, he may, by order made under this part of this act, extend this exception accordingly.

43. Where it is proved to the satisfaction of a secretary of state that the customs or exigencies of the trade carried on in any class of non-textile factories or workshops, or parts thereof, either generally or when situate in any particular locality, require that the special exception hereinafter in this section mentioned should be granted, and that such grant can be made without injury to the health of the children, young persons, and women affected thereby, he may, by order made under this part of this act, grant to such class of factories or workshops, or parts thereof, a special exception, that the period of employment for young persons, and women

therein, if so fixed by the occupier and specified in the notice, may, on any day, except Saturday, begin at nine o'clock in the morning, and end at nine o'clock in the evening, and in such case the period of employment for a child in a morning set shall begin at nine o'clock in the morning; and the period of employment for a child in an afternoon set shall end at eight o'clock in the evening.

44. The regulations of this act with respect to the employment of young persons in textile factories shall not prevent the employment, in the part of a textile factory in which a machine for the manufacture of lace is moved by steam, water or other mechanical power, of any male person, above the age of sixteen years, between four o'clock in the morning and ten o'clock in the evening, if he is employed in accordance with the following conditions; namely,

(a). Where such young person is employed on any day before the beginning, or after the end of the ordinary period of employment in the factory, there shall be allowed him for meals and absence from work between the above mentioned hours of four in the morning and ten in the evening, not less than nine hours; and

(b). Where such young person is employed on any day before the beginning of the ordinary period of employment in the factory, he shall not be employed on the same day after the end of that period; and

(c). When such young person is employed on any day after the end of the ordinary period of employment in the factory, he shall not be employed next morning before the beginning of the ordinary period of employment. For the purpose of this exception the ordinary period of employment in the factory means the period of employment for young persons under the age of sixteen years or women in the factory, or if none are employed, means such period as can under this act be fixed for the employment of such young persons and women in the factory, and notice of such period shall be affixed in the factory.

45. The regulations of this act with respect to the employment of young persons in non-textile factories or workshops shall not prevent the employment, in the part of a bakehouse in which the process of baking bread is carried on, of any male young person above the age of sixteen years between five o'clock in the morning

and nine o'clock in the evening, if he is employed in accordance with the following conditions, namely,

(a). Where such young person is employed on any day before the beginning or after the end of the ordinary period of employment in the bakehouse, there shall be allowed him for meals and absence from work between the above mentioned hours of five in the morning and nine in the evening not less than seven hours; and

(b). Where such young person is employed on any day before the beginning of the ordinary period of employment in the bakehouse, he shall not be employed after the end of that period on the same day; and

(c). Where such young person is employed on any day after the end of the ordinary period of employment in the bakehouse, he shall not be employed next morning before the beginning of the ordinary period of employment.

For the purpose of this exception the ordinary period of employment in the bakehouse means the period of employment for young persons under the age of sixteen years or women in the bakehouse, or if none are employed, means such period as can under this act be fixed for the employment of such young persons and women in the bakehouse. and notice of such period shall be affixed in the bakehouse.

Where it is proved to the satisfaction of a secretary of state that the exigencies of the trade carried on in bakehouses, either generally or when situate in any particular locality, require that the special exception hereafter in this section mentioned shall be granted, and that such grant can be made without injury to the health of the male young persons affected thereby, he may by order made under this part of this act grant to bakehouses, or to bakehouses situate in the said locality, a special exception permitting the employment of male young persons of sixteen years of age and upwards as if they were no longer young persons.

46 Where it is proved to the satisfaction of a secretary of state that the customs or exigencies of the trade carried on in any class of non-textile factories or workshops, either generally or when situate in any particular locality require some other day in the week to be substituted for Saturday as regards the hour at which the period of employment for children, young persons, and women

is required by this act to end on Saturday, he may, by order made under this part of this act, grant to such class of factories or workshops a special exception, authorizing the occupier of every such factory and workshop to substitute by a notice affixed in his factory or workshop some other day for Saturday, and in such case this act shall apply in such factory or workshop in like manner as if the substituted day were Saturday, and Saturday were an ordinary work day.

47. In the process of Turkey red dyeing, nothing in Part I. of this act shall prevent the employment of young persons and women on Saturday until half-past four o'clock in the afternoon, but the additional number of hours so worked shall be computed as part of the week's limit of work, which shall, in no case, be exceeded.

48. In any of the textile factories to which this exception applies, if the period of employment for young persons and women, as fixed by the occupier and specified in the notice, begins at the hour of seven in the morning, and the whole time between that hour and eight o'clock is allowed for meals, the regulations of this act with respect to the employment of children, young persons and women shall not prevent a child, young person or woman, between the first day of November and the last day of March next following, being employed continuously, without an interval of at least half an hour for a meal, for the same period as if the factory were a non-textile factory.

This exception applies to the textile factories specified in Part Seven of the third schedule of this act.

Where it is proved to the satisfaction of a secretary of state that in any class of textile factories, either generally or when situate in any particular locality, the customary habits of the persons employed therein require the extension thereto of this exception, and that the manufacturing process carried on therein is of a healthy character, and the extension can be made without injury to the health of the children, young persons and women affected thereby, he may, by order made under this this part of this act, extend this exception accordingly.

49. Where it is proved to the satisfaction of a secretary of state that the customs or exigencies of the trade carried on in any class of non-textile factories or workshops, either generally or when

situate in any particular locality, require that the special exception hereafter in this section mentioned should be granted, he may, by order made under this part of this act, grant to such class of factories or workshops a special exception, authorizing the occupier of any such factory or workshop to allow all or any of the half holidays or whole holidays in lieu of them, on different days to any of the children, young persons and women employed in his factory or workshop, or to any sets of such children, young persons and women, and not on the same days.

50. Where the occupier of a factory or workshop is a person of the Jewish religion, the regulations of this act with respect to the employment of young persons and women shall not prevent him.

(1). If he keeps his factory or workshop closed on Saturday until sunset, from employing young persons and women on Saturday from after sunset until nine o'clock in the evening; or

(2). If he keeps his factory or workshop closed on Saturday, both before and after sunset, from employing young persons and women one hour on every other day in the week (not being Sunday), in addition to the hours allowed by this act, so that such hour be at the beginning or end of the period of employment, and be not before six o'clock in the morning or after nine o'clock in the evening; or

(3). If all the children, young persons and women in his factory or workshop are of the Jewish religion, from giving them, if so specified in a notice affixed in the factory or workshop as by this act provided, any two public holidays under the Holidays Extension Act, 1875, in lieu of Christmas day and Good Friday, but in that case such factory or workshop shall not be open for traffic on Christmas day or Good Friday.

51. A penalty shall be incurred by any person in respect of any work done on Sunday in any factory or workshop by a young person or woman of the Jewish religion, subject to the following conditions:

(1). The occupier of the factory or workshop shall be of the Jewish religion; and

(2). The factory or workshop shall be closed on Saturday and shall not be open for traffic on Sunday; and

(3). The occupier shall not avail himself of the exception author-

izing the employment of young persons and women on Saturday evening, or for an additional hour during any other day of the week.

Where the occupier avails himself of this exception, this act shall apply to the factory or workshop in like manner, as if in the provisions thereof respecting Sunday the word Saturday was substituted for Sunday, and in the provisions thereof respecting Saturday the word Sunday, or if the occupier so specify in the notice the notice the word Friday, were substituted for Saturday.

b—Meal Hours.

52. The provisions of this act which require that all the children, young persons and women employed in a factory or workshop shall have the times allowed for meals at the same hour of the day shall not apply in the case mentioned in Part II of the third schedule of this act.

The provisions of this act which require that a child, young person, and women shall not, during any part of the time allowed for meals in a factory or workshop, be employed in the factory or workshop, or be allowed to remain in a room in which a manufacturing process or handicraft is being carried on, shall not apply in the cases and to the extent mentioned in Part II of the third schedule of this act.

Where it is proved to the satisfaction of a secretary of state that in any class of factories or workshops or parts thereof it is necessary, by reason of the continuous nature of the process, or of special circumstances affecting such class, to extend thereto the exceptions in this section or either of them, and that such extension can be made without injury to the health of the children, young persons and women affected thereby, he may by order made under this part of this act extend the same accordingly.

*c—Overtime.**

53. The regulations of this act with respect to the employment of young persons and women shall not prevent the employment in

*And see the Factory and Workshop Act, 1883, (46 and 47 Vict. c. 53, S. 13), *post*.

the factories and workshops or parts thereof to which this exception applies, of young persons and of women during a period of employment beginning at six o'clock in the morning and ending at eight o'clock in the evening, or beginning at seven o'clock in the morning and ending at nine o'clock in the evening; or beginning at eight o'clock in the morning and ending at ten o'clock in the evening, if they are employed in accordance with the following conditions; namely,

(1). There shall be allowed to every such young person and woman for meals during the period of employment not less than two hours, of which half an hour shall be after five o'clock in the evening; and

(2). Any such young person or woman shall not be so employed on the whole for more than five days in any one week, nor for more than forty-eight days in any twelve months.

This exception applies to the factories and workshops and parts thereof specified in Part III of the third schedule to this act.

Where it is proved to the satisfaction of a secretary of state that in any class of non-textile factories or workshops, or parts thereof, it is necessary, by reason of the material which is the subject of the manufacturing process or handicraft therein being liable to be spoiled by the weather, or by reason of press of work arising at certain recurring seasons of the year, or by reason of the liability of the business to a sudden press of orders arising from unforeseen events, to employ young persons and women in manner authorized by this exception, and that such employment will not injure the health of the young persons and women affected thereby, he may, by order made under this part of this act, extend this exception to such factories or workshops, or parts thereof.

54. If in any factory or workshop, or part thereof to which this exception applies, the process in which a child, young person or woman is employed is in an incomplete state at the end of the period of employment of such child, young person or woman, the provisions of this act with respect to the period of employment shall not prevent such child, young person or woman from being employed for a further period not exceeding thirty minutes.

Provided that such further periods, when added to the total number of hours of the periods of employment of such child, young

person or woman in that week, do not raise that total above the number otherwise allowed under this act.

This exception applies to the factories and workshops specified in Part IV of the third schedule to this act.

Where it is proved to the satisfaction of a secretary of state that in any class of non-textile factories or workshops, or parts thereof, the time for the completion of a process cannot by reason of the nature thereof be accurately fixed, and that the extension to such class of factories or workshops, or parts thereof, of this exception can be made without injury to the health of the children, young persons and women affected thereby, he may by order made under this part of this act extend this exception accordingly.

55. Nothing in this act shall prevent the employment of young persons and women so far as is necessary for the purpose only of preventing any damage which may arise from spontaneous combustion in the process of Turkey red dyeing, or from any extraordinary atmospheric influence in the process of open-air bleaching.

56. The regulations of this act with respect to the employment of young persons and women shall not prevent the employment in the factories and workshops, and parts thereof, to which this exception applies, of women during a period of employment beginning at six o'clock in the morning and ending at eight o'clock in the evening; or beginning at seven o'clock in the morning and ending at nine o'clock in the evening, if they are employed in accordance with the following conditions, namely:

(1). There shall be allowed to every such woman for meals during the period of employment not less than two hours, of which half an hour shall be after five o'clock in the evening; and

(2). Any such woman shall not be so employed on the whole for more than five days in any one week, nor for more than ninety-six days in any twelve months *

This exception applies to the factories and workshops and parts thereof specified in Part V of the third schedule to this act.

Where it is proved to the satisfaction of a secretary of state that in any class of non-textile factories or workshops or parts thereof it is necessary by reason of the perishable nature of the articles or materials which are the subject of the manufacturing process or handi-

*And see the Factory and Workshop Act, 1883, (46 and 47 Vict. c. 53, S. 13), *post*.

craft, to employ women in manner authorized by this exception, and that such employment will not injure the health of the women employed, he may by order made under this part of this act extend this exception to such factories or workshops or parts thereof.

57. Where it appears to a secretary of state that factories driven by water power are liable to be stopped by drought or flood, he may, by order made under this part of this act, grant to such factories a special exception permitting the employment of young persons and women during a period of employment from six o'clock in the morning until seven o'clock in the afternoon on such conditions as he may think proper, but so as that no person shall be deprived of the meal hours by this act provided, nor be so employed on Saturday, and that as regards factories liable to be stopped by drought, such special exception shall not extend to more than ninety-six days in any period of twelve months, and as regards factories liable to be stopped by floods, such special exception shall not extend to more than forty-eight days in any period of twelve months. This overtime shall not extend in any case beyond the time already lost during the previous twelve months.

d—Nightwork.

58. Nothing in this act shall prevent the employment, in factories and workshops to which this exception applies, of male young persons during the night if they are employed in accordance with the following conditions:

(1). The period of employment shall not exceed twelve consecutive hours, and shall begin and end at the hours specified in the notice in this act mentioned; and

(2). The provisions of Part I of this act with respect to the allowance of times for meals to young persons during the period of employment shall be observed with the necessary modifications as to the hour at which the times allowed for meals are fixed; and

(3). A male young person employed during any part of the night shall not be employed during any part of the twelve hours preceding or succeeding the period of employment; and

(4). A male young person shall not be employed on more than

six nights, or in the case of blast furnaces or paper mills, seven nights in any two weeks.

The provisions of this act with respect to the period of employment on Saturday, and with respect to the allowance to young persons of eight half holidays in every year, or of whole holidays in lieu of them, shall not apply to a male young person employed in day and night turns in pursuance of this exception.

This exception applies to the factories and workshops specified in Part VI of the third schedule to this act.

Where it is proved to the satisfaction of a secretary of state that in any class of non-textile factories or workshops, or parts thereof, it is necessary, by reason of the nature of the business requiring the process to be carried on throughout the night, to employ male young persons of sixteen years of age or upwards at night, and that such employment will not injure the health of the male young person employed, he may, by order made under this part of this act, extend this exception to such factories or workshops, or parts thereof, so far as regards young persons of the age of sixteen years or upwards.

59. In a factory or workshop in which the process of printing newspapers is carried on, not more than two nights in the week, nothing in this act shall prevent the employment of a male young person of sixteen years of age and upwards at night during not more than two nights in a week, as if he were no longer a young person.

60. In glassworks nothing in this act shall prevent any male young person from working according to the accustomed hours of the works, if he is employed in accordance with the following condition, namely :

(1). The total number of hours of the periods of employment shall not exceed sixty in any one week ; and

(2). The periods of employment for any such young person shall not exceed fourteen hours in four separate turns per week, or twelve hours in five separate turns per week, or ten hours in six separate turns per week, or any less number of hours in the accustomed number of separate turns per week, so that such number of turns do not exceed nine ; and

(3). Such young person shall not work in any turn without an interval of time not less than one full turn; and

(4). There shall be allowed to such young person during each turn, so far as is practicable, the like time for meals as are required by this act to be allowed in any other non-textile factory or workshop.

4—Special Exception for Domestic and Certain other Factories and Workshops.

61. The provisions of this act which relate—

(1). To the cleanliness, including lime washing, painting, varnishing and washing, or to the freedom from effluvia, or to the overcrowding or ventilation of a factory or workshop; or

(2). To all children, young persons and women employed in a factory or workshop having the times allowed for meals at the same hour of the day, or during any part of the times allowed for meals in a factory or workshop, being employed in the factory or workshop, or being allowed to remain in any room; or

(3). To the affixing of any notice or abstract in a factory or workshop, or specifying any matter in the notice so affixed; or

(4). To the allowance of any holidays to a child, young person or woman; or

(5). To the sending notice of accidents; shall not apply—

(a). Where persons are employed at home, that is to say, to a private house, room, or place which, though used as a dwelling is by reason of the work carried on there, a factory or workshop within the meaning of this act, and in which neither steam, water, nor other mechanical power is used, and in which the only persons employed are members of the same family dwelling there; or

(b). To a workshop which is conducted on the system of not employing children or young persons therein, and the occupier of which has served on an inspector notice of his intention to conduct his workshop on that system.

And the provisions of this act with respect to certificates of fitness for employment shall apply to any such private house, room, or place as aforesaid, which by reason of the nature of the work

carried on there is a factory, as if the same were a workshop within the meaning of this act, and not a factory.

Where the occupier of a workshop has served on an inspector notice of his intention to conduct that workshop on the system of not employing children or young persons therein, the workshop shall be deemed for all the purposes of this act to be conducted on the said system until the occupier changes it, and no change shall be made until the occupier has served on the inspector notice of his intention to change the system, and until the change, a child or young person employed in the workshop shall be deemed to be employed contrary to the provisions of this act. A change in the said system shall not be made oftener than once a quarter, unless for special cause allowed in writing by an inspector.

Nothing in this section shall exempt a bakehouse from the provisions of this act with respect to cleanliness (including lime-washing, painting, varnishing and washing), or to freedom from effluvia.

62. The regulations of this act with respect to the employment of women shall not apply to flax scutch mills which are conducted on the system of not employing either children or young persons therein, and which are worked intermittently, and for periods only which do not exceed in the whole six months in any year. A flax scutch mill shall not be deemed to be conducted on the system of not employing therein either children or young persons until the occupier has served on an inspector notice of his intention to conduct such mill on that system.

5.—Supplemental as to Special Provisions.

63. Where it appears to a secretary of state that the adoption of any special means or provision for the cleanliness or ventilation of a factory or workshop is required for the protection of the health of any child, young person, or woman employed in pursuance of an exception under this part of this act, either for a longer period than is otherwise allowed by this act, or at night, he may by order made under this part of this act direct that the adoption of such means or provision shall be a condition of such employment; and if it appears to a secretary of state that the adoption of any such means or provision is no longer required, or is, having regard to

all the circumstances, inexpedient, he may, by order made under this part of this act, rescind the order, directing such adoption without prejudice to the subsequent making of another order.

64. Where an exception has been granted or extended under this part of this act, by an order of a secretary of state, and it appears to a secretary of state that such exception is injurious to the health of the children, young persons, or women employed in, or is no longer necessary for the carrying on of the business in, the class of factories or workshops, or parts thereof to which the said exception was so granted or extended, he may by an order made under this part of this act rescind the grant or extension without prejudice to the subsequent making of another order.

65. Where a secretary of state has power to make an order under this part of this act, the following provisions shall apply to that order :

(1). The order shall be under the hand of the secretary of state, and shall be published in the *London Gazette*, and shall come into operation at the date of such publication in the *London Gazette*, or at any later date mentioned in the order.

(2). The order may be temporary or permanent, conditional or unconditional, and whether extending a prohibition or exception, granting an exception, directing the adoption of any means or provisions, or rescinding a previous order or effecting any other thing, may do so either wholly or partly.

(3). The order shall be laid as soon as may be before both Houses of Parliament, and if either House of Parliament, within the next forty days after the same has been so laid before such House, notice that such order ought to be annulled, the same shall, after the date of such resolution, be of no effect, without prejudice to the validity of anything done in the meantime under such order or to the making of any new order.

(4). The order, while it is in force, shall, so far as is consistent with the tenor thereof, apply as if it formed part of the enactment which provides for the extension or grant or otherwise for making the order.

66. An occupier of a factory or workshop, not less than seven days before he avails himself of any special exception under this part of this act, shall serve on an inspector and (except in the case

of a factory or workshop to which the provisions of this act with respect to the affixing of notices do not apply) affix in his factory or workshop notice of his intention so to avail himself, and whilst he avails himself of the exception shall keep the notice so affixed.

Before the service of such notice on the inspector the special exception shall not be deemed to apply to the factory or workshop, and after the service of such notice on the inspector it shall not be competent in any proceeding under this act for the occupier to prove that such special exception does not apply to his factory or workshop unless he has previously served on an inspector notice that he no longer intends to avail himself of such special exception.

The notice so served and affixed shall specify the hours for the beginning and end of the period of employment, and the times to be allowed for meals to every child, young person, and woman where they differ from the ordinary hours or times.

An occupier of a factory or workshop shall enter in the prescribed register and report to an inspector the prescribed particulars respecting the employment of a child, young person, or woman, in pursuance of an exception, but such entry and report need not be made in the case of a factory or workshop to which the provisions of this act with respect to the affixing of notices do not apply, except so far as may be from time to time prescribed by a secretary of state.

Where the occupier of a factory or workshop avails himself of an exception under this part of this act, and a condition for availing himself of such exception, whether specified in this part of this act, or in an order of a secretary of state made under this part of this act, is not observed in that factory or workshop, then

(1). If such condition relates to the cleanliness, ventilation, or overcrowding of the factory or workshop, the factory or workshop shall be deemed not to be kept in conformity with this act; and

(2). In any other case a child, young person, or woman employed in the factory or workshop, in alleged pursuance of the said exception, shall be deemed to be employed contrary to the provisions of this act.

PART III.—ADMINISTRATION, PENALTIES, AND
LEGAL PROCEEDINGS.

1—Inspection.

67. A secretary of state, from time to time, with the approval of the Treasury, as to numbers and salaries, may appoint such inspectors (under whatever title he may from time to time fix), and such clerks and servants as he may think necessary for the execution of this act, and may assign to them their duties and award them their salaries, and may constitute a principal inspector with an office in London, and may regulate the cases and manner in which the inspectors, or any of them, are to execute and perform the powers and duties of inspectors under this act, and may remove such inspectors, clerks, and servants.

The salaries of the inspectors, clerks, and servants, and the expenses incurred by them or by a secretary of state in the execution of this act, shall be paid out of moneys provided by Parliament.

Notice of the appointment of every such inspector shall be published in the *London Gazette*.

A person who is the occupier of a factory or workshop, or is directly or indirectly interested therein or in any process or business carried on therein, or in a patent connected therewith, or is employed in or about a factory or workshop, shall not act as an inspector under this act. An inspector under this act shall not be liable to serve in any parochial or municipal office.

Such annual report of the proceedings of the inspectors as the secretary of state, from time to time, directs, shall be laid before both Houses of Parliament.

A reference in this act to an inspector refers, unless it is otherwise expressed, to an inspector appointed in pursuance of this section, and a notice or other document required by this act to be sent to an inspector shall be sent to such inspector as a secretary of state from time to time directs, by declaration published in the *London Gazette*, or otherwise as he thinks expedient for making the same known to all persons interested.

68. An inspector under this act shall for the purpose of the execution of this act have power to do all or any of the following things, namely,

(1). To enter, inspect and examine at all reasonable times by day and night a factory and a workshop, and every part thereof, when he has reasonable cause to believe that any person is employed therein, and to enter by day any place which he has reasonable cause to believe to be a factory or workshop; and

(2). To take with him in either case a constable into a factory in which he has reasonable cause to apprehend any serious obstruction in the execution of his duty; and

(3). To require the production of the registers, certificates, notices, and documents kept in pursuance of this act, and to inspect, examine and copy the same; and

(4). To make such examination and inquiry as may be necessary to ascertain whether the enactments for the time being in force relating to public health and the enactments of this act are complied with, so far as respects the factory or workshop and the persons employed therein; and

(5). To enter any school in which he has reasonable cause to believe that children employed in a factory or workshop are for the time being educated; and

(6). To examine either alone or in the presence of any other person, as he thinks fit, with respect to matters under this act, every person whom he finds in a factory or workshops, or such a school as aforesaid, or whom he has reasonable cause to believe to be or to have been within the preceeding two months employed in a factory or workshop, and to require such person to be so examined and to sign a declaration of the truth of the matters respecting which he is so examined; and

(7). To exercise such other powers as may be necessary for carrying this act into effect.

The occupier of every factory or workshop, his agents and servants, shall furnish the means required by an inspector as necessary for an entry, inspection, examination, inquiry, or the exercise of his powers under this act in relation to such factory and workshop.

Every person who wilfully delays an inspector in the exercise of any power under this section, or who fails to comply with a requi-

sition of an inspector in pursuance of this section, or to produce any certificate or document which he is required by or in pursuance of this act to produce, or who conceals or prevents a child, young person, or woman from appearing before or being examined by an inspector, or attempts so to conceal or prevent a child, young person, or woman, shall be deemed to obstruct an inspector in the execution of his duties, under this act: Provided always, that no one shall be required under this section to answer any question or to give any evidence tending to criminate himself.

Where an inspector is obstructed in the execution of his duties under this act, the person obstructing him shall be liable to a fine not exceeding five pounds; and where an inspector is so obstructed in a factory or workshop, the occupier of that factory or workshop shall be liable to a fine not exceeding five, or where the offence is committed at night, twenty pounds; and where an inspector is so obstructed in a factory or workshop within the meaning of section sixteen of this act, the occupier shall be liable to a fine not exceeding one, or where the offence is committed at night, five pounds.

69. An inspector before entering, in pursuance of the powers conferred by this act, without the consent of the occupier, any room or place actually used as a dwelling as well as a factory or workshop, shall, on an affidavit or statutory declaration of facts and reasons, obtain written authority so to do from a secretary of state, or such warrant as is hereinafter mentioned from a justice of the peace.

The affidavit or statutory declaration above mentioned may be inspected or produced in evidence in all respects the same as an information on oath before a justice.

A justice of the peace, if satisfied by information on oath that there is reasonable cause to suppose that any enactment of this act is contravened in any such room or place as aforesaid, may in his discretion grant a warrant under his hand authorizing the inspector named therein at any time within the period named therein, but not exceeding one month from the date thereof, to enter in pursuance of this act, the room or place named in the warrant, and exercise therein the powers of inspection and examination conferred by this act, and the fines and provisions of this act with respect to obstruction of an inspector shall apply accordingly.

70. Every inspector under this act shall be furnished with the prescribed certificate of his appointment, and on applying for admission to a factory or workshop shall, if required, produce to the occupier the said certificate.

Every person who forges or counterfeits any such certificate, or makes use of any forged, counterfeited, or false certificate, or personates the inspector named in any such certificate, or falsely pretends to be an inspector under this act, shall be liable to be imprisoned for a period not exceeding three months, with or without hard labor.

2—Certifying Surgeons.

71. Where there is no certifying surgeon resident within three miles of a factory or workshop, the poor law medical officer shall be for the time being the certifying surgeon under this act for such factory or workshop.

72. Subject to such regulations as may be from time to time made by a secretary of state, an inspector may from time to time appoint a sufficient number of duly registered medical practitioners to be certifying surgeons for the purposes of this act and may from time to time revoke any such appointment.

Every appointment and revocation of appointment of a certifying surgeon may be annulled by a secretary of state upon appeal to him for that purpose.

A surgeon who is the occupier of a factory or workshop, or is directly or indirectly interested therein or in any process or business carried on therein or in a patent connected therewith, shall not be a certifying surgeon for that factory or workshop.

A secretary of state may from time to time make rules for the guidance of certifying surgeons, and for the particulars to be registered respecting their visits, and for the forms of certificates and other documents to be used by them.

73. A certificate of fitness for employment shall not be granted for the purposes of this act, except upon personal examination of the person named therein.

A certifying surgeon shall not examine a child or young person for purposes of a certificate of fitness for employment, or sign

any such certificate elsewhere than at the factory or workshop where such child or young person is or is about to be employed, unless the number of children and young persons employed in that factory or workshop are less than five, or unless for some special reason allowed in writing by an inspector.

If a certifying surgeon refuses to grant for any person examined by him a certificate of fitness for employment, he shall when required give in writing and sign the reasons for such refusal.

74. With respect to the fees to be paid to certifying surgeons in respect of the examination of, and grant of certificates of fitness for employment for children and young persons in factories and workshops the following provisions shall have effect:

(1). The occupier may agree with the certifying surgeon as to the amount of such fees;

(2). In the absence of any such agreement the fees shall be those named in the following scale:

When the examination is at a factory or workshop not exceeding one mile from the surgeon's residence.	}	2s. 6d. for each visit, and 6d. for each person after the first five examined at that visit.
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When the examination is at a factory or workshop more than one mile from the surgeon's residence.	}	The above fees and an additional 6d. for each complete half-mile over and above the mile.
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When the examination is not at the factory or workshop, but at the residence of the surgeon, or at some place appointed by the surgeon for the purpose, and which place, as well as the day and hour, appointed for the purpose, shall be published in the prescribed manner.	}	6d. for each person examined.
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(3). The occupier shall pay the fees on the completion of the examination, or if any certificates are granted, at the time at which the surgeon signs the certificate, or at any other time directed by an inspector.

(4). The occupier may deduct the fee or any part thereof, not exceeding in any case threepence, from the wages of the person for whom the certificate was granted.

(5). A secretary of state may from time to time, if he thinks it expedient, alter any fees fixed by this section.

3.—Miscellaneous.

75. Every person shall, within one month after he begins to occupy a factory, serve on an inspector a written notice containing the name of the factory, the place where it is situate, the address to which he desires his letters to be addressed, the nature of the work, the nature and amount of the moving power therein, and the name of the firm under which the business of the factory is to be carried on, and in default shall be liable to a fine not exceeding five pounds.

76. Where an inspector, by notice in writing, names a public clock, or some other clock open to public view, for the purpose of regulating the period of employment in a factory or workshop, the period of employment and times allowed for meals for children, young persons, and women employed in that factory or workshop shall be regulated by that clock, which shall be specified in the notice affixed in the factory or workshop.

77. The occupier of every factory and workshop to which this section applies shall keep in the prescribed form and with the prescribed particulars registers of the children and young persons employed in that factory or workshop, and of their employment, and of other matters under this act.

The occupier of a factory or workshop shall send to an inspector such extracts from any register kept in pursuance of this act as the inspector from time to time requires for the execution of his duties under this act.

This section applies to every factory and workshop in which a child or young person under the age of sixteen years is for the

time being prohibited under this act from being employed without a certificate of fitness for employment.

Where by reason of the number of children and young persons employed in a factory or workshop to which this section does not for the time being apply, or otherwise, it seems expedient to a secretary of state so to do, he may order the occupier of that factory or workshop to keep a register under this section, with power to rescind such order, and while such order is in force this section shall apply to that factory or workshop.

In the event of a contravention of this section in a factory or workshop, the occupier of the factory or workshop shall be liable to a fine not exceeding forty shillings.

78. There shall be affixed at the entrance of a factory and a workshop, and in such other parts thereof as an inspector for the time being directs, and be constantly kept so affixed in the prescribed form and in such position as to be easily read by the persons employed in the factory or workshop—

- (1). The prescribed abstract of this act; and
- (2). A notice of the name and address of the prescribed inspector; and
- (3). A notice of the name and address of the certifying surgeon for the district; and
- (4). A notice of the clock, if any, by which the period of employment and times for meals in the factory or workshop are regulated; and
- (5). Every notice and document required by this act to be affixed in the factory or workshop.

In the event of a contravention of this section in a factory or workshop, the occupier of the factory or workshop shall be liable to a fine not exceeding forty shillings.

79. Any notice, order, requisition, summons, and document under this act may be in writing or print, or partly in writing and partly in print.

Any notice, order, requisition, summons, and document required or authorized to be served or sent for the purposes of this act may be served and sent by delivering the same to or at the residence of the person on or to whom it is to be served or sent, where that person is the occupier of a factory or workshop, by delivering the

same or a true copy thereof to his agent or to some person in such factory or workshop; it may also be served or sent by post by a prepaid letter, and if served or sent by post shall be deemed to have been served and received respectively at the time when the letter containing the same would be delivered in the ordinary course of post, and in providing such service or sending it shall be sufficient to prove that it was properly addressed and put into the post; and where it is required to be served on or sent to the occupier of a factory or workshop, it shall be deemed to be properly addressed if addressed to the occupier of such factory or workshop at the factory or workshop, with the addition of the proper postal address, but without naming the person who is the occupier.

80. Any act for the time being in force relating to weights and measures,* shall extend to weights and measures, scales, balances, steelyards, and weighing machines used in a factory or workshop in checking or ascertaining the wages of any person employed therein, in like manner as if they were used in the sale of goods, and as if such factory or workshop were a place where goods are kept for sale, and such act shall apply accordingly, and every inspector of, or other person authorized to inspect or examine weights and measures, shall inspect, stamp, mark, search for, and examine the said weights and measures, scales, balances, steelyards, and weighing machines accordingly, and for that purpose shall have the same powers and duties as he has in relation to weights, measures, scales, balances, steelyards, and weighing machines used in the sale of goods.

4.—Fines.

81. If any factory or workshop is not kept in conformity with this act, the occupier thereof shall be liable to a fine not exceeding ten pounds.

The court of summary jurisdiction in addition to or instead of inflicting such fine, may order certain means to be adopted by the occupier within the time named in the order, for the purpose of bringing his factory or workshop into conformity with this act; the

* 41 and 42 Vict. c. 49.

court may, upon application, enlarge the time so named, but if, after the expiration of the time as originally named or enlarged by subsequent order, the order is not complied with, the occupier shall be liable to a fine not exceeding one pound for every day that such non-compliance continues.

82. If any person is killed or suffers any bodily injury in consequence of the occupier of a factory having neglected to fence any machinery required by or in pursuance of this act to be securely fenced, or having neglected to maintain such fencing, or in consequence of the occupier of a factory or workshop having neglected to fence any vat, pan, or other structure required by or in pursuance of this act to be securely fenced, or having neglected to maintain such fencing, the occupier of the factory or workshop shall be liable to a fine not exceeding one hundred pounds, the whole or any part of which may be applied for the benefit of the injured person or his family, or otherwise, as a secretary of state determines.

Provided that the occupier of a factory shall not be liable to a fine under this section in an information against him for not fencing the part of the machinery, or the vat, pan, or other structure by which the death or bodily injury was inflicted, has been heard and dismissed previous to the time when the death or bodily injury was inflicted.

83. Where a child, young person, or woman is employed in a factory or workshop contrary to the provisions of this act, the occupier of the factory or workshop shall be liable to a fine not exceeding three, or if the offence was committed during the night, five pounds for each child, young person, or woman so employed; and where a child, young person, or woman is so employed in a factory or workshop within the meaning of section 16 of this act, the occupier shall be liable to a fine not exceeding one, or if the offence was committed during the night, two pounds for each child, young person, or woman so employed.

A child, young person, or woman who is not allowed time for meals and absence from work as required by this act, or during any part of the times allowed for meals and absence from work is, in contravention of the provision of this act, employed in the factory or workshop or allowed to remain in any room, shall be deemed to be employed contrary to the provisions of this act.

84. The parent of a child or young person shall,—

(1). If such child or young person is employed in a factory or workshop contrary to the provisions of this act, be liable to a fine not exceeding twenty shillings for each offence, unless it appears to the court that such offence was committed without the consent, connivance, or wilful default of such parents; and

(2) If he neglects to cause such child to attend school in accordance with this act, he shall be liable to a fine not exceeding twenty shillings for each offence.

85. Every person who forges or counterfeits any certificate for the purposes of this act (for the forging or counterfeiting of which no other punishment is provided), or who gives or signs any such certificate, knowing the same to be false in any material particular, or who knowingly utters or makes use of any certificate so forged, counterfeited, or false as aforesaid, or who knowingly utters or makes use of as applying to any person a certificate which does not so apply, or who personates any person named in a certificate, or who wilfully connives at the forging, counterfeiting, giving, signing, uttering, making use, or personating as aforesaid, shall be liable to a fine not exceeding twenty pounds, or to imprisonment for a term not exceeding three months, with or without hard labor.

Every person who wilfully makes a false entry in any register, notice, certificate, or document required by this act to be kept or served, or sent, or who wilfully makes or signs a false declaration under this act, or who knowingly makes use of any such false entry or declaration, shall be liable to a fine not exceeding twenty pounds, or to an imprisonment for a term not exceeding three months, with or without hard labor.

86. Where an offence for which the occupier of a factory or workshop is liable under this act to a fine, has in fact been committed by some agent, servant, workman, or other person, such agent, servant, workman, or other person, shall be liable to the same fine as if he were the occupier.

87. Where the occupier of a factory or workshop is charged with an offence against this act he shall be entitled upon information duly laid by him to have any other person whom he charges as the actual offender brought before the court at the time appointed for hearing the charge; and if after the commission of the offence has

been proved, the occupier of the factory or workshop proves to the satisfaction of the court that he had used due diligence to enforce the execution of the act, and that the said other person had committed the offence in question without his knowledge, consent, or connivance, the other person shall be summarily convicted of such offence, and the occupier shall be exempt from any fine.

When it is made to appear to the satisfaction of an inspector at the time of discovering the offence that the occupier of the factory or workshop had used all due diligence to enforce the execution of this act, and also by what person such offence had been committed, and also that it had been committed without the knowledge, consent, or connivance of the occupier and in contravention of his orders, then the inspector shall proceed against the person whom he believes to be the actual offender in the first instance without first proceeding against the occupier of the factory or workshop.

88. A person shall not be liable in respect of a repetition of the same kind of offence from day to day to any larger amount of fines than the highest fine fixed by this act for the offence, except—

(a). Where the repetition of the offence occurs after an information has been laid for the previous offence; or

(b). Where the offence is one of employing two or more children, young persons or women contrary to the provisions of this act.

5—Legal Proceedings.

89. All offences under this act shall be prosecuted, and all fines under this act shall be recovered, on summary conviction before a court of summary jurisdiction in manner provided by the Summary Jurisdiction Acts.

A summary order may be made for the purpose of this act by a court of summary jurisdiction in manner provided by the Summary Jurisdiction Acts.

All fines imposed in pursuance of this act shall, save as otherwise expressly provided by this act, be paid into the Exchequer.

The court of summary jurisdiction, when hearing and determining a case arising under this act, shall be constituted either of two or more justices of the peace sitting at some court or public place at

which justices are for the time being accustomed to assemble for the purpose of holding petty sessions or of some magistrate or officer setting alone or with others at some court or other place appointed for the public administration of justice, and for the time being empowered by law to do alone any act authorized to be done by more than one justice of the peace.

Where a proceeding is taken before a court of summary jurisdiction with respect to an offence against this act alleged to be committed in or with reference to a factory or workshop, the occupier of that factory or workshop, and the father, son or brother of such occupier, shall not be qualified to act as a member of such court.

90. If any person feels aggrieved by a conviction or order made by a court of summary jurisdiction on determining an information or complaint under this act he may appeal therefrom; subject in England, to the conditions and regulations following:

(1). The appeal shall be made to the next practicable court of general or quarter sessions. [*The rest of this section repealed.*]

91. The following provisions shall have effect with respect to summary proceedings for offences and fines under this act:

(1) The information shall be laid within two months, or, where the offence is punishable at discretion by imprisonment, or is a breach of the provisions of this act with respect to holidays, within three months after the commission of the offence:

[*Sub-sections (2) and (3) were repealed by 47 and 48 Vict. c. 43.*]

(4). It shall be sufficient to allege that a factory or workshop is a factory or workshop within the meaning of this act, without more:

(5). It shall be sufficient to state the name of the ostensible occupier of the factory or workshop, or the title of the firm by which the occupier employing persons in the factory or workshop is usually known:

(6). A conviction or order made by a court of summary jurisdiction against which a person is authorized by this act to appeal, shall not be removed by certiorari or otherwise, either at the instance of the Crown or of any private person, into a superior court, except for the purpose of hearing and determination of a special case.

92. If a person is found in a factory, except at meal times, or while all the machinery of the factory is stopped, or for the sole purpose of bringing food to the persons employed in the factory

between the hours of four and five o'clock in the afternoon, such person shall, until the contrary is proved, be deemed for the purpose of this act to have been employed in the factory ;

Provided that yards, play grounds, and places open to the public view, school rooms, waiting rooms, and other rooms belonging to the factory in which no machinery is used or manufacturing process carried on shall not be taken to be any part of the factory within the meaning of this enactment ; and this enactment shall not apply to a factory or workshop to which the provisions of this act with respect to the affixing of notices do not apply.

Where a child, or young person is, in the opinion of the court, apparently of the age alleged by the informant, it shall lie on the defendant to prove that the child or young person is not of that age.

A declaration in writing by a certifying surgeon for the district that he has personally examined a person employed in a factory or workshop in that district, and believes him to be under the age set forth in the declaration, shall be admissible in evidence of the age of that person.

A copy of a conviction for an offence against this act purporting to be certified under the hand of the clerk of the peace having the custody of such conviction to be a true copy shall be receivable as evidence, and every such clerk of the peace shall, upon the written request of an inspector and payment of a fee of one shilling, deliver to him a copy of the conviction so certified.

PART IV.—DEFINITIONS, SAVINGS, APPLICATION TO SCOTLAND AND IRELAND, AND REPEAL.

1—Definitions.

93 The expression "textile factory" in this act means—

Any premises wherein or within the close or curtilage of which steam, water or other mechanical power is used to move or work any machinery employed in preparing, manufacturing, or finishing, or in any process incident to the manufacture of cotton, wool, hair,

silk, flax, hemp, jute, tow, china-grass, cocoanut fibre, or other like material, either separately or mixed together, or mixed with any other material, or any fabric made thereof:

Provided that print works, bleaching and dyeing works, lace warehouses, paper mills, flax scutch mills, rope works, and hat works shall not be deemed to be textile factories.

The expression "non-textile" factory in this act means—

(1) any works, warehouses, furnaces, mills, foundries, or places named in Part I of the fourth schedule to this act,

(2) also any premises or places named in Part II of the said schedule wherein, or within the close or curtilage or precincts of which steam, water or other mechanical power is used in aid of the manufacturing process carried on there,

(3) also any premises wherein or within the close or curtilage or precincts of which any manual labor is exercised by way of trade or for purposes of gain in or incidental to the following purposes, or any of them; that is to say,

(a) in or incidental to the making of any article, or of part of any article, or

(b) in or incidental to the altering, repairing, ornamenting, or finishing of any article, or

(c) in or incidental to the adapting for sale of any article, and wherein, or within the close or curtilage or precincts of which, steam, water, or other mechanical power is used in aid of the manufacturing process carried on there.

The expression "factory" in this act means textile factory and non-textile factory, or either of such descriptions of factories.

The expression "workshop" in this act means—

(1) Any premises or places named in Part II, of the Fourth Schedule to this act, which are not a factory within the meaning of this act,

(2) also, any premises, room, or place not being a factory, within the meaning of this act, in which premises, room, or place, or within the close or curtilage, or precincts of which premises, any manual labor is exercised by way of trade or for purposes of gain in or incidental to the following purposes or any of them; that is to say,

(a) in or incidental to the making of any article or of part of any article, or,

(b). in or incidental to the altering, repairing, ornamenting, or finishing of any article, or

(c). in or incidental to the adapting for sale of any article, and to which or over which premises, room, or place the employer of the persons working therein have the right of access or control.

A part of a factory or workshop may for the purposes of this act be taken to be a separate factory or workshop; and a place solely used as a dwelling shall not be deemed to form part of the factory or workshop for the purposes of this act.

Where a place situate within the close, curtilage or precincts forming a factory or workshop is solely used for some purpose other than the manufacturing process or handicraft carried on in the factory or workshop, such place shall not be deemed to form part of that factory or workshop for the purpose of this act, but shall, if otherwise it would be a factory or workshop, be deemed to be a separate factory or workshop, and be regulated accordingly.

Any premises or place shall not be excluded from the definition of a factory or workshop by reason only that such premises or place are or is in the open air.

This act shall not apply to such workshops, other than bake-houses, as are conducted on the system of non-employing any child, young person, or woman therein, but save as aforesaid applies to all factories and workshops as before defined, inclusive of factories and workshops belonging to the Crown; provided that in case of any public emergency a secretary of state may exempt a factory or workshop belonging to the Crown, from this act to the extent and during the period named by him.

The exercise by any child or young person in any recognized efficient school during a portion of the school hours of any manual labor for the purpose of instructing such child or young person in any art or handicraft, shall not be deemed to be an exercise of manual labor for the purpose of gain within the meaning of this act.

94. A child, young person or woman, who works in a factory or workshop, whether for wages or not, either in a manufacturing process or handicraft, or in cleaning any part of the factory or workshop used for any manufacturing process or handicraft, or in cleaning or oiling any part of the machinery, or in any other kind of

work whatsoever incidental to or connected with the manufacturing process or handicraft, or connected with the article made or otherwise the subject of the manufacturing process or handicraft therein, shall, save as is otherwise provided by this act, be deemed to be employed therein within the meaning of this act.

For the purposes of this act an apprentice shall be deemed to work for hire.

95. The expression "certified efficient school" in this act means a public elementary school within the meaning of the Elementary Education Acts, 1870 and 1873, and any workhouse school in England certified to be efficient by the Local Government Board, and also any elementary school which is not conducted for private profit and is open at all reasonable times to the inspection of her Majesty's inspectors of schools, and requires the like attendance from its scholars as is required in a public elementary school, and keeps such registers of those attendances as may be for the time being required by the Education Department, and is certified by the Education Department to be an efficient school; and the expression "recognized efficient school" means a certified efficient school as above defined, and also any school which the Education Department have not refused to take into consideration under the Elementary Education Act, 1870, as a school giving efficient elementary education to and suitable for the children of a school district, and which is recognized for the time being by an inspector under this act as giving efficient elementary education, and the inspector shall immediately report to the Education Department every school so recognized by him.

96. In this act, unless the context otherwise requires,—

The expression "child" means a person under the age of fourteen years:

The expression "young person" means a person of the age of fourteen years and under the age of eighteen years:

The expression "woman" means a woman of eighteen years of age and upwards:

The expression "parent" means a parent or guardian of, or person having the legal custody of, or the control over, or having direct benefit from the wages, of a child or young person:

The expression "Treasury" means the Commissioners of her Majesty's Treasury;

The expression "secretary of state" means one of her Majesty's principal secretaries of state.

The expression "education department" means the Lords of the Committee of the Privy Council of Education.

The expression "sanitary authority" means an urban or rural sanitary authority within the meaning of the Public Health Act, 1875, and any commissioners, board or vestry in the metropolis having the like powers as such urban sanitary authority.

The expression "person" includes a body of persons, corporate or unincorporate.

The expression "week" means the period between midnight on Saturday night and midnight on the succeeding Saturday night.

The expression "night" means the period between nine o'clock in the evening and six o'clock in the succeeding morning.

The expression "prescribed" means prescribed for the the time being by a secretary of state.

The expression "Summary Jurisdiction acts" means the act of session of the eleventh and twelfth years of the reign of her present Majesty, chapter forty-three, intituled: "An act to facilitate the performance of the duties of Justices of the Peace out of sessions within England and Wales with respect to summary convictions and orders," and any acts amending the same.*

The expression "Court of Summary Jurisdiction" means any justice or justices of the peace, metropolitan police magistrate, stipendiary, or other magistrate or officer, by whatever name called to whom jurisdiction is given by the Summary Jurisdiction acts, or any acts therein referred to.

The expression "mill-gearing" comprehends every shaft, whether upright, oblique, or horizontal, and every wheel, drum or pulley by which the motion of the first moving power is communicated to any machine appertaining to a manufacturing process.

The factories and workshops named in the fourth schedule to this act are in this act referred to by the names therein assigned to them.

*Summary Jurisdiction act, 1879.

Special Exemption of Certain Trades.

97. The exercise in a private house, or private room by the families dwelling therein, or by any of them, of manual labor by way of trade, or for purposes of gain in or incidental to any of the handicrafts specified in the fifth schedule to this act, shall not of itself constitute such house or room a workshop in the meaning of this act.

When it is proved to the satisfaction of a secretary of state that by reason of the light character of the handicraft carried on in any private house or private room by the family dwelling therein, or by any of them, it is expedient to extend this section to that handicraft, he may by order extend the same.

The order shall be made in manner provided by Part II of this act, and that part shall apply so far as circumstances admit, as if the order were an order extending an exception.

98. The exercise in a private house or private room by the family dwelling therein, or by any of them, of manual labor for the purposes of gain in or incidental to some of the purposes of this act in that behalf mentioned, shall not of itself constitute such house or room a workshop where the labor is exercised at irregular intervals, and does not furnish the whole or principal means of living to such family.

2—Savings.

99. Where in a factory the owner or hirer of a machine or implement moved by steam, water or other mechanical power, in or about or in connection with which machine or implement children, young persons, or women are employed, is some person other than the occupier of a factory, and such children, young persons, or women are in the employment and pay of the owner or hirer of such machine or implement, in any such case such owner or hirer shall, so far as respects any offence against this act which may be committed in relation to such children, young persons, or women, be deemed to be the occupier of the factory.

100. Nothing in this act shall extend—

(1). To any young person, being a mechanic, artisan, or laborer,

working only in repairing either the machinery in or any part of a factory, or any part of a factory or workshop; or

(2). To the process of gutting, salting, and packing fish immediately upon its arrival in the fishing boats.

101. The provisions of Section 91, of the Public Health Act, 1875, with respect to a factory, workshop, or workplace, not kept in a cleanly state or not ventilated, or overcrowded, shall not apply to a factory or workshop which is subject to the provisions of this act relating to cleanliness, ventilation, and overcrowding, but shall apply to every other factory, workshop and workplace.

It is hereby declared that the Public Health Act, 1875, shall apply to buildings in which persons are employed, whatever their number may be, in like manner as it applies to buildings where more than twenty are employed.

102. Any enactment or document referring to the acts repealed by this act, or any of them, or to any enactment thereof, shall be construed to refer to this act and to the corresponding enactment thereof.

[3—"Application of Act to Scotland and Ireland," and "4—Repeal" are not reproduced here].

FIRST SCHEDULE.

SPECIAL PROVISIONS FOR HEALTH.

Factories and Workshops in which the Employment of Young Persons and Children is Restricted.

1. In a part of a factory or workshop in which there is carried on the process of silvering of mirrors by the mercurial process, or the process of making white lead, a young person or child shall not be employed.

2. In the part of a factory in which the process of melting or annealing glass is carried on, a child or female young person shall not be employed.

3. In a factory or workshop in which there is carried on—

(a). the making or finishing of bricks or tiles not being ornamental tiles; or

(b) the making or finishing of salt, a girl under the age of sixteen years shall not be employed.

4. In a part of a factory or workshop in which there is carried on

(a). any dry grinding in the metal trade, or

(b). the dipping of lucifer matches, a child shall not be employed.

5. In any grinding in the metal trades other than dry grinding, or in fustian cutting, a child under the age of eleven years shall not be employed.

SECOND SCHEDULE.

SPECIAL RESTRICTIONS.

Places Forbidden for Meals.

The prohibition on a child, young person or woman taking a meal or remaining during the times allowed for meals in certain parts of factories or workshops, applies to the parts of factories and workshops following; that is to say,

(1). In the case of glass works, to any part in which the materials are mixed; and

(2). In the case of glass works where flint glass is made, to any part in which the work of grinding, cutting or polishing is carried on; and

(3). In the case of lucifer match works, to any part in which any manufacturing process or handicraft (except that of cutting the wood) is usually carried on; and

(4). In the case of earthenware works, to any part known or used as dippers' house, dippers' drying room or china scouring room.

THIRD SCHEDULE.

SPECIAL EXCEPTIONS.

Part I—Period of Employment.

The exception respecting the employment of children, young persons and women between the hours of eight in the morning and eight in the evening, and on Saturday between the hours of eight in the morning and four in the afternoon, or between the hours of seven in the morning and three in the afternoon, applies to any factory or workshop, or part thereof, in which any of the following manufacturing processes or handicrafts are carried on; that is to say,

- (a). Lithographic printing;
- (b). Turkey red dyeing;
- (c). The making of any article of wearing apparel;
- (d). The making of furniture hangings;
- (e). Artificial flower making;
- (f). Bon-bon and Christmas present making;
- (g). Valentine making;
- (h). Fancy box making;
- (i). Envelope making;
- (k). Almanac making;
- (l). Playing card making;
- (m). Machine making;
- (n). Biscuit making;
- (o). Firewood cutting;
- (p). Job dyeing; or
- (q). Aërated water making; and also to
- (r). Bookbinding works;
- (s). Letter press printing works; and

(t). A part of a factory or workshop which is a warehouse not used for any manufacturing process or handicraft, and in which persons are solely employed in polishing, cleaning, wrapping or packing up goods.

Part II—Meal Hours.

The cases in which the provisions of this act as to meal times being allowed at the same hour of the day are not to apply, are—

(1). The case of children, young persons and women employed in the following factories; that is to say,

Blast furnaces;

Iron mills;

Paper mills;

Glass works; and

Letter press printing works; and

(2). The case of male young persons employed in that part of any print works or bleaching and dyeing works in which the process of dyeing or open air bleaching is carried on.

The cases in which and the extent to which the provisions of this act as to a child, young person or woman during the times allowed for meals being employed or being allowed to remain in a room in which a manufacturing process or handicraft is being carried on, are not to apply, are—

(1). The case of children, young persons and women employed in the following factories; that is to say,

Iron mills;

Paper mills;

Glass works (same as otherwise provided by this act); and

Letter press printing works; and

(2). The case of a male young person employed in that part of any print works, or bleaching and dyeing works, in which the process of dyeing or open air bleaching is carried on, to this extent, that the said provision shall not prevent him, during the times allowed for meals to any other young person or to any child or woman, from being employed or being allowed to remain in any room in which any manufacturing process is carried on, and shall not prevent, during the times allowed for meals to such male young person, any other young person or any child or woman from being employed in the factory or allowed to remain in any room in which any manufacturing process is carried on.

Part III—Overtime.

The exception with respect to the employment of young persons and women for forty-eight days in any twelve months [during a period of employment, beginning at six or seven o'clock in the

morning, and ending at eight or nine o'clock in the evening, or beginning at eight o'clock in the morning and ending at ten o'clock in the evening, applies to each of the factories and workshops, and parts thereof, following ; that is to say,

(1). Where the material which is the subject of the manufacturing process or handicraft is liable to be spoiled by weather ; namely,

(a). Flax scutch mills ; and

(b). A factory or workshop or part thereof in which is carried on the making or finishing of bricks or tiles not being ornamental tiles ; and

(c). The part of rope works in which is carried on the open air process ; and

(d). The part of bleaching and dyeing works in which is carried on open air bleaching or Turkey red dyeing ; and

(e). A factory or workshop or part thereof in which is carried on glue making ; and

(2). Where press of work arises at certain recurring seasons of the year ; namely,

(f). Letter press printing works ;

(g). Bookbinding works ; and a factory, workshop, or part thereof in which is carried on the manufacturing process or handicraft of—

(h). Lithograph printing ; or

(i). Machine ruling ; or

(k). Firewood cutting ; or

(l). Bon-bon and Christmas present making ; or

(m). Almanac making ; or

(n). Valentine making ; or

(o). Envelope making ; or

(p). Aerated water making ; or

(q). Playing card making ; and

(r). Where the business is liable to sudden press of orders arising from unforeseen events ; namely a factory or workshop, or part thereof, in which is carried on the manufacturing process or handicraft of—

(r). The making up of any article of wearing apparel ; or

(s). The making up of furniture hangings ; or

(t). Artificial flower making ; or

- (u). Fancy box making; or
- (v). Biscuit making; or
- (w). Job dyeing; and also,
- (x). A part of a factory or workshop which is a warehouse not used for any manufacturing process or handicraft, and in which persons are solely employed in polishing, cleaning, wrapping or packing up goods.

Provided that the said exception shall not apply—

(a). Where persons are employed at home, that is to say, to a private house, room, or place which, though used as a dwelling, is by reason of the work carried on there a factory or workshop within the meaning of this act, and in which neither steam, water, nor other mechanical power is used, and in which the only persons employed are members of the same family dwelling there; or

(b). To a workshop, or part thereof, which is conducted on the system of not employing any child or young person therein.

Part IV—Additional Half Hour.

The exception with respect to the employment of a child, young person or woman for a further period of thirty minutes, where the process is in an incomplete state, applies to the factories following; that is to say,

(a). Bleaching and dyeing works;

(b). Print works;

(c). Iron mills in which male young persons are not employed during any part of the night;

(d). Foundries in which male young persons are not employed during any part of the night; and

(e) Paper mills in which male young persons are not employed during any part of the night.

Part V—Overtime for Perishable Articles.

The exception with respect to the employment of women for ninety-six days in any twelve months during a period of employment beginning at six or seven o'clock in the morning and ending at eight or nine o'clock in the evening, applies to a factory or work-

shop, or part thereof in which any of the following processes is carried on; namely

- The process of making preserves from fruit,
- The process of preserving or curing fish, or
- The process of making condensed milk.

Part VI—Night Work.

The exception with respect to the employment of male young persons during the night applies to the factories following; that is to say,

- (a). Blast furnaces;
- (b). Iron mills;
- (c). Letterpress printing works, and
- (d). Paper mills.

Part VII—Spell.

The exception respecting the continuous employment in certain textile factories during the winter months of children, young persons and women without an interval of at least half an hour for a meal for the same period as in a non-textile factory, applies to textile factories solely used for—

- (a). The making of elastic web; or
- (b). The making of ribbon; or
- (c). The making of trimming.

FOURTH SCHEDULE.

LIST OF FACTORIES AND WORKSHOPS.

Part I—Non-Textile Factories.

(1). "Print Works," that is to say, any premises in which any persons are employed to print figures, patterns or designs upon any cotton, linen, woolen, worsted or silken yarn, or upon any woven or felted fabric not being paper;

- (2). "Bleaching and dyeing works," that is to say, any premises in which the processes of bleaching, beetling, dyeing, calendering, finishing, hooking, lapping, and making up and packing any yarn or cloth of any material, or the dressing or finishing of lace, or any one or more of such processes, or any process incidental thereto, are or is carried on ;
- (3). "Earthenware works," that is to say, any place in which persons work for hire in making, or assisting in making, finishing or assisting in finishing earthenware of any description, except bricks and tiles not being ornamental tiles ;
- (4). "Lucifer match works," that is to say, any place in which persons work for hire in making lucifer matches, or in mixing the chemical materials for making them, or in any process incidental to making lucifer matches, except the cutting of the wood ;
- (5). "Percussion cap works," that is to say, any place in which persons work for hire in making percussion caps, or in mixing or storing the chemical materials for making them, or in any process incidental to making percussion caps ;
- (6). "Cartridge works," that is to say, any place in which persons work for hire in making cartridges, or in any process incidental to making cartridges, except the manufacture of paper or other material that is used in making the cases of the cartridges ;
- (7). "Paper staining works," that is to say, any place in which persons work for hire in printing a pattern in colors upon sheets of paper, either by blocks applied by hand or by roller worked by steam, water, or other mechanical power ;
- (8). "Fustian cutting works," that is to say, any place in which persons work for hire in fustian cutting ;
- (9). "Blast furnaces," that is to say, any blast furnace or other furnace, or premises in or on which the process of smelting or otherwise obtaining any metals from the ore is carried on ;
- (10). "Copper mills ;"
- (11). "Iron mills," that is to say, any mill, forge, or other premises in or on which any process is carried on for converting into malleable iron, steel or tin plate, or for otherwise making or converting steel ;
- (12). "Foundries," that is to say, iron foundries, copper foundries, brass foundries and other premises or places in which the

process of founding or casting any metal is carried on ; except any premises or places in which such process is carried on by not more than five persons and as subsidiary to the repair and completion of some other work ;

(13). "Metal and india rubber work," that is to say, any premises in which steam, water, or other mechanical power is used for moving machinery employed in the manufacture of machinery, or in the manufacture of any article of metal not being machinery, or in the manufacture of india rubber or gutta percha, or of articles made wholly or partially of india rubber or gutta percha ;

(14). "Paper mills," that is to say, any premises in which the manufacture of paper is carried on ;

(15). "Glass works," that is to say, any premises in which the manufacture of glass is carried on ;

(16). "Tobacco factories," that is to say, any premises in which the manufacture of tobacco is carried on ;

(17). "Letter press printing works " ; that is to say, any premises in which the process of letter-press printing is carried on ;

(18). "Bookbinding works," that is to say, any premises in which the process of bookbinding is carried on ;

(19). "Flax scutch mills."

Part II—Non-Textile Factories and Workshops.

(20). "Hat works" that is say, any premises in which the manufacture of hats or any process incidental to their manufacture is carried on ;

(21). "Rope works," that is to say, any premises being a ropery, ropewalk, or ropework, in which is carried on the laying or twisting or other process of preparing or finishing the lines, twines, cords, or ropes, and in which machinery moved by steam, water or other mechanical power is not used for drawing or spinning the fibre of flax, hemp, jute or tow, and which has no internal communication with any buildings or premises joining or forming part of a textile factory, except such communication as is necessary for the transmission of power ;

(22). "Bakehouses," that is to say, any places in which are

baked bread, biscuits, or confectionery, from the baking or selling of which a profit is derived ;

(23). "Lace warehouses," that is to say, any premises, room, or place not included in bleaching and dyeing works as hereinbefore defined, in which persons are employed upon any manufacturing process or handicraft in relation to lace, subsequent to the making of lace upon a lace machine moved by steam, water or other mechanical power ;

(24). "Shipbuilding yards," that is to say, any premises in which any ships, boats, or vessels used in navigation are made, finished, or repaired ;

(25). "Quarries," that is to say, any place, not being a mine, in which persons work in getting slate, stone, copolites, or other minerals ;

(26). "Pit banks," that is to say, any place above ground adjacent to a shaft of a mine, in which place the employment of women is not regulated by the "Coal Miners' Regulation Act, 1872," or the "Metalliferous Act, 1872," whether such place does or does not form part of the mines within the meaning of these acts.

FIFTH SCHEDULE.

Special Exemption.

Straw plaiting.

Pillow-lace making.

Glove making.

The Factory and Workshop Act, 1883, (ENGLAND.)

AN ACT TO AMEND THE LAW RELATING TO CERTAIN FACTORIES
AND WORKSHOPS.*

1. This act may be cited as the Factory and Workshop Act, 1883.

White Lead Factories.

2. After the 31st day of December, 1883, it shall not be lawful to carry on a white lead factory, unless such factory is certified by an inspector to be in conformity to this act.

3.—(1). A white lead factory shall not be certified to be in conformity with this act unless the scheduled conditions, that is to say, the conditions specified in the schedule to this act, as amended by any order of a secretary of state under this section, and including any conditions added by any such order, have been complied with.

(2). A secretary of state may at any time, by writing under his hand, revoke, alter, add to, or modify all or any of the conditions specified in the schedule to this act.

4. Within a reasonable time after written application in that behalf addressed to the chief inspector of factories by the occupier of any white lead factory, such factory shall be inspected by an inspector, and if he finds that the scheduled conditions have been

* 46 and 47 Vict., c. 53. See the Factory and Workshop Act, 1878, 41 and 42 Vict., c. 16. *Ante.*

complied with he shall certify to a secretary of state that the factory is in conformity with this act; and a copy of the certificate signed by the inspectors shall be forthwith given to the occupier.

5. If at any time after a white lead factory has been certified to be in conformity with this act it appears to an inspector that the factory is not kept in conformity with this act, he shall forthwith give notice to the occupier specifying in what respect default is made; and unless the default is within a reasonable time after the notice remedied to the satisfaction of an inspector, a secretary of state may, if he sees fit, withdraw the certificate until the default is remedied.

6. The occupier of a white lead factory which, after the 31st day of December, 1883, is carried on without a certificate under this act shall, for every day during which it is so carried on, be liable on summary conviction to a fine not exceeding two pounds.

7.—(1). There shall be established not later than the first day of January, 1884, in every white lead factory, such special rules for the guidance of the persons employed therein as may appear best calculated to enforce the use by them of the requirements provided under this act, and generally to prevent injury to health in the course of their employment.

(2). Such special rules, when established, shall be observed in and about the factory, as if they were enacted in this act.

(3). If any person who is bound to observe the special rules established for any white lead factory, acts in contravention of or fails to comply with any of such special rules, he shall be liable on summary conviction to a fine not exceeding two pounds; and the occupier of such factory shall also be liable on summary conviction to a fine not exceeding five pounds, unless he proves that he had taken all reasonable means, by publishing and to the best of his power enforcing the said rules, to prevent such contravention or non-compliance.

8.—(1). The occupier of every white lead factory shall frame and transmit to the chief inspector for approval by a secretary of state, special rules for such factory within three months after the passing of this act; or within three months after the opening for work of any white lead factory not opened for work before the passing of this act.

(2). The proposed special rules, together with a printed notice, specifying that any objection to such rules on the ground of anything contained therein or omitted therefrom may be sent by any of the persons employed in the factory to the chief inspector, shall, during not less than two weeks before such rules are transmitted to the chief inspector, be posted up in like manner, as is provided in this act respecting the publication of special rules for the information of persons employed in the factory, and a certificate that such rules and notice have been posted up shall be sent to the chief inspector, with the rules signed by the person sending the same.

(3). The secretary of state may approve such rules either with or without any omission, alteration or addition, and on his approval being signified in such manner as he may think fit, the special rules as approved may be established. But no such omission, alteration or addition shall be made without sufficient notice to the occupier to enable him to state his objections, if any, thereto.

9.—(1). After special rules are established under this act in any white lead factory, the occupier of such factory may from time to time propose in writing to the chief inspector, for the approval of a secretary of state any amendment of such rules or any new special rules, and the provisions of this act with respect to the original special rules shall apply to all such amendments and new rules in like manner, as near as may be, as they apply to the original rules.

(2) A secretary of state may at any time propose to the occupier of any white lead factory any new special rules or any amendments to the special rules; any such new rules or amendments shall, as settled after time given for consideration of the objections, if any, of the occupier, be established as from a date to be fixed by a secretary of state and specified therein.

10. If the occupier of any white lead factory to which this act applies makes any false statement with respect to the posting up of the special rules and notices, he shall be liable on summary conviction to a fine not exceeding twenty pounds; and if special rules for any white lead factory are not transmitted within the time limited by this act to the chief inspector, for the approval of a secretary of state, such secretary of state may, by writing, under his hand establish for that factory such special rules as he may see fit, to come into operation as from a date to be fixed by him and specified therein.

11.—(1). Printed copies of all special rules for the time being in force in any white lead factory under this act shall be kept posted up in legible characters in conspicuous places in the factory where they may be conveniently read by the persons employed.

(2). A printed copy of such rules shall be given by the occupier to any person affected thereby on his or her application.

(3.) If the occupier of any white lead factory fails to comply with any provisions of this section, he shall be liable on summary conviction to a fine not exceeding ten pounds.

12 Every person, who pulls down, injures, or defaces any proposed special rules, notice, or special rules when posted up in pursuance of the provisions of this act with respect to special rules, or any notice posted up in pursuance of the special rules shall be liable on summary conviction to a fine not exceeding five pounds.

*Explanation of Certain Provisions of Factory, etc., Act, 1878.**

13. It is hereby declared that

(a). Section fifty-three, of the Factory and Workshop Act 1878, only authorizes overtime employment of young persons or women to take place in any factory or workshop on forty-eight days in the whole in any twelve months; and that in reckoning such period of forty-eight days, every day on which any young person or woman has been employed overtime is to be taken into account; and that

(b). Section fifty-six of the said act only authorizes overtime employment of women to take place in any factory or workshop on ninety-six days in the whole in any twelve months; and that in reckoning such period of ninety-six days, every day on which any woman has been employed overtime is to be taken into account.

14. Notwithstanding anything in section twelve or section fourteen of the Factory and Workshop Act, 1878, the period of employment for a child in an afternoon set in a factory or workshop, where the dinner time does not begin before two o'clock in the afternoon, may begin at noon; provided that in such case the period of employment in the morning set shall end at noon.

*See Ante.

Bakehouses.

15. It shall not be lawful to let or suffer to be occupied as a bakehouse, or to occupy as a bakehouse, any room or place which was not so let or occupied before the first day of June, 1883, unless the following regulations are complied with:—

(1). No water closet, earth closet, privy, or ash pit shall be within or communicate directly with the bakehouse;

(2). Any cistern for supply water to the bakehouse shall be separate and distinct from any cistern for supplying water to a water closet;

(3). No drain or pipe carrying off fœcal or sewerage matter shall have air opening within the bakehouse.

Any person who lets or suffers to be occupied, or who occupies any room or place as a bakehouse in contravention of this section shall be liable, on summary conviction, to a fine not exceeding forty shillings, and to a further fine not exceeding five shillings for every day during which any room or place is so occupied after a conviction under this section.

16. When a court of summary jurisdiction is satisfied on the prosecution of an inspector or a local authority that any room or place used as a bakehouse, whether the same was or was not so used before the passing of this act, is in such a state as to be on sanitary grounds unfit for use or occupation as a bakehouse, the occupier of the bakehouse shall be liable on summary conviction to a fine not exceeding forty shillings, and on a second or any subsequent conviction, not exceeding five pounds.

The court of summary jurisdiction, in addition to or instead of inflicting such fine, may order means to be adopted by the occupier within the time named in the order, for the purpose of removing the ground of complaint. The court may, upon application, enlarge the time so named, but if, after the time originally named is enlarged by subsequent order, the order is not complied with, the occupier shall be liable to a fine not exceeding one pound for every day that such non-compliance continues.

17.—(1). As respects every retail bakehouse, the provisions of this part of this act and of sections 3, 33, 34, and 35, of the Factory and Workshop Act, 1878, which relates to cleanliness, ventilation,

overcrowding, and other sanitary conditions, shall be enforced by the local authority of the district in which the retail bakehouse is situate, and not by an inspector under the Factory and Workshop Act, 1878; and for the purposes of this section the medical officer of health of the local authority shall have and exercise all such powers of entry, inspection, taking legal proceedings, and otherwise, as an inspector under the Factory and Workshop Act, 1878.

(2). If any child, young person or woman is employed in any retail bakehouse, and the medical officer of the local authority becomes aware thereof, he shall forthwith give written notice thereof to the factory inspector for the district.

(3). An inspector under the Factory and Workshop Act, 1878, shall not, as respects any retail bakehouse exercise the power of entry and inspection conferred by that act, unless he has notice or reasonable cause to believe that a child, young person or woman is employed therein.

18. This act shall be construed as one with the Factory and Workshop Act, 1878, and in this act, unless the context otherwise requires,—

The expression "white lead factory" includes every factory or workshop in which the manufacture of white lead is carried on.

The expression "retail bakehouse" means any bakehouse, or place, the bread, biscuit or confectionery baked in which are not sold wholesale, but by retail in some shop or place occupied together with such bakehouse.

The expression "local authority" means, as respects the city of London and the liberties thereof, the commissioners of sewers; as respects the parishes and districts mentioned in the Schedules A and B, annexed to the Metropolis Management Act, 1855, and any parish to which the said act may be extended by order in council in manner in the said act provided, the vestries and district boards elected under the said act; and as respects any urban sanitary district, the urban sanitary authority; and as respects any rural sanitary district, the rural sanitary authority, within the meaning of the Public Health Act, 1875.

Conditions of Obtaining Certificate.

(1). The stacks and stoves in the factory must be efficiently ventilated.

(2). There must be provided for the use of the persons employed in the factory sufficient means of frequently washing hands and feet with a sufficient supply of hot and cold water, soap, towels and brushes.

(3). There must be provided in addition for the use of women employed in the factory, sufficient baths, with a sufficient supply of hot and cold water, soap, towels and brushes.

(4). There must be provided for the use of persons employed in the factory (but not in any part of the factory where any work is carried on) a proper room for meals.

(5). There must be provided for every person working at any tank an overall suit with head covering, and for every person working at any white bed, a respirator, or covering for the mouth and nostrils, and head covering, and for every person working at any dry stove or rollers, an overall suit with head covering, and a respirator or covering for the mouth and nostrils.

(6). There must be accessible to all persons employed in the factory a sufficient supply of acidulated drink.

PART II.

REAL ESTATE

MORTGAGE INDEBTEDNESS AND
FORECLOSURE EXECUTIONS.

112

Part II.

Real Estate Mortgage Indebtedness and Foreclosure Executions.

The extent of mortgage indebtedness is a subject which at present is attracting an unusual amount of attention in this country. The alleged increase of real estate mortgages, particularly of those on agricultural lands, is asserted to be one of the dangerous signs of the times, and that, so far as our farmers are concerned, it is a burden which, taken in connection with the falling value of land, bids fair to drive them to the wall, or at least forebodes the substitution in the near future, of the tenant, for the independent small farmer. These alarmist allegations, however, do not pass without question, for it is argued with a considerable degree of plausibility, that the absence of mortgages is not necessarily a measure of the prosperity of either the farmer or manufacturer. On the other hand, it is not denied that, ordinarily, borrowed money applied to productive industry is a benefit to the whole community, the contention being that the position of the farmer and manufacturer in this respect is by no means similar, and least of all at the present day when farming does not, as in the case of the manufacturer, require the farmer being compelled to borrow, not to extend his business, but to keep his head above water, the interest on his mortgage, especially if made in times of inflated values and high prices, eating up his substance.

In the preliminary report of the committee of the State Board

of Agriculture, which lately* investigated the "causes of the depression of the farming interests of New Jersey," the great fall in land values† and the rate of interest is complained of, and the "mortgage evil" is incidently referred to in connection therewith. The committee makes a general valuation of from \$30 to \$60 per acre for New Jersey farming lands, exclusive of waste or swamp lands; and estimates that sixty-five per cent. of the farms are mortgaged; "but this does not indicate the aggregate amount comprised in the mortgages as compared with the actual value of the farms for farming purposes." One of the many replies from the farmers is to the effect that "it is a deplorable fact that our farming lands are so heavily burdened with mortgages. The aggregate amount of this crushing burden is not far from eighty per cent. of the total valuation of the farms."

Be this as it may, there is an almost entire absence of data on the subject of mortgage indebtedness; certainly there are none of sufficient value to warrant reliable deductions. In only a few of the western states, Michigan, Illinois, Ohio, Indiana and Nebraska, has there been any attempt to gather such statistics. These go to show that the volume of land incumbrances is constantly swelling there, a result which is largely to be attributed to the somewhat overdone "western mortgage" industry, and therefore any conclusions drawn therefrom hardly would hold good in the east where the same conditions do not obtain. A considerable portion of these western mortgages is owned outside of the State affected, which results in the annual drain of interest money from the mortgaged territory. As the Commissioner of the Michigan Bureau of Labor Statistics put it in his fifth annual report (1888), "the foreign money lender having the first mortgage steps in, draws his interest and runs away, leaving the rest to meet the demands for public purposes. The resident capitalist having his money invested in mortgages, which can no longer escape the assessing officer, complains of the injustice of taxing mortgages, and is envious of his non-resident competitor who escapes that burden. The farmer, the mechanic and laboring man, whose property is all in sight, and

* February, 1890.

† "Question 1, (Have farming lands depreciated in your county?), is answered in the affirmative with but one or two exceptions. The depreciation as averaged by the committee for the whole State is forty per cent. from ten to fifteen years ago."—*Report of Committee*, p. 6.

upon whom the burden of taxation is most oppressive, cannot escape."

There has been some very wild guessing respecting the mortgage indebtedness of the country, and as wild conclusions drawn from such an assumed total. The Committee on Mortgage Debtors of the late General Assembly of the Knights of Labor (November, 1889) reported* that "though we find no reliable figures concerning the mortgage indebtedness of the country, yet enough is well known to prove beyond a doubt that it is frightfully large and dangerously burdensome." Reference is then made to some "widely published figures in the *New York Times* and other leading journals, both east and west," which credit seven western States with \$4,521,000,000 of mortgage incumbrance. The report then proceeds to state, that "these statements have been criticised and vehemently disputed by interested parties on the one hand, and partially verified on the other. Striking out one half of the amount to cover errors and silence criticism, we still find the figures and conditions confronting us most appallingly. As a fruitage of these conditions, the mortgage debtors in many places are unable to longer pay the interest on loans, and are utterly without hope of ever being able to pay the principal. This condition is not confined merely to the States named. It exists in city and country in nearly every State in the union. One leading orthodox authority places the mortgage indebtedness of twenty-three States at one-fourth of the value of the value of their entire real estate."

That such estimates as those cited are exaggerated, the statistics of valuation given in the United States census returns for 1880 make pretty clear. The assessed valuation of the real estate in the fourteen western States is placed at \$4,584,048,000 and that of all the thirty-eight States in the union at but little less than thirteen thousand million dollars. As a matter of fact, there are practically no statistics available on which to base reliable deductions of this nature. In the few western States where this line of investigation has been attempted, the results obtained are far from satisfactory, even where the official records of mortgages have been collated. A calculation of the supposed existing indebtedness from the mere record of mortgages is misleading, to say the least. To

* see official minutes published by the General Secretary-Treasurer, Philadelphia.

obtain the correct number of outstanding mortgages would require the search to be extended back a generation, in order to eliminate those discharged and foreclosed;* and this would not determine the amount still due on mortgages in force, for there is no record of past payments, which are well known to be considerable and to vary according to locality and class of mortgages.

It would also be misleading to conclude simply from a fairly correct estimate of total mortgage indebtedness, however large, based upon the number and amount of mortgages, that the condition of things was bad, and "that a very large proportion of the people seem to be in a financial rut, and are unable to extricate themselves," as it has been expressed. A large amount of the borrowed capital invested in productive industry would have to be first eliminated, and nearly the whole of the vast bulk of so-called purchase-money mortgages, given for property when purchased, or the deferred payments of borrowers in our numerous and rapidly increasing co-operative building and loan associations. This latter class of debtors is large and, where these enterprises flourish, constitutes a considerable portion of the total mortgages: the Bureau returns in 1888 showed 5,304 borrowing members of the New Jersey associations, which had over \$14,000,000 invested on bond and mortgage. But, excepting these obligations, it cannot generally be learned from the official records which mortgages have been given to secure purchase money, and which for money borrowed. Nor can it be certainly determined from the mere records, that any given mortgaged tract of real estate is farming land—it may be held for speculative purposes, or may be mining property, but at the same time there may be no indications on the face of the mortgage showing this, except, perhaps, its apparently inflated value, which again would not be an absolute test to-day, for land mortgaged in the early '70's, or before.

These and other modifying circumstances largely destroy the value of any estimates of the burden of existing indebtedness, determined by an inspection of the official records only. These must be supplemented by a personal enumeration of the real estate owners—a task which is to be undertaken, under a supplementary

* It is generally admitted that a farm mortgage has a long life. See correspondence from leading lawyers, *infra*.

act of Congress* as a part of the duties of the U. S. census enumerators in June, 1890. It is safe to say that these returns if obtainable will furnish extremely interesting and valuable information. The act appropriates the sum of one million dollars for the purpose, and provides :

That it shall be the duty of the Superintendent of Census, in addition to the duties now required of him by law, to ascertain the number of persons who live on and cultivate their own farms, and who live in their own homes, and the number who hire their farms and homes, and the number of farms and homes which are under mortgage, the amount of mortgage debt, and the value of the property mortgaged. He shall also ascertain whether such farms and homes have been mortgaged for the whole or part of the purchase money for the same, or for other purposes, and the rates of interest paid upon mortgage loans.

But these facts, having reference only to the ownership of and indebtedness on real estate, will tell but half the story of the burden of private recorded indebtedness. Chattel mortgages, those on personal property, are equally evidence of debt, and probably indicate to a greater extent than incumbrances on land whether the mortgages are becoming embarrassed. So with foreclosure executions, sheriff's sales, which mean that the owner has succumbed to the burden of the mortgage debt.

The same may be said of docketed judgments, which are all a lien on real estate. A judgment is enforceable against both the personal property and real estate of the debtor, it becoming a lien on the latter as soon as docketed, that is recorded in the county clerk's or supreme court clerk's office. It may be either a general lien, as in the case of a supreme court judgment, which covers the whole State, or a local lien, coextensive only with the county wherein docketed. It remains a lien on the land acquired by the debtor at any time within twenty years thereafter. Except in case of a purchase money mortgage, it is a lien superior to a subsequent mortgage. It is to be enforced first against the goods and chattels, and then against the real estate, all of which may be sold under the statute, except such as is exempted under the Homestead Exemption Act, of March 17, 1852,† that is, the lot and residence of the

* "An act to require the superintendent of census to ascertain the number of people who own farms and homes, and the amount of mortgage indebtedness thereon."

† Revised Statutes, Ed. 1877, p. 1055, ¶ 53.

debtor, being a householder and having a family, to the value of one thousand dollars.

Previous to the act of May 2, 1885,* a chattel mortgage was simply filed, and so far as creditors, or purchasers or mortgagees in good faith, were concerned, was valid only for one year thereafter, unless a copy was refiled within thirty days next preceding the expiration of the year. Since then, such instruments, duly executed and acknowledged, are required to be recorded in the office of the clerk, or of the register, where in existence, of the county wherein the mortgagor, if a resident of the State, resides; and if not a resident, then in the clerk's office of the county where the mortgaged property may be at the time of the execution of the mortgage. Such a mortgage is valid against the creditors of the mortgagor, and subsequent purchasers and mortgagees, "from the time of recording thereof until the same be cancelled of record in the manner now provided by law for cancelling mortgages of real estate." A chattel mortgage vests in the mortgagee or owner "the right to the possession of the chattels therein described, so far as may be necessary for the purpose of preventing the removal thereof out of the county wherein they did lie at the time of execution or delivery of such mortgage, and of recovering such chattels in case the same shall have been removed out of such county." On default in payment, the chattels are forfeited and the title is absolute at law in the mortgagee, who may proceed to sell them on due notice to the mortgagor. There is no statutory regulations as to the notice to be given. It should be such notice as will be likely to secure the best price practicable for the goods. The sale must be public, after due advertisement, and conducted with fairness and good faith. Sometimes a chattel mortgage is foreclosed in the same way as a real estate, but rarely.

A real estate mortgage is in the form of a deed of land, with a condition that, if a certified sum of money be duly paid, the deed shall become void, or as it is expressed in legal phraseology, "that then these presents, and the estate hereby granted, shall cease, determine and be void." The land is not transferred, and the only effect of the mortgage is to give the mortgagee a lien on the land, the equity, or right of redemption, still remaining in the mortgagor.

* Revised Statutes, Supplement (1886), p. 491, ¶8.

The debt is the principal thing and the land merely an accessory ; the payment of the debt extinguishing the mortgage, when it may be discharged on the records, a statement to that effect being entered on the margin of the recorded instrument. It is necessary to record the mortgage in the office of the county clerk, or register, when there is one*, or it will be postponed to the lien of an honest, subsequently recorded conveyance or mortgage. It need not be recorded in full, but only an abstract of it "registered." Section 17, page 705, Revised Statutes (1877) requiring the county clerk "to provide fit books, well-bound and lettered, for registering [on payment of his legal fees] all mortgages, and defeasible deeds in the nature of mortgages, of lands, tenements, and hereditaments, lying and being within his county, in which shall be entered the names of the mortgagor and mortgagee, the date of the mortgage, the mortgage money and when payable, and the description and boundaries of the lands, tenements and hereditaments mortgaged." The date of receipt of the instrument must be noted at the foot or in the margin of the record.

A mortgage will be presumed to have been paid, if the mortgagee never entered on the land, and there has been no foreclosure nor payment of interest within twenty years. On the other hand, when there has been no default, it remains in force notwithstanding the expiration of the term as stated in the instrument. It has become the practice in cities to make this nominal term one year ; the actual life of a mortgage, as a general rule, being considerably longer. This is done to protect the mortgagee, especially in the matter of the payment of taxes on the mortgage, on account of which a deduction in the assessment value of his land may be claimed by the mortgagor from the assessor. The mortgagee is bound in such case to pay the tax on his mortgage and cannot recover it of the mortgagor.† Under the so-called "five-county act,"‡ applying to the counties of Hudson, Essex, Union, Bergen and Passaic, and the cities of Trenton, New Brunswick and Camden, the owners of mortgaged lands may agree not to apply for any deduction, and in case the deduction is claimed in violation of the

* In only Camden, Essex and Hudson counties.

† 8 C. E. Green, 181.

‡ April 17, 1876.

agreement, the mortgage becomes immediately due. It is also the general custom throughout the state to insert "insurance" and "interest" clauses in the mortgage, under which the mortgagor is required to keep the premises insured and pay the interest due on the mortgage within a specified time, for example, six months. In the one case, if default is made, the mortgagee may take out a policy of insurance and add the premium to the mortgage; in the other, the mortgage becomes due and may be foreclosed immediately.

It is usual for some instrument, generally a bond, to accompany the mortgage, indicating the existence of the debt. The statute of limitation runs against the bond in sixteen years. Under the law of 1881,* all proceedings to collect the debt "shall be, first, to foreclose the mortgage, and if at the sale of the mortgaged premises under said foreclosure proceedings the said premises should not sell for a sum sufficient to satisfy said debt, interest and costs, then and in such case it shall be lawful to proceed on the bond for the deficiency, and that all suits on the bond shall be commenced within six months from the date of the sale of said mortgaged premises." With rare exceptions, a foreclosure proceeding is the course followed to obtain a sale of the mortgaged real estate. A power to sell the premises for payment of the debt may be inserted in the mortgage. That is valid, and will do away with the necessity of a foreclosure, but it is not favored by the courts and will be jealously watched.† Under the statute, also, when default is made in payment of the mortgage money, the property being subject only to one mortgage and no other persons but the mortgagor and mortgagee being necessarily interested thereto, it is lawful for the mortgagee at any time after the payment of the debt ought to have been made to sue out a writ of *scire facias*, requiring the mortgagor to show cause before the court of common pleas or Supreme Court, why the mortgaged premises should not be seized and sold for the debt; if there is no appearance on the return day of the writ, judgment is entered, execution issued and the property sold as under other executions for the sale of real estate.

*March 23, 1881.

†3 C. E. Green. 358.

But the almost invariable practice is to proceed by a suit of foreclosure. Where all the real estate is situate in the same county, the circuit court, under the act of 1851, has the same jurisdiction as the Court of Chancery, where with but few exceptions these proceedings are had.* They are begun by issuing a subpœna and filing a bill of foreclosure, all incumbrancers subsequent to the foreclosing mortgagee being made parties defendant with the mortgagor. The object of a bill of foreclosure is to enable the mortgagee to have the mortgaged premises sold in order to get his mortgage money and interest, or that the mortgagor may redeem it without delay, and in default thereof, that the mortgagor and all persons claiming under him, or to claim from or under him, be forever barred of and from all equity of redemption in the mortgaged premises.† From the service of the subpœna up to the time of the final decree, authorizing the issuing of the execution (*fi. fa.*) to the sheriff or master in chancery, if there be no defence, generally four to five months are consumed; or about six months to the sale of the premises—a period, however, which varies with the circumstances of the case, causing delay.

Not all the suits begun proceed to execution, and the issuing of the execution is sometimes delayed; but such cases are the exception, although the sheriff's fees add a very appreciable amount to the sum total of the debt, as do also the various items of so-called "costs," which go to the solicitor, clerk of the court, etc. These fees and costs are regulated by statute, but the totals vary in different suits. Combined with accumulated interest and the sacrifice of the property incident to forced sheriffs' sales, they seldom fail to more than wipe out any remaining equity of redemption of the mortgagor, who thus not only loses his property, but has an unsatisfied execution hanging over him. The following "sheriff's statement in foreclosure" will illustrate this. It is the return made by the sheriff of Burlington county of an execution in February, 1884. The final decree had been made in February, 1868, requiring the sheriff to satisfy out of the proceeds of the sale of the land of the defendant mortgagor, in the first place, the sum of \$2,408, the prin-

*In 1887 and 1888, for example, only 33 and 17 foreclosures proceedings, respectively, took place in the circuit courts, and 900 and 859, respectively, in chancery. More than half of the circuit foreclosures were in Cumberland and Passaic.

†Dickinson's Chancery Precedents, p. 383.

principal and interest due on the complainants' mortgage, dated March 3, 1865; and in the second place, the sum of \$1,300, the principal and interest of a second mortgage, dated in January, 1867, belong to the "defendant" (subsequent mortgagee) mentioned in the statement below. No sale took place under the first execution, but a part payment was made on November 19, 1882, on the amount due on the complainant's decree. In November, 1883, an alias (second) execution was issued for the principal sum of \$2,000, still due to complainant, the amount of interest thereon and costs, as well as the sum due to the defendant mortgagee. The property was sold in February, 1884, and the sheriff returned the following "statement":

Decree for complainant,	\$2,000 00	
Interest from Nov. 19, 1882, to March 8, 1884,	180 82	
Costs taxed at,	75 31	
Interest from Feb. 25, 1868, to March 8, 1884,	84 53	
Taxed costs on petition,	32 94	
Interest from Nov. 23, to March 8, 1884,	56	
Decree for defendant [second mortgagee],	1,300 00	
Interest from Nov. 15, 1875, to March 8, 1884,	755 79	
Costs taxed at,	18 56	
Interest from Feb. 25, 1868, to March 8, 1884,	20 69	
Sheriff's execution fees: Levy and return,	\$2 12	
Advertising by hand-bills,	3 50	
Advertising by newspapers,	16 68	
Crying sale,	1 00	
Report of sale,	1 00	
Percentage on \$1,500,	25 00	
Total amount of Sheriff's fees,	\$49 30	\$4,518 50
Amount of sale,		1,500 00
Balance remaining unsatisfied,		\$3,018 50

Owing to the length of time elapsing between the decree and the sale of the premises, and the consequent accumulation of interest, the case can hardly be called an ordinary one. Subsequent incumbrances, whether mortgagees, judgment creditors, or the like, who come in for a share of the surplus moneys, are frequent, however; while the taxed costs and sheriff's fees, as stated, are about the average amount added to the sum authorized to be levied under the

decree. What the statement plainly shows is the great sacrifice of property under these foreclosure proceedings. The real estate in question (town site, located in Beverly) brought only \$1,500 in 1884, although nineteen years before it had been mortgaged (first and second mortgages) to about \$3,500, a sum which probably was below its assessed value at the time. On farm property the margin on which a loan is made is considerably greater than on lots, and it is safe to assume that the sacrifice on a forced sale would be no less. In times of financial depression or of land depreciation, the value-destroying power of a mortgage debt, is equal, probably, to more than twice its volume. And whatever may be the effect on city real estate, the result of foreclosure of farming land in districts generally incumbered, cannot fail to be disastrous, not only to those directly involved, but to the other mortgage debtors, and even on the values of all unincumbered neighborhood property. The foreclosures of even an appreciable portion of existing mortgages would be a great calamity.

The Bureau has undertaken as extensive an investigation in this direction, as its resources have warranted. For reasons already stated, it was found inadvisable to take up the subject of recorded indebtedness in New Jersey, but the number of real estate mortgages recorded in the several counties in 1870, 1875 and 1880 to 1888 inclusive have been collated; being supplemented, for Essex county, by the amounts of the mortgages recorded during several years. These data in detail, as well as the statistics showing the number, nature and amount of the real estate foreclosures issued during a series of years, will be found at the end of the chapter. The years covered by this latter inquiry are 1856, 1870, 1875 and 1880 to 1888 inclusive, twelve as representative years as it was practicable to select. The nine last years include the period immediately following the recovery from the financial depression which began in 1873. In 1875, we were in the midst of that depression, while 1870 was a year of very considerable business activity.* The preceding decade was an abnormal one, with the exception of the year 1860, into which, however, it was found that the foreclosure proceedings of 1859 had been crowded, owing to the dispute be-

* "It is universally admitted that the years immediately precedent to 1873—*i. e.*, from 1867 to 1872—constituted a period of most extraordinary and almost universal inflation of prices, credits and business"—Wells, "*Recent Economic Changes*," p. 3.

tween the Governor and State Senate over the nomination to the office of Chancellor. The Court of Chancery was closed during the greater portion of the latter year, and hence during that period the only foreclosures suits instituted were those in the circuit courts. Previous to this occurred the industrial depression of 1857-8; but 1856 was a free and prosperous year.

In 1888, exclusive of those against corporations, which comprise but little over one per cent. of the total number, there were 844 real estate foreclosure executions issued in this state against individual mortgagors, the aggregate amount of the decrees for the principal and interest due on the complainants' mortgages being \$2,768,178. This is, by at least \$600,000, short of the total levy on the executions, which include the taxed costs and sheriffs' fees, as well as the amounts decreed to the subsequent incumbrancers. In 1856, the number of executions issued against individual mortgagors was only 330, with an aggregate amount of \$762,482 decreed for the principal and interest owing on the complainants' mortgages. These figures had increased, in 1870, to 592 and \$1,724,821, or 80 and 126 per cent. respectively. From 1870 to 1888, the increase was 42 and 60 per cent. respectively. Of the twelve years for which the records were collected for the Bureau, that of 1880 is the maximum, showing the highest figures in number and amount of executions, or 2,174 and \$7,447,064, respectively, which by 1888 had decreased 61 and 63 per cent. respectively. Generally speaking, there has been a decrease year by year, within the past nine years, during which time 10,422 executions on foreclosed mortgages have been issued, the amount of the levy on the real estate foreclosed approximating \$43,000,000. Taking the average for the twelve years enumerated as the basis of calculation, the total number of executions on the foreclosed mortgages of individual mortgagors since 1855, covering a period of less than a generation, must have exceeded 36,000; and the amount of the executions, \$150,000,000. In addition to this, there were the foreclosures against corporation mortgagors, which comprised about one per cent. of the total in number and eight per cent. in amount.

There is a striking contrast between the foreclosure movement and that of recorded mortgages. There has been a constant increase in the total number of recorded mortgages in this State

since the business revival at the close of the last decade. Of the eleven years which the Bureau enumeration covers, 1870 shows the largest number, although but little more than that recorded in 1888. From the beginning to the end of the industrial depression in the '70's, there seems to have been a rapid decrease, which has not again occurred since then, except that the effects of the business stagnation of 1882 and following years* are visible in the small rate of increase from 1883 to 1885—a period which also affected the foreclosure movement, showing a slight increase over the year immediately preceeding and succeeding.

The tendency in periods of business activity has been towards an increase in mortgages and decrease in foreclosures, and the reverse when the industrial conditions have changed; and generally, an increase in foreclosures has been accompanied by a falling off in mortgages. This tendency has been marked in those counties which are largely urban, namely, Camden, Essex, Hudson, Passaic and Union, as well as in those which have considerable urban population, or Bergen, Cumberland, Mercer, Middlesex and Morris,† but not so much in the seven rural counties‡, and still less in Atlantic, Cape May, Monmouth and Ocean, which may be classed as the seaside localities. This is indicated in the following table, showing the increase (+) or decrease (—) per cent. in foreclosure executions and mortgages, respectively between different periods:

* "The years 1879, 1880 and 1881, for the United States, were years of abundant crops and great foreign demand, and are generally admitted to have been prosperous; while the years 1882, 1883 and 1884 are regarded as having been years of extreme depression and reaction."—Wells, "*Recent Economic Changes*," p. 82.

† Morris has a large iron mining industry, and there has been a considerable development of small towns.

‡ Burlington, Gloucester, Hunterdon, Salem, Somerset, Sussex and Warren.

	NUMBER IN		PER CENT. INCREASE (+) OR DECREASE (-) FROM						
	1888.	1870.	1870 to 1875.	1875 to 1880.	1880 to 1885.	1885 to 1888.	1887 to 1888.	1870 to 1888.	* 1881-4 to 1884-8
Total for State. { Foreclosure exec't'ns.	859	599	+235	+11	-53	-17	-5	+44	-19
{ Mortgages.	23,059	23,233	-16	-36	+41	+30	+9	-1	+33
Counties largely { Foreclosure exec't'ns	368	274	+368	+6	-58	-30	-8	+34	-31
urban. { Mortgages.	11,682	12,015	-25	-44	+66	+40	+14	-27	+51
Counties partly { Foreclosure exec't'ns	196	112	+221	+22	-51	-8	-5	+73	-19
urban and rural. { Mortgages.	4,793	5,207	-11	-40	+36	+24	+4	-8	+32
Counties largely { Foreclosure exec't'ns	162	146	+90	+42	-61	+4	-3	+11	-11
rural. { Mortgages.	3,562	4,190	-8	-27	+11	+14	+5	-15	+13
Counties largely { Foreclosure exec't'ns	133	67	+142	-31	+15	-6	+5	+98	+30
seaside. { Mortgages.	3,022	1,821	+7	-7	+29	+29	+7	+66	+8

This table makes a very interesting comparison with the per cent. increase (—) or decrease (—) in population (estimated in 1888) and valuation of real estate† for a series of years, is given below. The total population of the State in 1888 has been estimated, on the basis of the school census returns, at 1,351,389; or, urban counties, 740,807; partly urban and rural, 267,549; rural, 229,336; seaside, 113,697. In only the rural counties, taken as a whole, has there been a decrease since 1885, of 6,181 or 3 per cent. If the estimate of population for 1888 is correct, six of the seven counties, which have been classed as rural, have declined in population during the past three years, the only exception being Gloucester. From 1880 to 1885, the population of only Hunterdon and Sussex fell off, but the aggregate showed a slight increase. In assessed valuations of real estate, outside of Cape May, there has been a continuous and very great increase since 1875 in the so-called sea side counties, approximating 70 per cent., and even from 1875 to 1880 this was apparent—a period when the remaining localities generally showed a fall in values, particularly those partly urban and rural. Since then, while there has been more or less variation in the rate of increase, there has been an absolute decline in values only in Cape May, Middlesex and the four rural counties of Hunterdon, Somerset, Sussex and Warren. Taking the rural counties

* Four years inclusive.

†The returns made to the Comptroller have been used. See end of chapter for the figures. The data before 1875 were not complete and valueless, and, therefore, have not been used.

as a whole there has been a slight increase, 4 per cent., which, however, is much below that in the rest of the State. The rate of increase from 1885 to 1888, generally, was much less than during the preceding five years. This will be more clearly seen from the following calculations showing the per cent. increase or decrease between the periods stated. These calculations are based on the township assessors' valuations, as returned to the State Comptroller. It is fair to presume that, owing to the natural official conservatism in this respect, these figures do not give fully the true state of affairs; certainly not, if the complaints of the farmers made to the special committee of the State Board of Agriculture are well founded. There is a general protest against over-valuation and high rates. However, the assessors' returns are the only official statements available :

	PER CENT. INCREASE (+), OR DECREASE (-) FROM						
	1870 to 1875	1875 to 1880		1880 to 1885		1885 to 1888	
	Popu- lation.	Popu- lation.	Value of real estate.	Popu- lation.	Value of real estate.	Popu- lation.	Value of real estate.
Total for State.....	+12	+10	-6	+13	+12	+6	+6
Counties largely urban.....	+20	+15	-5	+19	+13	+10	+8
partly urban and rural.....	+9	+8	-15	+8	+6	+5	+5
largely rural.....	+5	+2	-3	+2	+3	-3	+1
largely seaside.....	+3	+17	+11	+13	+50	+3	+8

While there has been a decided tendency, in the rural districts as a whole, to a fall in land assessed values as well as to a decrease in population since 1880*, not generally observable elsewhere, there has been much less of a decrease in the foreclosure rate than in the counties more or less urban: the decrease in the number of executions issued during the four years from 1885 to 1888 over that during the preceding four years was 11 per cent. in the seven

*See appendix. In two of the rural counties (Gloucester and Salem) there has been an increase in valuations. So far as population is concerned, the decrease, as a rule, has not been absolute but only relative—the rate of increase having been small compared with the rest of the State.

rural counties; 31 in the urban, and 19 in the partly urban and rural. On the other hand, the increase in the number of recorded mortgages was smaller in the former than in the latter two classes. This is owing largely, even if not wholly, to the opportunity of borrowing being curtailed, as capitalists are unwilling to lend on farm land, with its decreasing value. This depreciation of agricultural real estate is also said to have the effect of lessening the number of mortgaged farm foreclosures, which would otherwise be appreciably larger, there being considerable disinclination to force a sale on a falling market*.

In the so-called seaside localities the conditions prevailing are unlike those in the other parts of the state, owing to the speculative nature of much of the property owned by only temporary residents. There has been a large per cent. increase since 1880, in foreclosures and a comparatively small one in the number of mortgages recorded. The ratio of mortgage and foreclosure executions to population and valuation during the past nine years, was large, 207 and 11, respectively, to every 1,000 of population; and 60 and 3, respectively, to every \$100,000 of the assessed value of the real estate. Next come the partly rural counties, having a considerable sprinkling of urban population; then the urban, which however are not far removed from the rural in the ratio of foreclosures and mortgages to valuation and population, respectively, as will be seen from the following table, the valuations (for nine years) being based on the average population and assessed valuation of real estate† from 1880 to 1888 :

*See the correspondence from lawyers, *infra*.

†Collated from the Comptroller's annual reports.

	FOR EVERY 100 MORTGAGES THERE WERE	FOR EVERY 1,000 POPULATION THERE WERE		FOR EVERY \$100,000 REAL ESTATE THEIR WERE	
	Foreclosure executions.	Foreclosure executions.	Mortgages.	Foreclosure executions.	Mortgages.
Total for State.....	*6+	9—	124,	2+	32+
Counties largely urban.....	8—	8+	108—	2+	28—
Partly urban and rural...	7—	9.	132.	3—	39+
Largely rural.	6+	8—	121.	2—	28—
Largely sea-side.....	5—	11—	207+	3—	60+

The conclusion to be drawn from what has been stated is, that, other things being equal, the number and nature of the foreclosures, rather than the extent of the mortgage indebtedness, indicates the degree of prosperity of the land owning classes. But even this is not an infallible barometer, for, as in the case of the farming community, the decrease in foreclosures and the comparatively small rate of increase in mortgages on agricultural lands must be credited, largely, to falling land values and the consequent deterrent effect, not only on possible new loans, but particularly on the holders of mortgages to push delinquent mortgagors, because the outcome of a forced sale under the circumstances is likely to be the buying in of the encumbered property by the mortgagees themselves.†

Yet foreclosure executions point to the embarrassment of the mortgagors, for a mortgage foreclosure execution is but an other name for bankruptcy and failure, especially in farming. It has been stated recently with some show of authority,‡ that the percentage of such failures (farming) is much less than that of the business world. So far as the State of New Jersey is concerned, facts hardly warrant this optimistic assertion. The number and amount of mercantile failures in our State, as reported in "Brad-

* The number of foreclosure executions to every 100 mortgages, from 1870 to 1888, has been for the whole State: 1870, 3; 1875, 10; 1880, 18; 1881, 12; 1882, 8; 1883, 6; 1884, 7; 1885, 6; 1886, 5; 1887, 4; 1888, 4.

†See as to this, the correspondence from lawyers, *infra*.

‡See article in *Political Science Quarterly*, vol. 4, p. 448, on "Farm Mortgages and the Small Farmer."

street's" for a number of years past, and kindly furnished by Mr. Albert C. Stevens, the editor, have been considerably less than the total number and amounts of foreclosure executions for the same periods. It is reasonable to conclude, that the mercantile failures are duplicated in the foreclosure executions—that is, every merchant failing had at least one foreclosure on his lands. At the same time,, the amounts of foreclosure executions given in the Bureau tables, as already has been stated, are only the principal and interest due on the complainants' (mortgagees) mortgages, and do not include costs, sheriffs fees or the sum due to prior incumbrancers, or that decreed in favor of subsequent incumbrancers.

The following data, showing the number and amount of mercantile failures both in the United States and New Jersey, are from "Bradstreet's," the years being the calendar years :

LOCATION.	NUMBER OF MERCANTILE FAILURES.								
	1880	1881	1882	1883	1884	1885	1886	1887	1888
New Jersey.....	*	70	109	145	119	124	134	127	139
United States.....	4,350	5,929	7,635	10,299	11,620	11,116	10,568	9,740	10,587
Middle States.....	1,063	1,400	1,765	2,328	2,603	2,416	2,489	2,349	2,361
New York City.....	417	391	369	478	528	372	476	431	529

LOCATION.	GENERAL LIABILITIES.†								
	1880	1881	1882	1883	1884	1885	1886	1887	1888
New Jersey.....	\$ ‡	\$ 5,958,	\$ 1,511,	\$ 2,730,	\$ 1,467,	\$ 1,226,	\$ 556,	\$ 1,993,	\$ 1,731,
United States.....	57,120	76,094	93,238	175,968	248,740	119,121	113,648	130,605	120,242
Middle States.....	23,008	27,100	30,768	59,673	107,025	33,712	30,447	42,669	37,412
New York City.....	12,963	11,130	13,323	27,073	71,543	16,123	11,222	17,019	17,023

In the following table are given the total number of foreclosure executions issued in New Jersey against individual mortgagors,

* Total for New Jersey not available.

† Thousands (000) omitted, *e. g.*, \$5,958 means \$5,958,000.

‡ Total for New Jersey not available.

that is, not including those against corporations, from 1880 to 1888 inclusive, and the amounts of principal and interest decreed due on the complainants' mortgages; also the number and amounts of such executions levied on farm lands, or what have been classed as such. It is not pretended that this classification is more than an approximation, for the records themselves do not positively disclose whether a stated tract of land, given in acres, was, even at the date of the mortgage, in use for agricultural purposes, or was suburban real estate, mining property, or simply held for speculative purposes. The amount of the decree is the only indication in many cases, but that is by no means decisive, for there may be a great variation between the amount of the decree and of the original mortgage foreclosed, which may have been paid off partly, or increased by accumulations of interest, or made in times of inflated values.* As far as was practicable, these qualifying circumstances have been taken into consideration in making the following calculations :

YEAR.	TOTAL FORECLOSURE EXECUTIONS AGAINST INDIVIDUALS.		EXECUTIONS ON FARM LANDS.		
	Number.	Amount.	Number of		Amount,
			Executions.	Acres.	
1880.....	2, 174	\$7, 447, 064	281	28, 079	\$229, 411
1881.....	1, 443	5, 213, 146	173	15, 667	384, 944
1882.....	1, 148	4, 141, 222	154	12, 144	355, 142
1883.....	961	3, 684, 792	141	8, 064	198, 093
1884.....	1, 034	3, 730, 468	147	12, 836	310, 465
1885.....	1, 015	3, 613, 834	128	14, 521	384, 683
1886.....	918	2, 633, 976	133	13, 098	202, 912
1887.....	885	2, 515, 787	129	13, 612	260, 564
1888.....	844	2, 768, 178	110	10, 455	216, 491

*As a matter of fact a considerable proportion of the mortgages foreclosed during the years mentioned had been made in the period of inflated values.

INCREASE (+), OR DECREASE (-).

YEARS.	IN TOTAL EXECUTIONS.				IN EXECUTIONS ON FARM LANDS.					
	Number.	Per Cent.	AMOUNT.		Number.	Per Cent.	ACRES.		AMOUNT.	
			Dollars.	Per Cent.			Number.	Per Cent.	Dollars.	Per Cent.
1880 to 1888.	-1,330	-61.	-4,678,886	-62.	-171	-61.	-17,624	-62.	-12,920	-5.
1881-4* to 1885-8* }	-924	-21.	-5,237,853	-31.	-115	-19.	-2,975	-6.	-133,994	-14.

If this estimate is accurate, it means that in the nine years last past, there were 1,396 farmers sold out under foreclosure executions, and a total of 128,476 acres of land,† or not less than four per cent. of our total farms and acreage, improved and unimproved. The same rate extended over a generation would mean the bankruptcy of more than one-seventh of the farmers.‡ These figures are anything but a favorable indication of the prosperity of the agricultural community, which constitutes a large portion of our population, and whose success is of the profoundest interest to all; and especially does its welfare affect directly and indirectly every part of the wage-earning class.§

Personal inquiries made by this office of the leading lawyers, who have a large foreclosure practice in New Jersey, amply confirm these conclusions as to the generally depressed condition of the agricultural industry. There is a consensus of opinion as to the undesirableness of farm mortgages as investments, and that the decrease of farm foreclosures is due, principally, to the disinclination of mortgagees to force a sale of depreciated rural estate. F. G. Burnham, Esq., general counsel, for New Jersey, of the New York Mutual

*Both years inclusive.

†These estimates can hardly be considered too radical. In the tables at the close of this chapter, where all acre executions have been classed under "acres" which were not manifestly urban or speculative tracts, the totals for these nine years are 1,800 executions, on 230,952 acres, amounting to \$5,787,499.

‡According to the census of 1880, there were 34,307 farms in New Jersey, containing 2,929,773 acres of improved and unimproved land. Over one-sixth of the total, (397,000), engaged in gainful occupations in New Jersey in 1880, were employed in agriculture. There has been a constant increase in the migration of the rural population of the cities; and the effect of agricultural depression accelerates this drift and adds to the competition among the wage-earners engaged in manufactures.

§See p. 67.

Life Insurance Co., does not think there were one-quarter as many foreclosure proceedings pending in either one of the past three years as in the years from 1876 to 1885. "The reason for this is because after the terrible financial crisis of 1873, resulting in such a complete letting down of values of real estate, the value of the equity in many pieces of property was completely blotted out, and the holders of mortgages were compelled to foreclose in order to save themselves to some extent. Resulting from the same financial crash, the payment of interest was more in frequent than before, debtors being unable to pay their debts, or even the interest on their debts. The times have been getting steadily better for several years past, and mortgagors of urban property, whose values have been steadily increasing, are able to pay their interest. The values of farms have not been increasing, but this is, I think, because of the great rivalry of the west, and it is therefore difficult for farmers to secure loans on their farms. I am not aware of a *single large corporation that is now willing to loan to any considerable extent on farming property in this State*, while several are loaning very freely on city and town property."

The counsel of the Mutual Benefit Life Insurance Co., F. K. Howell, Esq., of Newark, referring especially to urban real estate, reports that there is a "marked decrease in foreclosures of mortgages at the present time as compared with former years. I find upon examination, that the total number of foreclosures coming to my hand for the five years 1880-84 inclusive, was about double the number for the five years 1885-89 inclusive. The proportion of cases settled pending suit was, in the last five years, also double that of the preceding five years. In my opinion, this result was due to the more prompt payment of interest and principal, and not to any disinclination of mortgagees to force sales. Upon the whole, I think, there has been, recently, an appreciation of real estate, which, coupled with an easy money market has favored borrowers, enabling them to place their loans at lower rates of interest. Another reason for recent decrease in foreclosures is, that mortgages, made during the prevalence of inflated values from 1865 to 1875, were for the most part foreclosed or otherwise terminated prior to 1885. Now mortgages are made on much more conservative valuations, and are consequently less liable to default.

But my impression is that mortgages on rural property in this State are less satisfactory in point of promptness of payment than on city property. I think the values of land adapted for agricultural purposes only have declined since 1880, due largely to the lower prices realized for farm products, and the increased cost of production, making the net profit less. Of course, land so situated as to be available for other uses, as for villa sites, etc., has in many cases advanced in price in anticipation of such use. I think there is some evidence that the increased population of our cities and towns is, in part, at the expense of the rural districts."

James C. McDonald, of Newark, who refers only to city property, as he rarely if ever gets an opportunity to handle farming lands, writes, that "foreclosure of mortgages for non-payment of interest is at present a rare thing compared with the years 1880 to 1885, due to the prompt payment of interest, which the good times and the good wages very easily permits."

The firm of Collins & Corbin, of Jersey City, speaking only of city property, also report a falling off in foreclosures. "This we think, is because the effects of the panic of 1873, and consequent depression of land values, have worn away, and owners of land are again prosperous. Moreover, the rate of interest has decreased, rents are better, population has much increased, tenants are more numerous and owners of real estate are better able to pay interest than formerly."

Judge Gilhooly, of the firm of Gilhooly & Marsh, Elizabeth, states that the reason why there are not half as many foreclosures in Union county now as in 1880, is "because of prompter payments of mortgage debts and because in this city and county there has been no inflation of land values since 1880; also owing to the existence of the numerous building and loan associations which have started since then. There has been a falling in farm values of at least 25 per cent."

Speaking for Atlantic County, J. E. P. Abbott, Esq., of May's Landing, writes: "I have been in practice in this county for twenty-four years, and have had a very extensive experience in the matter of loaning money on mortgage, and in foreclosure. There has been a decided drop in the values of farm and unimproved lands and in villages, since 1880, but not so in beach property, which has increased

on an average of 25 per cent. and in exceptional cases, 100 to 300 per cent. The decrease referred to is not so noticeable to the public until there is a desire to sell or a forced sale, when it is clearly shown. Trust companies from Philadelphia will loan no where else in the county except on Atlantic City real estate, for the reason, I suppose, because lands never depreciate there. Immediately after the enactment of the law of 1881, compelling the foreclosure of mortgages before proceedings could be had on the bond, lenders began to call in their money and many foreign ones left the State. Only to-day, I heard a large capitalist say, that he would not think of putting a dollar on mortgage in New Jersey; but I can get it out of him, and have often, on a judgment bond payable on demand, but allowed to lie some time as agreed upon. We find it hard to borrow money on mortgage, except from large trust companies, who do not want the principal but only interest semi-annually, at 6 per cent.; but that is confined to beach property. Other borrowers must seek for smaller amounts among local investors or building and loan associations."

Messrs. Potter & Nixon, of Bridgeton, Cumberland county, are of the impression that "farming lands have not increased or fallen in value appreciably. Wild lands in parts of this county have more than doubled in value, through the influx of Russian Jews, which began six to eight years ago." On the other hand, L. Newcomb, Esq., of Vineland, in the same county, believes that there has been a depreciation in farm property since 1880, but that it has now reached the lowest ebb. "Many loaners will not take a mortgage on property which they think they may be obliged to buy in themselves."

In Gloucester county, according to Robert S. Clymer, Esq., the recent decrease in foreclosure proceedings "has resulted, not from the more prompt payment of interest, but largely from two causes, namely, because a large proportion of the poorer mortgages have already been foreclosed, and from a disinclination of mortgagees to force a sale of depreciated real estate, with the almost certain prospect of being compelled to bid in the properties. This refers particularly to farm property. The number of foreclosures affecting urban property has been and is very insignificant, such a proceeding rarely taking place with us. There has been a decided fall in the

value of farm lands since 1880. At present, the market for land for agricultural purposes is very dull."

Town property in Burlington county, according to Joseph H. Gaskill, of Mt. Holly, has not depreciated so much as farming land. This depreciation accounts for the decreased foreclosures; mortgages taken on a high valuation also have been closed out largely.

In Morris county, James H. Neighbour, Esq., of Dover, finds a fall in the value of farm lands. The decrease in foreclosures is here, as elsewhere, to be explained by this, also, by the prompter payment of interest, and because fewer mortgages were given from 1875 to 1881 than before or since.

The value of Hunterdon county farming property has largely declined since 1880, reports Henry A. Fluck, Esq., of Flemington. There would be more foreclosing if mortgagees were satisfied that they would not be forced to buy in the mortgaged property; hence they forbear, and interest remains unpaid.

In Somerset county, the conditions seem to be the same, although J. J. Bergen, Esq., thinks the collection of mortgage debts will be more frequent in the ensuing year than for some time past. The interest on town property mortgages is more promptly paid than that on farm mortgages. "The value of farm lands has depreciated nearly one-half since 1880, and in some instances it looks as if the farms would be abandoned, the occupants preferring to work by the day. The present outlook for farmers in this county is anything but cheerful: high taxes, large interest accounts, and the low price of products threaten to swamp many of them.

From Sussex county comes the same story. Theodore Simonson, Esq., makes the following statement:

"In the case of farming lands, the very low price of farm products, the scarcity and high price of farm labor and the high price of everything the farmer has to buy, has made farming, as a general thing, a non-paying business—so much so, that lots of tenants in this county, who have been renting farms, or working them on shares, are leaving them and engaging in other business; and where the owners of farms are living on them and working them themselves, they have a hard struggle to make much more than a living. When the farm is mortgaged (as most of them are), and the owners

have to pay the interest, a portion of the principal every year and live, the undertaking is, with few exceptions greater than they can get through with. Consequently, the mortgagee is contented to take what he can get, rather than foreclose and take the farm; for then he has the trouble and expense of running it, with the chances of getting less each year than he gets from the mortgagor.

"In the case of town and village property the case is somewhat different. In the larger towns, real estate commands a higher price comparatively than farming lands. Mortgages on town property are recognized as good investments: the interest is paid more promptly, the payments made regularly; and when the mortgagee has to take the property to secure his debt, he can always rent it for the interest or more.

"Owners of town property pay their mortgages more rapidly than farmers, who, as a rule, allow their mortgages to remain, only paying the interest. They are compelled to do this on account of the small incomes from their farms. They very rarely make any payments of the principal, and have come to recognize the fact that it is necessary for a mortgage to remain on their lands. Where there is a mortgage on the farm, the equity for the owner is, with few exceptions, wiped out by the general depreciation.

"There has been a reduction in the price of farm lands in the past ten years. The percentage is wonderful. It is surprising to see how low some of the farms in this county are selling. There are two ranges of mountains crossing it, and along the face of those mountains are farms that have been tilled and cultivated for years, but are not now recognized as desirable as those in the valleys, although twenty to twenty-five years ago they commanded a high price and a ready market, and were sought after by farmers with small means. To-day, those farms will sell for scarcely any price, and it is a difficult matter to get any one to work them, other than the owners. The better farms in the county have depreciated in value as well. There are several of our best farms that have been offered for sale to close estates, and withdrawn from the market and held by the heirs on account of the small offers for them. There is no sale for farming land. No one wants it."

In Warren county, in the opinion of Henry S. Harris, Esq., of Belvidere, "there has been a fall in the value of farming land since

1880, but not great, as it was low then. Falling value of real estate both increases and decreases foreclosures according to circumstances, chiefly the relation of the mortgage amount to the value of the encumbered property. It ought to be noted that more frequently than formerly owners, when the situation admits, give deeds to mortgagees without waiting for foreclosure proceedings. This, however, is hardly appreciably as affecting the decrease in foreclosures. There is a disinclination to disturb good investments."

Wm. H. Morrow, Esq., also of Belvidere, estimates the fall in the value of farm lands, since 1880, at 25 per cent. " Holders of mortgages delay as long as possible to foreclose from disinclination to add costs and thus swell the amount due. Mortgage debtors are not now making any money beyond paying their interest. I think interest is paid more promptly on urban than on rural properties. Farm mortgages are paid only when there is a transfer of the premises and the purchaser has the money to pay, or on the settlement of estates when it is necessary for money to pass. I do not think that twenty per cent. of farmers, who have their farms mortgaged to the amount of forty per cent. of their value, are making a living now."

The decrease in foreclosures is attributed by Oscar Jeffery, Esq., of Washington, Warren county, to the fact, that the majority of good farms are cleared of mortgage. Very few of the owners are in debt, and those that are pay their debts and interest promptly. So far as I can judge in my own locality, there is not much difference between town, village and farm property. There has been a decided fall in farm values, so far as I can learn from the farmers, and this continues, owing to low price of grain. In my experience with farmers, I have never known them so depressed and disheartened."

From what has been said, there is strong evidence that the real estate mortgage indebtedness, supplemented, probably, by other like burdens, bears heavily on our farmers at least, owing largely, to the depressed condition of the agricultural industry. For reasons already stated, no attempt was made to determine the amount of this indebtedness, either for the whole State or that resting on the farming community, by the collation of the total sums of the face value of outstanding mortgages, transcribed from the official county

records. It has however been possible from data obtained, supplemented by the opinions of those informed as to the average life of mortgages and the extent of the practice of paying them by installments, to approximate the volume of this total indebtedness.

In regard to the system of partial payments, the consensus of opinion is that this is done to some extent on urban and more rarely on rural mortgages. The general counsel for New Jersey of the New York Mutual Life Insurance Company, already quoted, writes, that "my experience teaches me that there are many mortgagors of urban property, particularly those to a small amount, who pay by installment every year." On the other hand, Mr. F. K. Howell, of the Mutual Benefit, thinks that while "there is no doubt that partial payments are most frequent, and considerable in amount, in cases of mortgages on suburban real estate, which is being improved and developed; if this class is left out of account, it would be found that mortgagors are not to any appreciable extent paying off their mortgages in installments."

Messrs. Collins & Corbin, of Jersey City, report that, "installment mortgages have become very common. The building and loan associations hold them entirely. Trust companies take them; and mortgagors frequently desire to have clauses inserted giving them an option to so pay. During the past three or four years there has been much pressure by mortgagors to induce mortgagees to accept the principal before it is due, indicating prosperity on the part of the former. We should presume that, including the building and loan mortgages, one-third of all were installment. The building and loan mortgages are payable by periodical dues; those given to trust companies, by equal monthly installments, which discharge the whole principal in ten years, with privilege to mortgagor to pay at a more rapid rate. As to other mortgages, we frequently find a clause in them permitting part payment of principal, on interest day, in sums not less than \$500 or \$1000, or the like."

Counsellor James C. McDonald, of Newark, writes that "a sober thrifty German, Frenchman or Irishman pays off his mortgage, as a rule, by installments, say, in sums of \$100 or \$200 each year, according as health or wages permit. Out of some fifty mortgages held by me since 1876 as executor, hardly any have not been reduced

or paid off in full. These were small ones from \$500 to \$1,800, the land mortgaged being the homestead of the mortgagor. There are of course some exceptions, which are due, however, either to lack of sobriety or ill health. It is a very common thing for a whole family, father, mother and children, to unite forces and purses, not only to pay off the mortgage and interest but to keep taxes and assessments settled. There are also a number of mortgages foreclosed each year for the sole purpose of making title or clearing up some disputed point, possibly five to eight per cent. of the foreclosed mortgages coming under this head."

For Union county, Judge Gilhooly, of Elizabeth and Counsellor G. Berry, of Rahway, respectively report installment payments to be rare, except on mortgages held by building associations. Counsellor Neighbour, of Dover, Morris county, considers them also rare, purchase money mortgages being about the only class in regard to which the practice is followed. To the same effect is the experience of Potter & Nixon, of Bridgeton, Cumberland county: "Mortgages given for purchase money are often paid off by installment; those taken as investments, rarely." Counsellor Newcomb, of Vineland, in the same county, thinks that in his part, "nearly all the farm mortgages are paid slowly, in installments." For Atlantic county, Counsellor Abbott estimates "perhaps one-fourth of those that pass under my notice." A like ratio holds good for Burlington county, in the opinion of Counsellor Gaskill, of Mount Holly.

The following remaining extracts from the correspondence received from the lawyers previously mentioned, refer to the so-called rural counties:

SOMERSET: "There may be some instances where payments are made on account of the principal of a mortgage on farm lands, but these are very few and in many cases the debts are being increased. Mortgages on town property are in a much better condition and I think are being reduced.—J. J. Bergen, Somerville.

HUNTERDON: "About one-third are being paid off by installments; but this estimate may be a trifle high."—H. A. Fluck, Flemington.

GLOUCESTER: "There have not been to any great extent payment

of mortgages by installments, except, of course, those to building associations. This results from disinclination on the part of the mortgagees to accept part payment where the security is good, and in other cases the mortgagors are too poor to do it. The building association loans are largely made on urban property."—Robert S. Clymer, Woodbury.

SUSSEX: "Mortgages on town property are paid largely by gradual yearly reduction. Those on farming lands are placed as permanent investments; very few are reduced by yearly payments, and it is a rare thing to hear of a farmer wiping out his indebtedness."—Theodore Simonson, Newton.

WARREN: "There are few mortgagors in this region who pay installments. I do not believe ten per cent. of the total number of mortgages is thus liquidated, nor, ten per cent. of the total indebtedness."—Henry L. Harris, Belvidere.

"I do not think many mortgages are thus paid."—Wm. H. Morrow, Belvidere.

"The system of partial payments is not general."—Oscar Jeffery, Washington.

As will be seen from the summary at the close of the chapter, the average life of 9,114 mortgages foreclosed between 1870 and 1888, that is the time elapsed between the execution of the mortgage and the final decree in the foreclosure proceedings, was 9 years; or $8\frac{1}{4}$ years for mortgages on "lots," or urban, suburban and speculative property generally, and $9\frac{1}{3}$ years for those on "acres," under which have been included not only those lands which were manifestly agricultural, but also tracts about which there was more or less doubt. This, so far as existing mortgages on city and town real estate is concerned, tallies fairly well with the opinions of the gentlemen already referred to, as well as with the calculations based on transcripts from the Essex county records for 1870, 1875, 1880 and 1885 to 1888 inclusive. On rural property, it is generally agreed that mortgages remain longer than on urban, a number of correspondents affirming that as a rule the life of a mortgage on farm property is co equal with that of the mortgagor. It is safe to assume, therefore, that the average term given above is too low.

There were recorded in this State, from 1880 to 1888 inclusive 155,500 mortgages. The average amount of the mortgages made by individual borrowers, exclusive of those by corporations in Essex county, was \$2,200. On this basis, which is probably higher than the State average,* assuming nine years, as stated above, to be the average life of a mortgage, the total sum of existing real estate mortgage indebtedness in New Jersey would approximate \$356,095,000, or nearly 70 per cent. of the total assessed real estate valuation in 1888, \$519,103,972, which was hardly more than 50 per cent. of the actual value. This estimate, however, is extreme, not only because based on the average of the Essex mortgage, which is larger than elsewhere, except possibly in Hudson county, but because no account has been taken of partial payments. These must amount to one-third of the aggregate principal of the building and loan mortgages (\$14,000,000), and there is some evidence that this ratio nearly holds good for the total mortgages given; but this, perhaps, may be offset by the low estimate of the life of the average mortgage on which the foregoing calculations have been based.

According to conservative estimates, one-sixth of all the mortgages recorded during the past few years were on farm property—the number varying from a small fraction in the urban counties (1 per cent. in Essex) to over 60 per cent. in the rural counties. Assuming that the average farm mortgage lasts but nine and one-third years, this would mean at least 27,000 farm mortgages, and that nearly 80 per cent. of our farms are mortgaged—an estimate, which, however, does not take into consideration "second" mortgages. At \$1,100 (the average Essex county mortgage), the total mortgage indebtedness on New Jersey farm lands would be not far from 30,000,000,† or an annual interest burden of \$1,800,000. If there has been a depreciation of 40 per cent. in farm values‡ since 1879–80, when the assessed valuation of our farms was \$190,895,800,§ this would be at present \$115,000,000, mort-

*Mortgages from \$50,000 to \$200,000 in Essex county are not infrequently recorded. The average amount of the decrees for the principal and interest of individual mortgages, foreclosed in the whole State from 1880 to 1888 inclusive, was \$3,500.

†There were during the past nine years 16 foreclosure executions to every mortgage recorded during that time in the seven so-called rural counties. Taking this ratio, and assuming the life of a farm mortgage to be as above stated, the result would be 27,920 farm mortgages for the State; or, at \$1,100 per mortgage, \$30,712,000 of indebtedness.

‡ Estimate of the Committee of State Board of Agriculture.

§ U. S. Census.

gaged to the extent of somewhat over 26 per cent. This calculation takes no account of other incumbrances than real estate mortgages, and has been made on a very low estimate of the life of farm mortgages. A similar calculation made for the so-called rural counties of Burlington, Gloucester, Hunterdon, Salem, Somerset, Sussex and Warren, would go to show that the farming lands in those localities are mortgaged to the extent of 37 per cent. of their value; but as already reminded, all such estimates, for want of exact information, are of little value in arriving at the actual state of facts.

The records of Essex county are evidence that the interest-rate, so far as the urban localities are concerned, is decreasing, and that the majority of mortgages are now placed at 5 per cent. and less. The following table shows the number of mortgages recorded in the years stated in Essex county, and the interest-rates paid thereon :

YEAR.	Number of mortgages reported.	RATE PER CENT OF INTEREST.											
		2	2½	3	3½	4	4½	5	5½	6	6½	7	8
1888.....	3,317			4		19	6	1,813	9	1,462		4	
1887.....	3,122	1	1	3		37	8	1,497	17	1,556		2	
1886.....	2,824			1	1	27	6	1,176	6	1,593		4	
1885.....	2,517			3		10	1	659	9	1,816		19	
1880.....	1,646					5		9		1,579		53	
1875.....	3,357							1		19		3,336	1
1870.....	4,022									65		3,957	

Another matter of considerable interest is the extent of mortgage indebtedness to corporations, especially to building and loan associations, banks and trust companies and insurance companies. When corporations themselves are borrowers, as, for example, in the case of railroad companies, the large sums required almost always necessitate corporations as mortgagees, such as trust or insurance companies, although the number of corporation mortgagors is comparatively small.* If the same conditions prevail in the rest of the State as in Essex county, there has been a large increase in the number of corporation mortgagees during the past few years, and also in the amount loaned, if several extensive railroad loans of former years are excepted. This increase is to be credited mostly to the building and loan associations, which, in Essex county, in 1888, placed 53 per cent. of the number and 32 per cent. of the amount of all the mortgages made by corporations,† that is, 29 and 35 per cent., respectively, of the aggregate recorded:

YEAR.	PER CENT. OF MORTGAGES TO CORPORATIONS AGGREGATE RECORDED.‡		PER CENT. OF TOTAL MORTGAGES TO CORPORATIONS MADE TO							
			BUILDING AND LOAN ASSOCIATIONS.		BANKS AND TRUST COMPANIES.		INSURANCE COMPANIES.		MISCELLANEOUS CORPORATIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1888.	29.	35.	53.	32.*	20.	26.	25.	39.	2.	3.
1887.	22.	86.	53.	1.8	28.	97.	17.	1.	2.	.2
1886.	19.	24.	43.	28.	25.	30.	26.	41.	6.	1.
1885.	17.	28.	44.	12.	32.	65.	24.	22.	—	1.
1880.	12.	21.	14.	4.	28.	22.	56.	72.	2.	2.

*In Essex and Camden counties, there were but 21 and 36, respectively, in 1888; and 12 and 27, respectively, in 1887. But the amount borrowed was large.

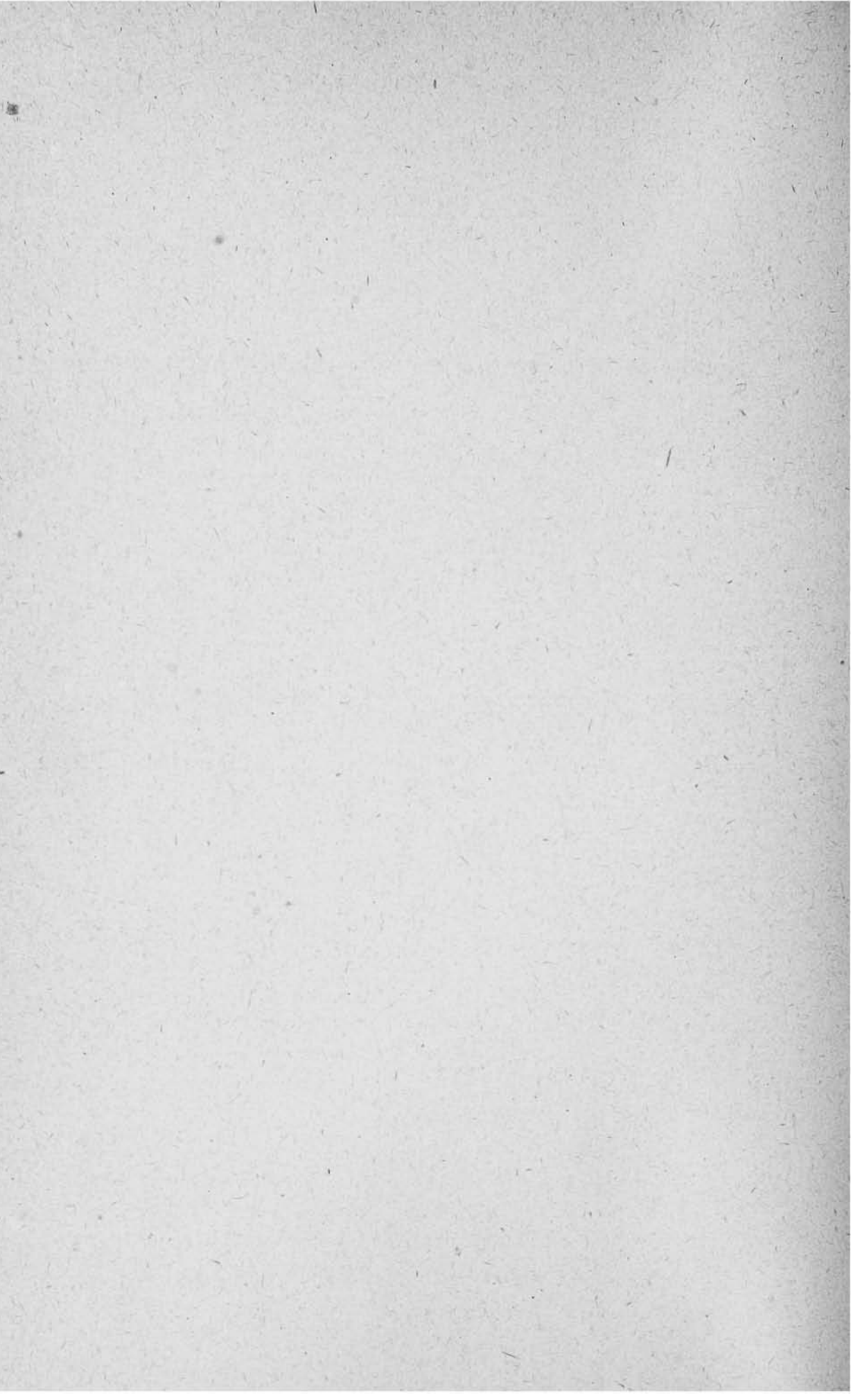
†1, 121 mortgages and \$3, 567, 197 in amount loaned.

‡ Including those to individuals.

The tendency in the State has been towards a decreased per cent. in the number and amount of executions in foreclosure suits by corporation complainants, more noticeable in respect to building and loan associations than any other class. In 1880, the maximum, in number and amount, of corporation executions as issued, or 488 and \$2,529,106, respectively; in 1888, these figures had decreased to 108 and \$676,170, respectively, or the minimum in recent years, as will be seen from the following calculations :

YEAR.	PER CENT. OF EXECUTIONS BY CORPORATIONS, COMPLAINANTS.									
	Building and Loan Associations.		Banks.		Insurance Companies.		Miscellaneous Corporations.		Of aggregate issued.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1856	54.	37.	18.	29.	14.	21.	14.	13.	8.	4.
1870	27.	10.	42.	61.	15.	11.	16.	18.	5.	7.
1875	27.	17.	19.	39.	50.	31.	4.	13.	18.	13.
1880	21.	3.	21.	14.	52.	55.	6.	28.	22.	32.
1881	30.	8.	24.	33.	42.	49.	4.	10.	20.	22.
1882	17.	4.	31.	25.	45.	60.	7.	11.	20.	29.
1883	22.	6.	30.	27.	40.	60.	8.	7.	17.	22.
1884	24.	7.	33.	54.	24.	35.	19.	4.	16.	13.
1885	21.	5.	35.	45.	41.	48.	3.	2.	15.	21.
1886	28.	7.	19.	16.	46.	72.	7.	5.	15.	26.
1887	33.	6.	19.	10.	42.	78.	6.	6.	14.	34.
1888	29.	8.	19.	38.	43.	48.	9.	6.	15.	22.

APPENDIX TO PART II.



APPENDIX.

TABLE 1.—SHOWING REAL ESTATE FORECLOSURE EXECUTIONS.*

INCREASE (+), OR DECREASE (—), IN NUMBER.

STATE AND COUNTIES.	From 1887 to 1888.	From 1885 to 1888.	From 1880 to 1885.	From 1875 to 1880.	From 1870 to 1875.	From 1856 to 1870.	From 1870 to 1888.	From 1881-1884 to 1884-1888. †
Total for State.....	-41	-170	-1,170	+217	+1,384	+265‡	+260	-920
Camden.....	+3	-23	-84	+103	+25	-9	+21	-65
Essex.....	+3	-34	-258	+3	+323	+21	+34	-272
Hudson.....	-13	-64	-173	-8	+230	+68	-15	-198
Passaic.....	-3	-20	-63	-11	+119	+1	-25	-123
Union.....	-21	-11	-143	-25	+213	+15	+29	-65
Bergen.....	-2	-18	-64	+39	+74	+17	+31	-134
Cumberland.....	-13	+2	-25	-13	+34	+22	-2	+10
Mercer.....	+18	+12	-31	+20	+14	+11	+15	+10
Middlesex.....	-14	-6	-71	+22	+92	-4	+37	-25
Morris.....	.....	-8	-34	+11	+34	+15	+3	-47
Burlington.....	.....	-2	-45	+26	+22	-2	+1	-29
Gloucester.....	-7	+1	-21	+15	+15	+7	+10	+1
Hunterdon.....	.....	+3	-43	+12	+20	+23	-8	-23
Salem.....	+3	+9	-34	+15	+12	+4	+2	+18
Somerset.....	-2	+3	-46	+27	+26	+9	+10	-33
Sussex.....	-3	-8	-14	+3	+12	+11	-7	+3
Warren.....	+3	+2	-35	+17	+24	+18	+8	-12
Atlantic.....	-2	-4	+4	-3	+11	.....	+8	-1
Cape May.....	-4	-2	+5	-6	+11	-6	+8	+15
Monmouth.....	+10	+2	+3	-20	+54	+29	+39	+100
Ocean.....	+3	-4	+7	-11	+19	+3	+11	+1.
Total for counties largely urban	-31	-152	-726	+62	+910	+96	+94	-779
partly rural and urban..	-11	-18	-225	+80	+248	+61	+84	-186
rural.....	-6	+8	-238	+115	+131	+70	+16	-80
seaside.....	+7	-8	+19	-40	+95	+26	+66	+125

* Includes executions against corporations.

† Four years inclusive.

‡ Two foreclosures are of mortgages covering lands in four counties.

TABLE 2.—SHOWING RECORDED REAL ESTATE MORTGAGES.

INCREASE (+), OR DECREASE (—), IN NUMBER.

STATE AND COUNTIES.	From 1887 to 1888.	From 1885 to 1888.	From 1880 to 1885.	From 1875 to 1880.	From 1870 to 1875.	From 1870 to 1888.	From 1881-84* to 1884-85.
Total for State.....	+2,000	+5,390	+5,169	-6,961	-3,772	-174	+20,711
Camden.....	+312	+669	+545	-743	+365	+836	+2,432
Essex.....	+367	+219	+1,012	-1,743	-866	-378	+4,580
Hudson.....	+410	+937	+1,020	-634	-1,663	-340	+4,476
Passaic.....	+315	+158	+657	-317	-265	+233	+1,691
Union.....	+82	+344	+85	-516	-599	-684	+1,341
Bergen.....	+159	+277	+121	-419	-274	-295	+741
Cumberland.....	-199	+68	+122	-245	-86	-141	+1,026
Mercer.....	+82	+234	+500	-412	+136	+458	+1,523
Middlesex.....	+38	+93	+190	-359	-322	-398	+734
Morris.....	+71	+253	+97	-379	-9	-38	+517
Burlington.....	+127	+313	+80	-105	-231	+57	+720
Gloucester.....	-11	-32	+130	-21	+56	+133	+318
Hunterdon.....	+116	+88	+23	-240	+20	-109	+106
Salem.....	-32	+16	+107	-40	-35	+16	+277
Somerset.....	+18	+116	+22	-308	+23	-147	+266
Sussex.....	+1	+13	-60	-79	-184	-310	-125
Warren.....	-56	-36	-5	-256	+29	-268	-73
Atlantic.....	+155	-445	+43	+153	+99	+740	+662
Cape May.....	+34	-13	+131	-13	-31	+74	+175
Monmouth.....	-6	+267	+253	-138	+71	+453	+66
Ocean.....	+21	-7	+96	-147	-8	-66	-142
Total for counties largely urban.....	+1,486	+3,327	+3,319	-3,953	-3,026	-333	+13,920
partly urban and rural..	+151	+925	+1,030	-1,814	-555	-414	+4,541
largely rural.....	+163	+446	+297	-1,049	-322	-628	+1,489
largely seaside.....	+204	+692	+523	-145	+131	+1,201	+741

* For four years, inclusive.

TABLE 3.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS.

YEAR.	TOTAL EXECUTIONS.		EXECUTIONS AGAINST INDIVIDUALS.		EXECUTIONS AGAINST CORPORATIONS.									
					TOTAL EXECUTIONS.		ON LANDS—(ACRES)*			ON LOTS.		PER. CT. TOTAL EX'T'S.		Per ct. on l'd. (acres)
	Number.	Amount of principal and interest due on complainant's mortgage.	Number.	Amount.	Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.	Number.	Amount.		Number.
1856	334	\$ 815,397	330	\$ 762,482	4	\$ 52,915	1	15	\$1,079	3	\$ 51,836	1.2	6.4	25.
1870	599	1,806,512	529	1,724,821	7	81,691	.....	.....	.....	7	81,691	1.2	4.5	....
1875	1,983	7,502,097	1,964	7,161,919	19	340,178	.....	.....	.....	19	340,178	1.	4.5	....
1880	2,199	7,828,761	2,174	7,447,064	25	381,700	4	596	40,422	21	342,278	1.1	4.8	16.
1881	1,456	5,591,036	1,443	5,213,146	13	377,890	2	46	4,945	11	372,945	1.	6.	15.
1882	1,163	4,413,776	1,148	4,141,222	15	272,561	2	303	18,011	13	254,553	1.3	6.	14.
1883	970	3,725,182	961	3,684,792	9	40,390	1	41	1,527	8	38,863	1.	1.	10.
1884	1,046	5,106,882	1,034	3,730,468	12	1,376,414	.....	.....	.....	12	1,376,414	1.1	26.9	....
1885	1,029	3,970,602	1,015	3,613,834	14	356,768	.....	.....	.....	14	356,768	1.3	9.	....
1886	927	2,706,044	918	2,633,976	9	72,068	2	755	10,385	7	61,703	1.	3.	22.
1887	900	2,753,430	885	2,515,787	15	237,643	3	3,255	9,913	12	227,730	1.7	9.	20.
1888	859	3,025,400	844	2,768,178	15	2,572,221	1	68	716	14	256,506	1.9	8.	6.

*All executions on tracts not manifestly urban, mining or speculative real estate are included under this head. All others have been tabulated under "lots."

TABLE 4.—SHOWING REAL ESTATE FORCLOSURE EXECUTIONS AGAINST INDIVIDUALS.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES.)*			ON LOTS.		Aver- age.	AMT.	Average acreage.
	Number.	Amount of principal and interest due complainant's mortgage.	Number.	Acres.	Amount.	Number.	Amount.	On acres.*	On lots.	
1856.....	330	\$ 762,482	101	12,561	\$ 219,241	229	\$ 548,241	\$2.172	\$2,416	123
1870.....	592	1,724,821	184	14,277	387,525	408	1,337,296	2.106	3,278	78
1875.....	1,964	7,161,919	286	27,127	1,037,538	1,678	6,124,381	3.628	3,649	95
1880.....	2,174	7,447,064	382	35,105	1,169,316	1,792	6,277,748	3.061	3,503	92
1881.....	1,443	5,213,146	245	23,413	979,853	1,198	4,233,293	3.999	3,534	95
1882.....	1,148	4,141,222	180	13,926	495,153	968	3,646,069	2.751	3,757	77
1883.....	961	3,684,792	141	13,467	477,457	820	3,207,335	3.386	3,912	95
1884.....	1,034	3,730,468	133	15,602	515,606	851	3,214,862	2.762	3,778	85
1885.....	1,015	3,613,834	160	17,700	602,715	855	3,011,119	3.767	3,522	111
1886.....	918	2,683,976	178	17,286	522,873	740	2,111,103	2.937	2,853	97
1887.....	885	2,515,789	162	16,966	510,941	723	2,004,846	3.154	2,773	105
1888.....	844	2,768,178	169	15,535	513,555	675	2,254,593	3.039	3,340	92

*See preceding note.

TABLE 5—SHOWING REAL ESTATE FORECLOSURE EXECUTIONS IN CITIES.*

YEAR.	JERSEY CITY.		NEWARK.		CAMDEN.		HOBOKEN.		TRENTON.		ELIZABETH.		PATERSON.		N. BRUNSWICK.†		TOTAL (8 CITIES.)*		PER CENT. OF AGGREGATE EXECUTIONS ON OTHER THAN FARM LANDS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1856.....	26	\$143,959	57	\$99,291	18	\$31,203	3	\$12,521	13	\$9,757	4	\$3,711	12	\$6,307	1	\$1,310	134	\$303,061	58.	52.
1870.....	89	447,047	45	121,671	8	13,567	10	22,003	13	25,270	19	28,317	13	52,456	.....	.....	197	710,330	47.	49.
1875.....	241	960,256	271	986,531	35	87,645	24	111,436	20	62,584	155	792,434	101	307,509	37	100,775	884	3,409,170	52.	53.
1880.....	210	617,630	261	1,057,746	118	310,700	31	137,825	38	90,791	102	539,541	94	143,271	41	105,682	895	3,033,186	49.	45.
1881.....	151	653,630	152	657,256	80	187,857	13	68,840	28	80,265	44	210,953	77	356,313	40	63,408	595	2,279,522	49.	49.
1882.....	107	459,013	151	591,874	58	234,084	11	66,778	14	15,874	31	188,761	35	234,667	21	56,316	428	1,797,597	43.	46.
1883.....	85	590,816	100	617,891	27	45,941	13	37,174	13	31,402	31	131,349	39	74,654	14	44,934	322	1,574,166	39.	48.
1884.....	98	352,216	87	242,593	26	32,319	10	22,023	20	60,143	37	172,189	39	88,424	16	44,861	333	1,014,768	39.	22.
1885.....	100	467,292	104	373,418	41	99,990	8	31,652	16	28,485	28	119,529	47	217,910	14	42,276	358	1,380,451	41.	41.
1886.....	73	279,391	88	286,091	31	54,392	10	29,567	17	55,830	36	118,788	26	61,492	8	16,773	289	902,324	38.	41.
1887.....	62	262,808	76	221,984	22	44,595	9	16,872	12	21,576	31	116,166	34	62,944	13	24,476	259	681,431	35.	31.
1888.....	60	330,657	27	216,598	72	49,230	3	3,084	17	24,504	29	187,274	34	81,059	13	39,629	253	932,030	37.	37.

* Where the cities formerly constituted but part of a township, the mortgages on which the foreclosure proceedings were based, especially in the earlier years, often only mention the township. Therefore, the figures above given for the years 1856 and 1870 are not complete.

† Forming a part of North Brunswick township. See preceding note.

‡ See foot note to table 3.

TABLE 6.—SHOWING FORECLOSURE EXECUTIONS BY CORPORATIONS, COMPLAINANTS.

YEAR.	TOTAL CORPORATION EXECUTIONS.			BUILD. AND LOAN ASSO.		BANKS.*		INSURANCE COMPANIES.		MISCELLANEOUS CORPORATIONS.		CORPORATION EXECUTIONS ON LANDS (ACRES).†									
	Number.	Amount.	Number.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Total Executions.			Building and Loan Associations.			Other Corporations			
												Number.	Acres.	Amount.	Number.	Acres.	Amount.	Number.	Acres.	Amount.	Number.	Acres.	Amount.
1856.....	28	\$ 34,622	8.	4.	15	\$ 12,675	5	\$ 9,932	4	\$ 7,273	4	\$ 4,742	3	234	\$ 2,166	2	231	\$ 1,952	1	3	\$ 214
1870.....	26	124,248	5.	7.	7	13,013	11	75,189	4	13,659	4	22,387	3	144	5,163	1	39	673	2	105	4,490
1875.....	306	976,415	18.	13.	98	107,981	68	380,622	184	304,266	16	123,550	31	4,332	194,296	7	742	14,222	24	3,590	180,074
1880.....	488	2,529,106	22.	32.	87	74,630	102	362,840	256	1,396,648	43	694,988	47	5,005	162,642	12	499	10,449	35	4,506	152,193
1881.....	295	1,256,706	20.	22.	83	96,983	71	419,006	123	621,271	18	119,446	31	4,163	127,502	14	1,238	20,350	17	2,925	107,152
1882.....	233	1,313,637	20.	29.	40	53,382	73	334,873	105	797,663	15	127,719	17	1,563	87,779	3	256	7,537	14	1,307	80,262
1883.....	165	820,606	17.	22.	37	53,401	49	219,397	65	492,445	14	55,363	12	940	49,362	4	181	10,437	8	759	38,925
1884.....	170	662,469	16.	13.	41	50,206	56	338,425	41	228,764	32	45,074	20	1,581	76,544	10	377	8,893	10	1,204	67,651
1885.....	156	820,460	15.	21.	33	42,458	54	372,363	65	398,088	4	7,551	11	1,069	45,061	1	32	2,925	10	1,037	42,136
1886.....	138	690,555	15.	26.	38	48,870	26	110,855	62	523,713	12	7,117	13	2,304	78,965	2	57	858	11	2,247	78,107
1887.....	126	927,807	14.	34.	41	58,141	24	91,593	53	727,668	8	49,905	8	1,073	64,091	2	108	2,713	6	965	61,378
1888.....	108	676,170	13.	22.	31	52,312	21	257,372	47	325,965	9	40,521	14	84	52,225	3	73	1,275	11	11	50,950

* Including trust companies. † See note to Table 3.

TABLE 7.—SHOWING AMOUNTS OF REAL ESTATE FORECLOSURE EXECUTIONS.

YEAR.	Total number of executions.	NUMBER OF EXECUTIONS OF THE AMOUNT OF											
		\$100 and under.	\$100 to \$500.	\$500 to \$1,000.	\$1,000 to \$2,000.	\$2,000 to \$5,000.	\$5,000 to \$10,000.	\$10,000 to \$20,000.	\$20,000 to \$30,000.	\$30,000 to \$40,000.	\$40,000 to \$50,000.	\$50,000 to \$80,000.	Over \$80,000.
1856	334	7	99	79	81	34	20	10	1	1	1	1	1
1870	599	6	112	108	151	130	60	18	18	10	3	1	1
1875	1,983	8	226	322	454	581	250	96	30	7	4	1	1
1880	2,199	10	199	330	563	698	282	86	15	10	2	1	3
1881	1,456	8	162	241	366	405	194	57	18	3	3	6	1
1882	1,163	3	126	212	247	349	144	53	16	1	3	5	4
1883	970	3	103	172	218	304	110	45	6	3	2	2	2
1884	1,046	8	126	195	229	288	124	50	14	2	3	2	5
1885	1,029	5	115	172	246	298	138	39	4	6	1	1	6
1886	927	9	118	169	232	253	110	32	6	3	1	1	1
1887	900	6	109	168	224	263	95	27	2	3	1	1	1
1888	859	4	100	149	209	254	92	33	9	6	1	1	3
Total	13,465	77	1,595	2,317	3,220	3,887	1,619	546	139	54	23	20	26

TABLE 7.—SHOWING AMOUNTS OF REAL ESTATE FORECLOSURE EXECUTIONS—(—Continued).

YEAR.	PER CENT. OF NUMBER OF EXECUTIONS OF THE AMOUNT OF						
	\$500 and under.	\$500 to \$1,000.	\$1,000 to \$3,000.	\$3,000 to \$5,000.	\$5,000 to \$10,000.	\$10,000 to \$20,000.	Over \$20,000.
1856.....	32.	24.	24.	10.	6.	3.	1.
1870.....	20.	19.	25.	22.	10.	3.	1.
1875.....	12.	16.	23.	30.	13.	5.	2.
1880.....	9.	15.	26.	32.	13.	4.	1.
1881.....	12.	16.	25.	28.	13.	4.	2.
1882.....	11.	18.	21.	30.	12.	5.	3.
1883.....	11.	18.	22.	32.	11.	5.	1.
1884.....	13.	19.	22.	27.	12.	4.	3.
1885.....	11.	17.	23.	30.	13.	4.	2.
1886.....	13.	18.	26.	27.	12.	3.	1.
1887.....	13.	19.	25.	29.	10.	3.	1.
1888.....	12.	17.	24.	30.	11.	4.	2.
Total....	12.	18.	24.	28.	12.	4.	2.

TABLE 8.—SHOWING NUMBER OF FORECLOSURE EXECUTIONS ON LANDS (ACRES)* AND ACREAGE FORECLOSED.

YEAR.	TOTAL ACREAGE.	NUMBER OF EXECUTIONS	NUMBER OF EXECUTIONS ON LANDS WITH AN ACREAGE OF							Average per execution.		
			10 and under.	10 to 25.	25 to 50.	50 to 100.	100 to 200.	200 to 300.	300 to 400.			
			400 to 500.	Over 500.								
1856.....	102	12,531	15	19	18	19	20	5	1	2	3	123
1870.....	184	14,277	20	31	44	44	34	8	1	1	2	78
1875.....	286	27,127	6	35	56	92	83	7	2	2	3	95
1880.....	386	35,701	17	52	81	115	92	19	5	1	4	94
1881.....	247	23,459	13	53	38	75	51	9	3	2	3	99
1882.....	182	14,229	14	33	49	43	31	6	1	1	4	95
1883.....	142	13,508	12	20	3	49	27	8	.....	.....	1	95
1884.....	183	15,602	3	23	43	51	40	12	1	.....	1	85
1885.....	160	17,700	8	18	29	42	44	11	4	.....	3	111
1886.....	180	17,296	10	32	21	46	55	9	2	2	3	96
1887.....	165	20,161	2	16	41	50	38	13	1	1	1	122
1888.....	170	15,603	6	19	33	50	52	5	4	.....	1	92
Total.....	2,387	227,194	126	351	456	676	567	112	25	12	29	95

* See note to Table 3.

TABLE 9.—SHOWING LIFE OF MORTGAGES FORECLOSED.

ON ACRES.*

YEAR.	Number of mortgages.		NUMBER OF MORTGAGES FORECLOSED IN A PERIOD OF																
	Years.	Months.	AVERAGE LIFE.																
			1 year and under.	1 to 2 years.	2 to 3 years.	3 to 4 years.	4 to 5 years.	5 to 6 years.	6 to 7 years.	7 to 8 years.	8 to 9 years.	9 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 35 years.	35 to 40 years.	Over 40 years.
1856.....	85	5 10	2	20	12	8	10	3	5	6	2	2	6	2	5	2	1	1	1
1870.....	113	5 10	4	23	19	12	10	9	7	5	4	2	9	6	1	1	1	1	1
1875.....	170	7	6	15	17	23	15	28	10	13	8	10	11	7	5	2	1	1	1
1880.....	232	9 6	5	12	13	21	15	15	14	11	14	63	13	11	5	1	1	1	2
1881.....	162	8 8	1	1	12	12	14	12	16	13	16	9	36	11	5	2	2	1	1
1882.....	115	10 4	4	6	7	7	3	7	4	8	6	7	30	17	6	1	2	1	1
1883.....	94	10 4	1	6	4	3	4	7	1	8	10	5	24	11	6	1	2	1	1
1884.....	132	10 6	2	10	6	3	4	10	10	16	7	7	32	14	9	2	1	1	1
1885.....	115	10	3	10	10	11	6	3	3	6	4	5	25	19	8	1	1	1	1
1886.....	119	8 9	2	7	16	7	7	8	5	6	11	3	21	17	4	2	3	1	1
1887.....	102	10 7	4	7	6	9	6	5	6	3	5	4	17	17	9	1	3	1	1
1888.....	127	10 2	2	12	10	8	9	9	7	6	5	6	23	13	7	5	4	2	1
Total.....	1,566	9 1	36	129	132	124	103	114	89	104	89	74	297	147	76	23	15	10	5

ON LOTS.

1856.....	202	5	13	47	32	26	21	7	6	11	6	5	13	11	3	1	1	1	1
1870.....	276	7 4	14	73	55	38	23	10	9	4	4	7	17	14	6	1	1	1	1
1875.....	1,139	4 3	38	216	188	224	154	116	69	44	25	19	26	7	8	3	1	1	1
1880.....	1,151	7 6	14	53	70	105	122	90	135	106	88	94	220	33	14	7	1	1	1
1881.....	842	8 2	17	32	42	62	62	72	70	63	77	84	215	32	6	6	1	1	1
1882.....	701	9	5	25	35	28	47	43	52	57	66	71	221	32	7	3	7	1	1
1883.....	588	9 2	8	40	44	28	18	35	32	36	48	38	195	42	12	5	4	2	1
1884.....	621	9 9	13	40	40	30	20	21	26	40	42	37	224	69	9	7	2	1	1
1885.....	654	9 6	15	48	71	43	26	25	21	27	25	26	221	70	22	7	4	2	1
1886.....	600	8 4	16	60	45	46	37	24	20	10	20	21	135	87	9	5	3	1	1
1887.....	551	9 9	17	42	45	51	38	32	25	6	16	16	146	86	20	4	4	2	1
1888.....	510	10 5	16	34	33	32	31	43	29	21	12	9	106	109	24	4	4	2	1
Total.....	7,835	8 3	186	710	700	713	599	518	494	425	429	427	1,739	592	140	51	31	14	4

* See note to Table 2.

TABLE 10.—SHOWING NUMBER OF RECORDED MORTGAGES.

COUNTIES.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.	1880.	1875.	1870.
Atlantic.....	955	800	621	510	587	555	571	561	467	314	216
Bergen.....	815	656	536	538	458	513	424	409	417	836	1,110
Burlington.....	997	870	857	684	722	697	657	612	604	709	940
Camden.....	1,952	1,640	1,605	1,283	1,102	1,168	921	857	738	1,481	1,116
Cape May.....	267	233	250	280	235	227	209	184	149	162	193
Cumberland.....	845	1,044	896	777	795	685	503	553	655	900	986
Essex.....	3,938	3,571	3,093	2,719	2,555	2,233	2,155	1,798	1,707	3,396	4,316
Gloucester.....	504	515	568	536	512	444	444	405	406	427	371
Hudson.....	3,035	2,625	3,193	2,098	1,866	1,659	1,535	1,415	1,078	1,712	3,375
Hunterdon.....	541	425	413	453	432	410	474	410	430	670	650
Mercer.....	1,517	1,435	1,241	1,283	1,055	1,086	905	904	783	1,195	1,059
Middlesex.....	897	859	846	804	672	745	656	599	614	973	1,295
Monmouth.....	1,546	1,552	1,383	1,279	1,361	1,633	1,555	1,145	1,026	1,164	1,093
Morris.....	719	648	544	466	494	451	470	445	369	748	757
Ocean.....	254	233	242	261	272	399	272	189	165	312	320
Passaic.....	1,621	1,306	1,238	1,463	1,098	1,192	1,280	1,017	806	1,123	1,388
Salem.....	451	483	428	467	377	402	379	394	360	400	435
Somerset.....	475	457	358	359	320	350	360	353	337	645	622
Sussex.....	264	263	311	251	319	301	321	273	311	390	574
Union.....	1,136	1,054	927	792	709	624	706	529	707	1,223	1,820
Warren.....	330	386	358	366	386	405	391	331	371	627	598
Total.....	23,059	21,055	19,908	17,669	16,280	16,179	15,138	13,383	12,500	19,461	23,233

TABLE 11—SHOWING THE MONTHLY MORTGAGE MOVEMENT

COUNTIES.	Total number recorded in 1888.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Atlantic...	955	95	81	78	80	116	76	84	69	67	90	63	56
Monmouth	1,546	125	89	139	234	153	113	96	89	127	138	114	119
Ocean,	254	16	21	15	33	21	22	17	22	18	32	6	21
Essex	3,938	355	241	329	383	399	323	318	314	331	340	325	280
Passaic....	1,621	114	95	103	135	206	129	160	142	139	137	154	107
Bergen....	815	76	63	134	124	92	80	73	77	60	75	59	54
Mercer....	1,517	109	76	105	218	168	147	139	112	98	158	90	97
Middlesex.	897	56	66	77	90	98	89	78	76	71	60	64	63
Morris....	719	61	41	62	78	67	56	60	52	55	59	72	56
Burlington	997	76	63	134	124	92	80	73	77	60	75	59	54
Hunterdon	541	14	21	146	201	33	23	13	21	18	19	11	21
Sussex.....	264	23	19	31	68	28	15	10	17	13	11	14	15
Warren ...	330	25	14	28	93	27	19	20	15	32	22	12	22

TABLE 12—SHOWING THE NUMBER AND AMOUNTS OF REAL ESTATE MORTGAGES RECORDED IN ESSEX COUNTY.

YEAR.	TOTAL MORTGAGES BY INDIVIDUALS.		ON FARM LANDS.		ON LOTS AND OTHER THAN FARM LANDS.*		MORTGAGES BY CORPORATIONS.							
	Number.	Amount.	NUMBER OF		Number of mortgages.	Amount.	TOTAL MORTGAGES		ON LOTS, ETC.		ON FARM LANDS.			
			Mortgages.	Acres.			Amount.	Number.	Amount.	Number.	Amount.	No. Mortgages.	No. Acres.	Amount.
1888.....	3917	\$9,887,130	14	331	\$15,400	3,924	\$10140,077	21	\$268,347	21	\$268,347	.....	.....	.....
1887.....	3559	8,660,699	24	485	24,207	3,547	59,984,692	12	51,348,200	12	51,343,200	.....	.....	.....
1886.....	3091	7,090,108	32	980	37,467	3,061	7,054,941	2	2,300	2	2,300	.....	.....	.....
1886.....	2714	5,835,119	11	199	9,300	2,710	9,583,319	7	3,757,500	7	3,757,500	.....	.....	.....
1880.....	1704	3,698,350	9	268	11,101	1,700	4,500,749	5	813,500	5	813,500	.....	.....	.....
1875.....	3387	9,728,295	6	182	7,978	3,390	23,778,317	9	25,058,000	9	25,058,000	.....	.....	.....

* Including corporation mortgages.

TABLE 18.—SHOWING THE NUMBER AND AMOUNTS OF REAL ESTATE MORTGAGES TO CORPORATIONS (MORTGAGEES) RECORDED IN ESSEX COUNTY.

YEAR.	TO BUILDING AND LOAN ASSOCIATIONS.		TO BANKS, INCLUDING TRUST COMPANIES.		TO INSURANCE COMPANIES.		TO MISCELLANEOUS CORPORATIONS.		TOTAL MORTGAGES TO CORPORATIONS.	
	Number of mortgages.	Amount.	Number of mortgages.	Amount.	Number of mortgages.	Amount.	Number of mortgages.	Amount.	Number.	Amount.
1888	688	\$1, 135, 517	229	\$ 900, 075	282	\$1, 441, 300	22	\$ 90, 305	1, 121	\$3, 567, 197
1887	421	871, 100	218	50, 147, 900	129	504, 850	12	102, 400	780	51, 626, 250
1886	257	475, 100	150	525, 875	158	720, 975	37	12, 554	602	1, 734, 504
1885	201	333, 800	148	1, 793, 730	108	601, 800	1	500	458	2, 729, 890
1880	27	41, 726	55	208, 650	111	671, 943	4	10, 000	197	932, 319

YEAR.	PER CENT. OF TOTAL MORTGAGES TO CORPORATIONS.						PER CENT. OF AGGREGATE MORTGAGES RECORDED.		
	To Building and Loan Associations.	To Banks, Including Trust Companies.	To Insurance Companies.	To Miscellaneous Corporations.	Total.	Total.	Total.		
1888	32.	20.	26.	25.	39.	2.	3.	29.	35.
1887	53.	1.8	28.	97.	17.	1.	2.	22.	86.
1886	43.	28.	25.	30.	26.	41.	6.	19.	24.
1885	44.	12.	32.	65.	24.	22.	1.	17.	28.
1880	14.	4.	28.	22.	56.	72.	2.	12.	21.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.
ATLANTIC COUNTY.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.	
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.
1870.....	9	\$ 7,818	4	80	\$ 4,244	5	\$ 3,574	.....	\$.....	.....	\$.....	.....	\$.....
1875.....	20	26,630	9	504	9,538	11	17,092	.....	.....	.....	.....	.....	.....
1880.....	17	22,138	5	1,167	7,156	12	14,982	1	90	.....	.....	1	90
1881.....	16	15,190	10	647	12,187	6	3,003	.....	.....	.....	.....	.....	.....
1882.....	18	21,266	9	787	10,233	9	11,033	.....	.....	.....	.....	.....	.....
1883.....	22	50,562	4	101	3,193	18	47,369	1	1,527	1	41	1,527	.....
1884.....	26	73,899	3	104	1,925	23	71,974	2	20,062	.....	.....	2	20,062
1885.....	21	25,127	4	355	5,809	17	19,318	.....	.....	.....	.....	.....	.....
1886.....	24	39,498	5	162	3,016	19	36,482	1	7,643	.....	.....	1	7,643
1887.....	19	39,433	3	3,180	5,490	16	33,943	2	1,429	1	3073	69	1,360	
1888.....	17	99,904	3	191	2,921	14	96,983	2	57,264	.....	.....	2	57,264

BERGEN COUNTY.

1856.....	4	\$ 17,326	4	244	17,326	.....	.....	1	1,079	1	15	1,079	.....	.....
1870.....	21	112,032	6	166	7,734	15	104,298	1	4,140	.....	.....	.....	1	4,140
1875.....	95	489,040	12	1,710	44,524	83	444,516	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.

BERGEN COUNTY.—Continued

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES). *			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Am't.	TOTAL EXECUTIONS.		ON LANDS (ACRES). *			ON LOTS.	
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.
1880.....	134	\$563,778	16	961	\$62,225	118	\$501,553	.....	.....	.....	.....	.....	.....	.....
1881.....	90	406,350	15	1,860	104,354	75	301,996	2	\$ 13,563	.....	.....	.....	2	\$ 13,563
1882.....	95	517,940	19	1,088	88,597	76	429,343	6	111,354	.....	.....	.....	6	111,354
1883.....	73	377,054	8	517	29,056	65	347,998	2	3,990	.....	.....	.....	2	3,990
1884.....	97	694,445	15	907	70,563	82	623,882	2	40,642	.....	.....	.....	2	40,642
1885.....	70	570,845	7	386	15,199	63	555,646	6	251,931	.....	.....	.....	6	251,931
1886.....	45	185,526	6	372	20,248	39	165,278	.....	.....	.....	.....	.....	.....	.....
1887.....	54	198,717	9	1,029	43,093	45	155,624	1	2,670	.....	.....	.....	1	2,670
1888.....	52	173,085	6	329	14,582	46	158,503	.....	.....	.....	.....	.....	.....	.....

BURLINGTON COUNTY.

1856.....	35	51,011	16	4,220	32,780	19	18,231	1	1,079	1	15	1,079	.....	.....
1870.....	33	85,409	12	1,252	61,124	21	24,285	.....	.....	.....	.....	.....	.....	.....
1875.....	35	118,098	14	1,249	33,221	41	84,877	.....	.....	.....	.....	.....	.....	.....
1880.....	81	189,570	29	4,689	107,771	52	81,799	.....	.....	.....	.....	.....	.....	.....
1881.....	44	98,431	11	2,403	39,196	33	59,235	.....	.....	.....	.....	.....	.....	.....

*See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
BURLINGTON COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on complainants mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES) *			ON LOTS.	
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.
1882.....	41	\$ 105,504	11	1,070	\$ 23,796	30	\$ 81,708	1	\$ 3,963	.....	.....	.....	1	\$ 3,963
1883.....	47	131,716	13	3,739	87,142	34	44,574	.....	.....	.....	.....	.....	.....	.....
1884.....	28	43,465	8	1,215	17,367	20	26,098	.....	.....	.....	.....	.....	.....	.....
1885.....	36	95,722	10	1,076	52,197	26	43,525	.....	.....	.....	.....	.....	.....	.....
1886.....	26	59,578	14	1,174	43,086	12	16,492	.....	.....	.....	.....	.....	.....	.....
1887.....	34	94,542	13	3,574	50,495	21	44,047	3	14,150	.....	.....	.....	3	14,150
1888.....	34	124,788	15	1,401	65,356	19	59,432	1	1,089	.....	.....	.....	1	1,089

CAMDEN COUNTY.

1856.....	27	38,803	3	47	4,364	24	34,439	.....	.....	.....	.....	.....	.....	.....
1870.....	18	26,873	5	314	7,236	13	19,637	.....	.....	.....	.....	.....	.....	.....
1875.....	43	97,421	3	177	4,833	40	92,588	.....	.....	.....	.....	.....	.....	.....
1880.....	146	373,251	14	436	21,644	132	351,607	1	1,799	.....	.....	.....	1	1,799
1881.....	94	215,533	6	509	20,345	88	195,188	.....	.....	.....	.....	.....	.....	.....
1882.....	77	263,897	11	673	19,078	66	244,819	.....	.....	.....	.....	.....	.....	.....
1883.....	43	89,852	4	226	5,911	39	83,941	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS BY COUNTIES.—Continued.
CAMDEN COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES) *		ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Number.	Amount.	Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.
1884	36	\$ 40,237	4	160	32	\$ 37,807	1	\$	1		\$	1	\$
1885	62	138,121	9	2,058	53	112,744							
1886	48	89,480	5	475	43	65,972							
1887	36	141,474	3	233	33	137,131	2	79,247	1	112	2,999	1	76,248
1888	39	89,117	6	686	33	64,915							
CAPE MAY COUNTY.													
1856	9	\$112,222	3	170	6	\$106,320	1	\$40,524			\$	1	\$40,524
1870	3	4,178	3	178		4,178							
1875	14	31,427	1	119	13	29,746							
1880	8	11,511	2	63	6	10,083							
1881	12	30,886	5	249	7	23,498	3	21,186	1	17	1,161	2	20,025
1882	11	83,772	1	97	10	33,565							
1883	5	5,540	1	38	4	4,311							
1884	10	15,026	1	66	9	12,283							
1885	13	177,353	3	227	10	166,694	1	12,555				1	12,555

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
CAPE MAY COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.			EXECUTIONS AGAINST CORPORATIONS.									
	Number.	Amount of principal and interest due on complainant's mortgage.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*		ON LOTS.						
								Number.	Amount.	Number.	Acres.	Number.	Amount.					
1886.	14	\$ 52,578	1	525	\$11,896	13	\$40,682	3	\$									
1887.	15	14,312	4	421	3,255	11	11,057											
1888.	11	109,282				11	109,282	3	90,287									90,287
CUMBERLAND COUNTY.																		
1856.	3	12,253	2	305	11,815	1	435											
1870.	25	343,423	19	1,999	25,724	6	317,699											
1875.	59	84,933	19	735	19,653	40	65,270	1	33,768								1	33,768
1880.	46	71,421	19	1,436	44,708	27	26,713	1	16,023	1	180	1	16,093					
1881.	30	52,038	10	632	12,982	20	39,056											
1882.	23	39,000	6	371	12,071	17	26,929	1	8,920	1	144		8,920					
1883.	19	30,177	8	378	14,348	11	15,829											
1884.	20	17,819	9	264	8,110	11	9,709											
1885.	21	28,255	8	579	10,686	13	17,569											
1886.	22	32,810	15	683	19,879	7	12,931											
1887.	36	54,636	13	759	19,400	23	35,236											

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
CUMBERLAND COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*		ON LOTS		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on comp'ts. in o. r. i. g. e.	Number.	Acres.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*		ON LOTS.		
							Number.	Amount.	Number.	Acres.	Number.	Amount.	
1888.....	23	\$ 26,206	5	651	\$ 6,963	18	\$19,333

ESSEX COUNTY.

186.....	72	179,636	6	138	5,215	66	174,471	1	1,580	.....	.....	.....	.....	1	1,580
1870.....	93	295,380	4	160	7,396	89	287,984	2	15,433	.....	.....	.....	.....	2	15,433
1875.....	416	1,701,462	5	246	25,118	411	1,676,344	2	27,237	.....	.....	.....	.....	2	27,237
1880.....	419	1,724,752	7	368	15,597	412	1,709,155	3	90,455	.....	.....	.....	.....	3	90,455
1881.....	254	1,019,413	8	314	27,145	246	992,268	1	20,815	.....	.....	.....	.....	1	20,815
1882.....	246	951,101	7	378	22,695	239	928,406	1	20,815	.....	.....	.....	.....	1	20,815
1883.....	160	899,987	6	300	16,283	154	883,704	.....	.....	.....	.....	.....	.....	.....	.....
1884.....	154	552,983	6	201	13,627	148	539,356	2	38,128	.....	.....	.....	.....	2	38,128
1885.....	161	572,467	5	246	15,241	156	557,223	.....	.....	.....	.....	.....	.....	.....	.....
1886.....	131	468,367	1	50	1,071	130	467,296	1	7,057	.....	.....	.....	.....	1	7,057
1887.....	124	407,602	4	435	39,418	120	368,184	1	3,542	.....	.....	.....	.....	1	3,542
1888.....	127	398,734	2	113	6,559	125	392,175	1	31,627	.....	.....	.....	.....	1	31,627

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
GLOUCESTER COUNTY.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES) *			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.							
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.	
1856.....	2	\$ 1,633	1	109	\$ 1,534	1	\$ 99	.....	.....	.....	.....	.....	.....	.....	.....
1870.....	9	20,819	5	529	7,615	4	13,204	.....	.....	.....	.....	.....	.....	.....	.....
1875.....	24	50,045	17	1,542	39,323	7	10,722	.....	.....	.....	.....	.....	.....	.....	.....
1880.....	39	98,787	25	1,994	59,560	14	39,227	1	\$16,117	.....	.....	.....	1	\$16,117	.....
1881.....	26	49,844	5	832	27,365	21	22,479	.....	.....	.....	.....	.....	.....	.....	.....
1882.....	22	36,047	12	1,695	26,919	10	9,128	.....	.....	.....	.....	.....	.....	.....	.....
1883.....	12	14,519	7	306	12,469	5	2,050	.....	.....	.....	.....	.....	.....	.....	.....
1884.....	22	49,803	15	1,397	36,973	7	12,830	.....	.....	.....	.....	.....	.....	.....	.....
1885.....	18	41,063	10	828	20,684	8	20,379	1	1,090	.....	.....	.....	1	1,090	.....
1886.....	20	30,876	10	940	17,544	10	13,332	.....	.....	.....	.....	.....	.....	.....	.....
1887.....	26	41,058	11	562	24,026	15	17,032	.....	.....	.....	.....	.....	.....	.....	.....
1888.....	19	35,038	10	514	16,057	9	18,981	.....	.....	.....	.....	.....	.....	.....	.....

HUDSON COUNTY.

1856.....	41	182,750	2	411	13,750	39	168,955	.....	.....	.....	.....	.....	.....	.....	.....
1870.....	109	509,561	.....	.....	.....	109	509,561	2	56,094	.....	.....	.....	2	56,094	.....

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
 HUDSON COUNTY—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES) *		ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.					
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES). *		ON LOTS.	
1875	339	\$ 1,392,389			339	\$1,392,389	5	\$122,962			5	\$ 122,962
1880	331	1,238,672			331	1,238,672	4	22,925			4	22,925
1881	228	1,293,960			228	1,293,960	2	291,942			2	291,942
1882	158	614,370			158	614,370	2	24,132			2	24,132
1883	141	822,943			141	822,943						
1884	164	1,900,816			164	1,900,816	4	1,257,990			4	1,257,990
1885	158	639,119			158	639,119						
1886	134	354,051			134	354,051	1	922			1	922
1887	107	362,102			107	362,102	1	99,346			1	99,346
1888	94	571,845			94	591,845	3	26,235			3	26,235
HUNTERDON COUNTY.												
1856	5	9,180	3	179	8,496	2	684					
1870	28	56,314	16	1,135	25,621	12	30,693					
1875	48	129,720	20	2,080	74,023	28	55,697					
1880	60	198,402	32	2,764	115,973	28	82,429					

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
HUNTERDON COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES.)*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on complainants' mortgage.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.	
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.
1881.....	42	\$ 91,143	16	1,135	\$ 44,356	26	\$ 46,787	.....	\$ .....	.....	.....	\$ .....	.....	\$ .....
1882.....	22	44,529	9	511	17,086	13	27,443	1	2,489	.....	.....	.....	1	2,489
1883.....	22	43,127	5	422	16,236	17	26,891	1	5,162	.....	.....	.....	1	5,162
1884.....	22	41,051	9	350	11,019	13	30,032	.....	.....	.....	.....	.....	.....	.....
1885.....	17	28,556	6	712	12,668	11	15,888	.....	.....	.....	.....	.....	.....	.....
1886.....	23	62,938	14	1,582	49,127	9	13,811	.....	.....	.....	.....	.....	.....	.....
1887.....	20	63,378	10	790	36,671	10	26,707	.....	.....	.....	.....	.....	.....	.....
1888.....	20	52,746	12	1,152	37,026	8	15,720	.....	.....	.....	.....	.....	.....	.....

MERCER COUNTY.

1856.....	20	\$ 30,735	3	154	\$ 5,578	17	\$ 25,157	.....	\$ .....	.....	.....	\$ .....	.....	\$ .....
1870.....	21	57,166	10	592	20,812	21	36,354	1	332	.....	.....	.....	1	332
1875.....	45	123,396	11	1,062	31,424	34	91,972	.....	.....	.....	.....	.....	.....	.....
1880.....	65	146,309	14	889	26,213	52	120,096	2	18,190	.....	.....	.....	2	18,190
1881.....	40	148,395	4	240	21,276	36	127,119	.....	.....	.....	.....	.....	.....	.....
1882.....	25	57,600	1	23	303	24	57,297	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
MERCER COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.							
	Number.	Amount of principal and interest due on complainants mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.	
1883.....	27	\$ 59,830	5	269	\$ 12,635	22	\$ 47,195	.....	.....	.....	.....	.....	.....	.....	.....
1884.....	36	200,546	5	605	31,391	31	169,155	1	\$ 6,287	.....	.....	.....	.....	1	\$ 6,287
1885.....	34	56,905	2	82	1,897	32	55,008	.....	.....	.....	.....	.....	.....	.....	.....
1886.....	30	76,048	5	193	10,374	25	65,674	1	32,722	.....	.....	.....	.....	1	32,722
1887.....	28	65,713	4	278	9,075	24	56,638	.....	.....	.....	.....	.....	.....	.....	.....
1888.....	46	104,936	12	1,071	49,834	34	55,102	.....	.....	.....	.....	.....	.....	.....	.....

MIDDLESEX COUNTY.

1856.....	16	32,305	9	616	11,533	7	20,772	.....	.....	.....	.....	.....	.....	.....	.....
1870.....	12	36,571	8	271	13,874	4	22,697	.....	.....	.....	.....	.....	.....	.....	.....
1875.....	104	416,307	25	2,083	126,907	79	289,400	1	5,990	.....	.....	.....	.....	1	5,990
1880.....	126	449,420	26	1,320	101,801	100	347,619	1	861	.....	.....	.....	.....	1	861
1881.....	98	255,273	26	2,034	88,252	72	167,021	.....	.....	.....	.....	.....	.....	.....	.....
1882.....	50	195,834	16	1,181	79,058	34	116,776	.....	.....	.....	.....	.....	.....	.....	.....
1883.....	53	285,835	9	654	41,360	44	244,475	1	7,842	.....	.....	.....	.....	1	7,842
1884.....	60	188,140	18	1,801	48,268	42	139,877	.....	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3.

TABLE 14 — SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.

MIDDLESEX COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.	
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.
1885.....	55	\$173,662	11	935	\$48,722	44	\$124,940	.....	.....	.....	.....	.....	.....	.....
1886.....	69	236,423	20	1,814	94,405	49	142,018	.....	.....	.....	.....	.....	.....	.....
1887.....	63	186,552	11	903	33,488	52	153,064	.....	.....	.....	.....	.....	.....	.....
1888.....	49	194,399	12	123	48,950	37	145,449	.....	.....	.....	.....	.....	.....	.....

MONMOUTH COUNTY.

1856.....	16	25,227	8	572	15,101	8	10,126	.....	.....	.....	.....	.....	.....	.....
1870.....	45	105,822	23	1,446	41,063	22	64,759	1	\$5,692	.....	.....	.....	1	\$5,692
1875.....	99	310,266	33	2,554	113,421	66	196,845	.....	.....	.....	.....	.....	.....	.....
1880.....	79	182,578	26	1,896	64,659	53	117,919	1	672	.....	.....	.....	1	672
1881.....	50	132,728	22	1,885	78,770	28	53,958	.....	.....	.....	.....	.....	.....	.....
1882.....	47	223,140	18	1,108	39,039	29	184,101	.....	.....	.....	.....	.....	.....	.....
1883.....	66	167,716	16	1,159	67,281	50	100,435	.....	.....	.....	.....	.....	.....	.....
1884.....	62	187,931	16	807	24,268	46	163,663	.....	.....	.....	.....	.....	.....	.....
1885.....	82	222,977	12	1,274	42,856	70	180,121	.....	.....	.....	.....	.....	.....	.....
1886.....	85	299,537	17	1,508	36,881	68	262,656	2	8,025	.....	.....	.....	2	8,025

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
MONMOUTH COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.							
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.	
1887.....	74	\$ 272,187	19	1,867	48,502	55	223,687	.....	.....	.....	.....	.....	.....	.....	.....
1888.....	84	238,159	19	1,380	57,211	65	180,948	.....	.....	.....	.....	.....	.....	.....	.....

MORRIS COUNTY.

1856.....	8	15,139	6	2,326	13,962	2	1,176	.....	.....	.....	.....	.....	.....	.....	.....
1870.....	23	92,285	12	1,054	39,482	11	52,803	.....	.....	.....	.....	.....	.....	.....	.....
1875.....	57	252,444	22	1,981	98,810	35	153,634	.....	.....	.....	.....	.....	.....	.....	.....
1880.....	68	182,367	25	3,228	84,375	43	97,992	.....	.....	.....	.....	.....	.....	.....	.....
1881.....	57	282,196	18	904	188,728	39	93,468	.....	.....	.....	.....	.....	.....	.....	.....
1882.....	38	140,622	12	1,147	36,722	26	103,900	.....	.....	.....	.....	.....	.....	.....	.....
1883.....	40	121,776	9	893	36,246	31	85,530	1	\$3,241	.....	.....	.....	1	\$3,241	.....
1884.....	34	76,895	20	1,581	54,671	14	22,224	.....	.....	.....	.....	.....	.....	.....	.....
1885.....	34	86,916	13	1,423	38,462	21	48,454	.....	.....	.....	.....	.....	.....	.....	.....
1886.....	36	103,600	15	1,134	53,699	21	49,901	.....	.....	.....	.....	.....	.....	.....	.....
1887.....	26	115,488	10	1,306	57,541	16	57,947	1	6,845	1	70	\$6,845	.....	.....	.....
1888.....	26	76,852	15	1,443	37,168	11	38,684	1	6,909	.....	.....	.....	1	6,909	.....

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
OCEAN COUNTY.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES.)*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on complainants' mortgage.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.	
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.
1856.....	17	\$ 5,772	5	600	\$ 3,949	2	\$ 1,823	.....	.....	.....	.....	.....	.....	.....
1870.....	10	31,447	4	390	17,248	6	14,199	.....	.....	.....	.....	.....	.....	.....
1875.....	29	231,667	15	3,561	79,882	14	151,785	1	\$123,385	.....	.....	.....	1	\$123,385
1880.....	18	33,349	12	739	18,853	6	14,496	.....	.....	.....	.....	.....	.....	.....
1881.....	18	207,669	11	2,537	21,380	7	186,289	.....	.....	.....	.....	.....	.....	.....
1882.....	22	40,977	10	776	30,238	12	10,739	1	9,091	1	159	\$9,091	.....	.....
1883.....	12	42,361	6	601	17,354	6	25,007	.....	.....	.....	.....	.....	.....	.....
1884.....	23	86,167	11	1,166	16,621	12	69,546	.....	.....	.....	.....	.....	.....	.....
1885.....	25	83,651	8	876	33,288	17	50,363	1	5,208	.....	.....	.....	1	5,208
1886.....	22	60,681	9	856	24,101	13	36,580	.....	.....	.....	.....	.....	.....	.....
1887.....	18	59,321	5	540	9,941	13	49,380	1	19,264	.....	.....	.....	1	19,263
1888.....	21	51,814	4	130	2,159	17	49,655	.....	.....	.....	.....	.....	.....	.....

PASSAIC COUNTY.

1856.....	21	20,080	7	524	12,434	14	7,646	.....	.....	.....	.....	.....	.....	.....
1870.....	22	95,366	5	168	9,583	17	85,783	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3. † One of these also included under Burlington.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.

PASSAIC COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.							
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.	
1875.....	141	\$408,754	3	189	\$ 11,218	138	\$397,536	9	\$ 26,836	.....	.....	.....	.....	.....	.....
1880.....	130	263,307	13	970	19,152	117	244,155	3	10,149	1	69	\$1,609	2	\$ 8,545	.....
1881.....	123	511,388	10	1,123	35,129	113	476,259	2	21,550	.....	.....	.....	2	21,550	.....
1882.....	65	463,413	2	166	4,926	63	458,487	2	91,800	.....	.....	.....	2	91,800	.....
1883.....	78	198,892	5	262	3,318	73	194,574	1	1,544	.....	.....	.....	1	1,544	.....
1884.....	65	202,415	6	1,002	57,230	59	145,185	.....	.....	.....	.....	.....	.....	.....	.....
1885.....	67	293,514	6	1,056	30,937	61	262,577	.....	.....	.....	.....	.....	.....	.....	.....
1886.....	44	130,033	3	175	7,053	41	122,980	.....	.....	.....	.....	.....	.....	.....	.....
1887.....	50	112,517	2	36	1,391	48	111,126	.....	.....	.....	.....	.....	.....	.....	.....
1888.....	47	118,345	3	436	5,611	44	112,734	.....	.....	.....	.....	.....	.....	.....	.....

SALEM COUNTY.

1856†.....	10	36,499	7	897	35,114	3	1,385	.....	.....	.....	.....	.....	.....	.....	.....
1870.....	14	25,443	7	328	10,976	7	14,467	.....	.....	.....	.....	.....	.....	.....	.....
1875.....	26	66,909	19	1,517	46,705	7	20,204	.....	.....	.....	.....	.....	.....	.....	.....
1880.....	41	85,614	28	2,303	70,998	13	14,616	.....	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3. † One of these also included under Burlington.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
SALEM COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.							
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.	
1881.....	13	\$44,901	8	558	\$ 8,974	5	\$35,927	.....	.....	.....	.....	.....	.....	.....	.....
1882.....	4	8,805	3	186	8,076	1	729	.....	.....	.....	.....	.....	.....	.....	.....
1883.....	8	13,514	2	149	3,350	6	10,164	.....	.....	.....	.....	.....	.....	.....	.....
1884.....	6	17,412	1	135	6,324	5	11,088	.....	.....	.....	.....	.....	.....	.....	.....
1885.....	7	7,869	2	93	4,159	5	3,710	.....	.....	.....	.....	.....	.....	.....	.....
1886.....	13	23,022	6	1,234	11,823	7	11,199	.....	.....	.....	.....	.....	.....	1	\$6,693
1887.....	13	30,776	6	744	19,290	7	11,486	1	\$6,693	.....	.....	.....	.....	.....	.....
1888.....	16	17,580	9	641	10,942	7	6,638	.....	.....	.....	.....	.....	.....	.....	.....

SOMERSET COUNTY.

1856.....	11	22,644	8	429	8,010	4	14,634	1	9,732	.....	.....	.....	.....	1	9,732
1870.....	21	40,674	15	998	26,761	6	13,913	.....	.....	.....	.....	.....	.....	.....	.....
1875.....	47	170,175	20	1,813	103,559	27	66,616	.....	.....	.....	.....	.....	.....	.....	.....
1880.....	74	234,172	39	3,387	157,918	35	76,254	1	1,748	1	47	\$1,748	.....	.....	.....
1881.....	44	133,979	20	1,722	89,889	24	44,090	.....	.....	.....	.....	.....	.....	.....	.....
1882.....	42	99,781	18	1,334	55,454	24	44,327	.....	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued.
SOMERSET COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS		EXECUTIONS AGAINST CORPORATIONS.							
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.	
1883.....	31	\$ 87,512	18	1,704	\$71,633	13	\$15,879	.....	.....	.....	.....	.....	.....	.....	.....
1884.....	40	120,829	16	1,352	49,192	24	71,637	.....	.....	.....	.....	.....	.....	.....	.....
1885.....	28	106,339	18	1,953	86,272	10	20,067	.....	.....	.....	.....	.....	.....	.....	.....
1886.....	32	90,841	14	1,140	47,149	18	43,692	.....	.....	.....	.....	.....	.....	.....	.....
1887.....	33	97,439	15	950	60,162	18	37,277	.....	.....	.....	.....	.....	.....	.....	.....
1888.....	31	129,762	17	1,490	52,330	14	77,432	2	\$40,106	1	68	\$716	1	\$39,390	.....

SUSSEX COUNTY.

1856.....	11	19,150	6	589	8,152	5	\$10,998	.....	.....	.....	.....	.....	.....	.....	.....
1870.....	22	40,467	14	2,406	23,263	8	17,204	.....	.....	.....	.....	.....	.....	.....	.....
1875.....	34	93,684	17	2,099	57,322	17	36,362	.....	.....	.....	.....	.....	.....	.....	.....
1880.....	37	135,628	27	4,138	114,861	10	20,767	.....	.....	.....	.....	.....	.....	.....	.....
1881.....	27	90,195	21	2,342	82,340	6	7,855	.....	.....	.....	.....	.....	.....	.....	.....
1882.....	17	37,981	10	1,357	28,534	7	9,447	.....	.....	.....	.....	.....	.....	.....	.....
1883.....	13	38,083	7	828	11,034	6	27,049	.....	.....	.....	.....	.....	.....	.....	.....
1884.....	15	55,439	10	1,513	37,730	5	17,709	.....	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS BY COUNTIES.—Continued.

SUSSEX COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.						
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.	
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.
1885.....	23	\$ 88,334	12	\$2,356	\$32,296	11	\$ 56,038	1	\$6,035	.....	.....	.....	1	\$ 6,035
1886.....	19	53,558	12	2,829	40,462	7	13,096	.....	.....	.....	.....	.....	.....	.....
1887.....	18	38,942	13	1,613	27,872	5	11,070	.....	.....	.....	.....	.....	.....	.....
1888.....	15	38,282	11	1,655	29,953	4	8,329	.....	.....	.....	.....	.....	.....	.....

UNION COUNTY.

1856.....	17	14,762	6	302	5,140	11	9,622	.....	.....	.....	.....	.....	.....	.....
1870.....	32	88,728	5	157	21,176	27	67,552	.....	.....	.....	.....	.....	.....	.....
1875.....	245	1,215,142	11	671	70,917	234	1,144,225	.....	.....	.....	.....	.....	.....	.....
1880.....	220	1,086,794	7	636	44,338	213	1,042,456	5	201,370	1	300	\$21,047	4	180,323
1881.....	114	428,711	11	612	60,714	103	367,997	1	3,784	1	29	3 784	.....	.....
1882.....	112	470,024	4	108	3,711	108	466,313	.....	.....	.....	.....	.....	.....	.....
1883.....	75	186,152	3	147	3,147	72	183,005	2	17,084	.....	.....	.....	2	17,084
1884.....	98	439,425	3	141	7,461	95	431,964	1	13,305	.....	.....	.....	1	13,305
1885.....	72	309,391	6	494	23,281	66	286,110	2	15,687	.....	.....	.....	2	15,687
1886.....	63	218,340	1	727	9,706	62	208,634	2	15,040	1	727	9,706	1	5,334

* See note to Table 3.

TABLE 14.—SHOWING WHOLE NUMBER OF REAL ESTATE FORECLOSURE EXECUTIONS, BY COUNTIES.—Continued
UNION COUNTY.—Continued.

YEAR.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		EXECUTIONS AGAINST CORPORATIONS.							
	Number.	Amount of principal and interest due on complainants' mortgages.	Number.	Acres.	Amount.	Number.	Amount.	TOTAL EXECUTIONS.		ON LANDS (ACRES).*			ON LOTS.		
								Number.	Amount.	Number.	Acres.	Amount.	Number.	Amount.	
1887.....	82	\$ 305,680	3	125	4,996	79	300,684	2	\$ 4,457	.....	.....	.....	.....	.....	.....
1888.....	61	281,470	.....	.....	.....	61	\$281,470	.....	.....	.....	.....	.....	.....	.....	.....

WARREN COUNTY.

1856.....	1	\$ 201	.....	.....	\$.....	1	\$ 201	.....	\$.....	.....	.....	\$.....	.....	\$.....
1870.....	19	30,736	7	654	12,415	12	18,321	.....	.....	.....	.....	.....	.....	.....
1875.....	43	92,188	10	1,235	45,459	33	46,729	.....	.....	.....	.....	.....	.....	.....
1880.....	60	526,944	22	1,988	456,633	38	70,311	.....	.....	.....	.....	.....	.....	.....
1881.....	36	82,813	10	948	29,376	26	53,437	.....	.....	.....	.....	.....	.....	.....
1882.....	28	48,073	3	223	6,311	25	41,762	.....	.....	.....	.....	.....	.....	.....
1883.....	23	58,034	6	816	24,759	17	33,275	.....	.....	.....	.....	.....	.....	.....
1884.....	28	112,139	7	835	17,698	21	94,441	.....	.....	.....	.....	.....	.....	.....
1885.....	25	224,326	8	691	92,035	17	132,291	.....	70,208	.....	.....	.....	1	70,208
1886.....	27	38,258	7	473	8,209	20	30,049	1	659	1	28	659	.....	.....
1887.....	24	51,558	7	816	22,404	17	29,154	1	.....	.....	.....	.....	.....	.....
1888.....	27	73,666	9	1,197	46,477	18	27,189	.....	.....	.....	.....	.....	.....	.....

* See note to Table 3.

TABLE 15.—SHOWING REAL ESTATE FORECLOSURE EXECUTIONS BY CORPORATIONS (COMPLAINANTS).

ATLANTIC COUNTY.

YEAR.	TOTAL CORPORATION EXECUTIONS.		BUILDING AND LOAN ASSOCIATIONS.		BANKS.*		INSURANCE COMPANIES		MISCELLANEOUS CORPORATIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1875.....	1	\$ 1,337	1	\$ 1,337	..	..	..	..	..	..
1880.....	5	8,488	3	2,958	1	90	1	5,440	..	..
1881.....	3	2,111	3	2,111	..	..	..	..	..	..
1882.....	3	3,839	2	3,293	1	546	..	..	..	..
1883.....	6	15,489	4	5,145	1	8,817	..	..	1	1,527
1884.....	8	15,357	6	10,725	1	1,738	1	2,894	..	..
1885.....	4	6,543	4	6,543	..	..	..	..	..	..
1886.....	7	5,769	6	5,308	..	..	..	..	1	461
1887.....	2	1,742	2	1,742	..	..	..	..	..	..
1888.....	2	1,994	2	1,994	..	..	..	..	..	..

BERGEN COUNTY.

1870.....	3	45,945	..	..	3	45,945	..	..	..	..
1875.....	10	50,739	..	..	..	..	7	49,251	3	1,488
1880.....	5	8,488	3	2,958	1	90	1	5,440	..	..
1881.....	18	58,093	..	..	12	38,618	5	16,711	1	2,764
1882.....	15	159,612	1	1,187	5	72,243	9	86,182	..	..
1883.....	16	89,570	..	..	2	10,778	6	70,368	8	8,424
1884.....	26	119,344	..	..	4	33,305	5	60,791	17	25,248
1885.....	8	81,302	..	..	1	4,279	7	77,023	..	..
1886.....	3	56,765	..	..	..	..	3	56,765	..	..
1887.....	3	24,770	..	..	..	..	3	24,770	..	..
1888.....	4	26,517	..	..	1	7,845	3	18,672	..	..

BURLINGTON COUNTY.

1856.....	4	4,556	3	3,687	..	..	1	869	..	..
1870.....	3	2,034	3	2,039	..	..	..	..	..	..
1875.....	12	17,250	11	12,947	..	..	1	4,303	..	..
1880.....	5	4,383	3	2,916	..	..	2	1,467	..	..
1881.....	5	16,761	2	54	1	217	1	4,763	1	11,727
1882.....	1	420	1	420	..	..	..	..	..	..
1883.....	7	10,482	5	3,590	1	1,141	1	5,751	..	..
1884.....	4	5,607	3	5,136	..	..	1	471	..	..
1885.....	3	3,180	3	3,180	..	..	..	..	..	..
1886.....	3	6,083	2	2,074	..	..	1	4,009	..	..
1887.....	5	12,749	3	2,229	..	..	2	10,520	..	..
1888.....	2	9,218	..	..	..	..	1	4,009	1	5,209

* Including trust companies.

TABLE 15.—SHOWING REAL ESTATE FORECLOSURE EXECUTIONS
BY CORPORATIONS (COMPLAINANTS).—CONTINUED.

CAMDEN COUNTY.

YEAR.	TOTAL CORPORATI- ON EXE- CUTIONS.		BUILDING AND LOAN ASSO- CIATIONS.		BANKS.*		INSURANCE COMPANIES.		MISCELLA- NEOUS CORPORA- TIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1856.....	2	\$ 3,578	1	\$ 218	.....	.....	1	\$ 3,360	.....	.....
1875.....	6	11,328	6	11,328	.....	.....	.....	.....	.....	.....
1880.....	30	57,778	24	42,813	2	\$ 4,724	2	8,290	2	\$ 1,951
1881.....	33	61,769	27	39,360	.....	.....	3	10,588	3	11,821
1882.....	22	62,158	15	25,702	.....	.....	2	6,950	5	29,506
1883.....	7	9,478	6	8,338	1	1,140	.....	.....	.....	.....
1884.....	8	9,707	4	3,575	2	3,291	2	2,841	.....	.....
1885.....	12	22,817	10	9,906	2	12,911	.....	.....	.....	.....
1886.....	7	8,646	7	8,646	.....	.....	.....	.....	.....	.....
1887.....	8	14,276	4	6,598	.....	.....	2	6,016	2	1,662
1888.....	9	28,881	7	17,740	1	7,395	.....	.....	1	3,746

CAPE MAY COUNTY.

1875.....	1	1,107	1	1,107	.....	.....	.....	.....	.....	.....
1880.....	1	1,076	1	1,076	.....	.....	.....	.....	.....	.....
1881.....	1	18,968	.....	.....	.....	.....	1	18,968	.....	.....
1883.....	1	1,693	1	1,693	.....	.....	.....	.....	.....	.....
1885.....	1	2,555	.....	.....	1	2,555	.....	.....	.....	.....
1887.....	2	2,292	2	2,292	.....	.....	.....	.....	.....	.....
1888.....	2	3,557	2	3,557	.....	.....	.....	.....	.....	.....

CUMBERLAND COUNTY.

1875.....	4	2,167	3	1,851	.....	.....	.....	.....	1	316
1880.....	5	8,159	5	8,159	.....	.....	.....	.....	.....	.....
1881.....	1	2,820	.....	.....	.....	.....	1	2,820	.....	.....
1882.....	1	276	1	276	.....	.....	.....	.....	.....	.....
1883.....	2	3,304	2	3,304	.....	.....	.....	.....	.....	.....
1885.....	1	427	1	427	.....	.....	.....	.....	.....	.....
1887.....	3	5,168	3	5,168	.....	.....	.....	.....	.....	.....
1888.....	1	1,218	1	1,218	.....	.....	.....	.....	.....	.....

* Including trust companies.

TABLE 15.—SHOWING REAL ESTATE FORECLOSURE EXECUTIONS BY CORPORATIONS (COMPLAINANTS).

ESSEX COUNTY.

YEAR.	TOTAL CORPORATION EXECUTIONS.		BUILDING AND LOAN ASSOCIATIONS.		BANKS.*		INSURANCE COMPANIES.		MISCELLANEOUS CORPORATIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1856.....	10	\$ 18,557	4	\$ 5,555	2	\$ 5,810	2	\$ 3,044	2	\$ 4,148
1870.....	9	36,172	2	6,384	3	16,129	4	13,659	..	.....
1875.....	112	628,443	7	10,683	32	167,731	71	402,060	2	27,969
1880.....	160	786,241	1	2,599	54	193,534	98	472,313	7	117,795
1881.....	77	436,504	..	.....	35	269,990	39	158,252	3	8,262
1882.....	85	425,585	1	588	42	184,064	40	238,045	2	2,888
1883.....	41	242,373	..	.....	21	98,660	19	135,340	1	8,373
1884.....	32	112,820	6	4,880	11	28,672	15	79,268	..	.....
1885.....	38	151,961	1	1,717	15	61,746	22	88,498	..	.....
1886.....	29	156,302	3	6,537	6	25,799	20	123,966	..	.....
1887.....	32	141,029	5	10,315	7	22,446	20	108,268	..	.....
1888.....	20	118,433	2	6,035	6	21,257	12	91,141	..	.....

GLOUCESTER COUNTY.

1880.....	2	2,561	2	2,561	..	.....	..	.....	..	.....
1881.....	2	12,621	2	12,621	..	.....	..	.....	..	.....
1882.....	1	1,674	1	1,674	..	.....	..	.....	..	.....
1883.....	1	353	1	353	..	.....	..	.....	..	.....
1885.....	1	677	1	677	..	.....	..	.....	..	.....
1886.....	2	1,684	2	1,684	..	.....	..	.....	..	.....
1887.....	2	1,839	2	1,839	..	.....	..	.....	..	.....
1888.....	4	8,557	1	1,957	2	5,592	..	.....	1	1,008

HUDSON COUNTY.

1856.....	2	1,544	..	.....	1	1,164	..	.....	1	380
1870.....	3	11,556	1	3,922	2	7,634	..	.....	..	.....
1875.....	35	194,566	3	6,345	10	40,288	20	137,858	2	10,075
1880.....	51	219,846	1	2,048	20	83,809	28	129,142	2	4,847
1881.....	34	180,110	1	2,638	6	18,037	24	107,072	3	52,363
1882.....	23	136,560	1	341	10	39,788	11	95,082	1	1,350
1883.....	18	124,913	..	.....	11	61,571	7	68,342	..	.....
1884.....	32	159,156	3	10,743	14	121,017	6	16,718	9	10,678
1885.....	34	291,495	..	.....	23	226,152	11	65,343	..	.....
1886.....	19	95,593	2	4,094	13	59,713	4	31,786	..	.....
1887.....	17	64,085	5	17,599	6	25,550	3	6,153	3	14,784
1888.....	12	167,249	2	9,373	6	143,620	3	14,256	..	.....

* Including trust companies.

TABLE 15.—SHOWING REAL ESTATE FORECLOSURE EXECUTIONS
BY CORPORATIONS (COMPLAINANTS).

HUNTERDON COUNTY.

YEAR.	TOTAL CORPORATIONS EXECUTIONS.		BUILDING AND LOAN ASSOCIATIONS.		BANKS.*		INSURANCE COMPANIES		MISCELLANEOUS CORPORATIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1870.....	1	\$ 1,270	..	..	..	..	..	..	1	\$ 1,270
1875.....	9	35,309	5	17,903	1	341	3	17,065	..	..
1880.....	4	51,633	..	..	1	2,714	1	27,823	2	21,096
1881.....	2	950	2	950	..	..	..	..	..	..
1882.....	2	3,390	1	200	1	3,190	..	..	..	..
1883.....	5	15,296	4	4,655	..	..	..	..	1	10,641
1884.....	2	910	1	463	1	447	..	..	..	..
1885.....	1	2,137	..	..	..	..	1	2,137	..	..
1886.....	1	458	1	458	..	..	..	..	..	..
1887.....	1	788	1	788	..	..	..	..	..	..
1888.....	1	1,559	..	..	1	1,559	..	..	..	..

MERCER COUNTY.

1856.....	2	1,044	2	1,044	..	..	..	..	..	..
1870.....	1	9,376	..	..	..	..	..	..	1	9,376
1875.....	7	9,412	5	5,577	..	..	2	3,835	..	..
1880.....	9	23,463	4	3,544	..	..	2	4,237	3	15,682
1881.....	10	10,195	5	3,725	1	1,388	3	3,364	1	1,718
1882.....	3	22,468	2	1,385	..	..	1	21,083	..	..
1883.....	3	9,008	2	8,700	..	..	..	..	1	308
1884.....	3	2,838	3	2,838	..	..	..	..	..	..
1886.....	1	32,722	..	..	..	..	1	32,722	..	..
1887.....	2	6,936	..	..	..	..	1	2,256	1	4,680
1888.....	1	5,047	..	..	..	..	1	5,047	..	..

MIDDLESEX COUNTY.

1875.....	31	176,094	14	40,940	5	33,648	11	84,144	1	17,362
1880.....	35	172,998	6	5,519	1	1,635	24	130,776	4	35,068
1881.....	31	92,542	20	22,534	2	9,903	8	51,270	1	8,835
1882.....	6	25,089	2	2,412	..	..	3	18,025	1	4,652
1883.....	12	50,030	5	4,240	1	3,288	5	24,171	1	18,331
1884.....	6	32,152	2	2,741	1	11,890	2	12,176	1	5,345
1885.....	9	19,081	7	9,161	..	..	2	9,920	..	..
1886.....	20	78,625	8	6,982	..	..	12	71,643	..	..
1887.....	17	48,806	9	6,047	4	9,881	4	32,878	..	..
1888.....	16	74,298	8	5,710	1	276	7	68,312	..	..

* Including trust companies.

TABLE 15.—SAOWING REAL ESTATE FORECLOSURE EXECUTIONS BY CORPORATIONS (COMPLAINANTS).

MONMOUTH COUNTY.

YEAR.	TOTAL CORPORATIONS EXECUTIONS.		BUILDING AND LOAN ASSOCIATIONS.		BANKS *		INSURANCE COMPANIES.		MISCELLANEOUS CORPORATIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1870.....	1	\$ 5 692	..	\$ .....	..	\$ .....	..	\$ .....	1	\$ 5,692
1875.....	17	53,687	14	24,864	..	..	2	11,617	1	17,206
1880.....	11	26,113	8	14,070	..	..	..	..	3	12,043
1881.....	3	313	3	313	..	..	..	..	..	..
1882.....	3	17,310	1	1,267	..	..	2	15,043	..	..
1883.....	6	25,516	3	3,667	..	..	2	14,090	1	7,759
1884.....	8	11,870	5	5,199	..	..	1	4,367	2	2,304
1885.....	6	38,657	2	5,083	2	11,957	2	21,617	..	..
1886.....	5	77,387	1	2,238	3	15,919	1	59,230	..	..
1887.....	6	34,480	..	..	..	..	6	34,480	..	..
1888.....	8	46,927	..	..	..	..	6	38,238	2	8,689

MORRIS COUNTY.

1870.....	1	6,049	..	..	..	..	..	..	1	6,049
1875.....	11	85,440	..	..	1	2,675	10	82,765	..	..
1880.....	16	53,241	..	..	5	13,737	10	32,519	1	6,985
1881.....	10	52,480	..	..	3	3,730	7	48,750	..	..
1882.....	5	37,204	..	..	2	5,167	3	32,037	..	..
1883.....	10	49,545	..	..	2	2,667	8	46,878	..	..
1884.....	4	19,894	..	..	..	..	4	19,894	..	..
1885.....	3	10,456	..	..	1	2,995	1	6,436	1	1,025
1886.....	4	28,902	..	..	1	5,292	3	23,610	..	..
1887.....	3	13,768	..	..	..	..	3	13,768	..	..
1888.....	3	10,825	..	..	..	..	2	9,165	1	1,660

OCEAN COUNTY.

1856.....	1	548	1	548	..	..	..	..	..	..
1875.....	2	3,620	1	280	..	..	1	3,340	..	..
1880.....	3	4,688	2	3,524	..	..	..	..	1	1,164
1881.....	6	11,608	4	4,190	..	..	..	..	2	7,418
1882.....	10	20,619	5	8,663	1	9,091	..	..	4	2,865
1883.....	2	7,520	2	7,520	..	..	..	..	..	..
1884.....	3	2,240	3	2,240	..	..	..	..	..	..
1885.....	2	15,109	2	15,109	..	..	..	..	..	..
1886.....	2	1,634	1	2,252	..	..	1	16,382	..	..
1887.....	4	23,166	2	1,964	1	1,938	..	..	1	19,264
1888.....	2	4,895	1	225	1	4,670	..	..	..	..

* Including trust companies.

TABLE 15.—SHOWING REAL ESTATE FORECLOSURE EXECUTIONS BY CORPORATIONS (COMPLAINANTS).

PASSAIC COUNTY.

YEAR.	TOTAL CORPORATION EXECUTIONS.		BUILDING AND LOAN ASSOCIATIONS.		BANKS *		INSURANCE COMPANIES.		MISCELLANEOUS CORPORATIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1875.....	11	\$112,474	..	\$.....	5	\$32,451	5	\$78,451	1	\$ 1,572
1880.....	16	97,695	..	.....	3	35,899	9	51,374	4	10,422
1881.....	1	504	..	.....	.....	.....	.....	.....	1	504
1882.....	10	132,027	1	717	2	2,832	6	42,405	1	86,073
1883.....	6	27,884	..	.....	1	2,170	5	25,714	..	.....
1884.....	7	47,470	..	.....	1	10,617	4	35,928	2	925
1885.....	5	27,635	..	.....	.....	.....	4	25,871	1	1,764
1886.....	9	13,198	1	1,503	1	207	1	7,334	6	4,154
1887.....	6	23,621	1	531	1	3,314	3	10,260	1	9,516
1888.....	2	7,516	..	.....	.....	.....	1	4,321	1	3,195

SALEM COUNTY.

1856.....	1	343	1	343	.....	.....	.....	.....	.....	.....
1875.....	3	4,242	3	4,242	.....	.....	.....	.....	.....	.....
1880.....	9	12,902	7	6,615	1	505	.....	.....	1	5,782
1881.....	1	1,805	1	1,805	.....	.....	.....	.....	.....	.....
1883.....	1	647	1	647	.....	.....	.....	.....	.....	.....
1884.....	1	665	1	665	.....	.....	.....	.....	.....	.....
1885.....	1	411	1	441	.....	.....	.....	.....	.....	.....
1886.....	2	2,761	2	2,761	.....	.....	.....	.....	.....	.....
1887.....	2	7,341	1	648	1	6,693	.....	.....	.....	.....
1888.....	3	3,072	3	3,072	.....	.....	.....	.....	.....	.....

SOMERSET COUNTY.

1856.....	1	214	.....	.....	.....	.....	.....	.....	1	214
1870.....	3	5,883	1	673	2	5,210	.....	.....	.....	.....
1875.....	7	18,686	2	3,477	2	8,214	3	6,995	.....	.....
1880.....	22	86,855	2	1,564	5	4,542	10	37,083	5	43,666
1881.....	8	24,619	3	1,275	.....	.....	5	23,344	.....	.....
1882.....	3	11,406	.....	.....	1	1,390	2	10,016	.....	.....
1883.....	1	1,712	.....	.....	1	1,712	.....	.....	.....	.....
1884.....	6	29,660	2	628	3	26,939	1	2,093	.....	.....
1885.....	3	14,684	.....	.....	2	8,330	1	6,354	.....	.....
1886.....	1	4,302	.....	.....	.....	.....	1	4,302	.....	.....
1887.....	1	751	.....	.....	1	751	.....	.....	.....	.....
1888.....	1	39,390	.....	.....	1	39,390	.....	.....	.....	.....

* Including trust companies.

TABLE 15.—SHOWING REAL ESTATE FORECLOSURE OPERATIONS BY CORPORATIONS (COMPLAINANTS).

SUSSEX COUNTY.

YEAR.	TOTAL CORPORATION EXECUTIONS.		BUILDING AND LOAN ASSOCIATIONS.		BANKS, *		INSURANCE COMPANIES.		MISCELLANEOUS CORPORATIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1856.....	1	\$ 235	1	\$ 235						
1875.....	1	452	1	452						
1880.....	9	34,206			2	\$ 8,483	7	\$ 25,723		
1881.....	3	11,406					3	11,406		
1882.....	4	13,426			1	1,641	3	11,785		
1884.....	1	3,273					1	3,273		
1885.....	1	3,529			1	3,529				
1886.....	3	17,973					3	17,973		
1887.....	1	6,610					1	6,610		

UNION COUNTY.

1856.....	1	980			1	980				
1870.....	1	281			1	281				
1875.....	63	508,455	1	541	11	69,873	46	390,479	5	47,562
1880.....	54	393,688	1	1,924	4	16,217	48	362,018	1	13,529
1881.....	35	241,959			10	63,962	23	163,963	2	14,034
1882.....	30	132,949	1	2,463	7	14,921	21	115,180	1	385
1883.....	19	128,733	1	1,549	6	25,393	12	101,791		
1884.....	17	59,737			5	12,046	11	47,117	1	574
1885.....	20	126,110			5	30,513	14	94,889	1	708
1886.....	15	84,408	1	4,071	2	3,925	11	73,910	1	2,502
1887.....	6	22,070	1	381			5	21,689		
1888.....	15	104,063	1	1,451	2	25,768	41	72,804	1	4,040

WARREN COUNTY.

1875.....	16	55,353	13	17,846	1	5,401	2	32,104		
1880.....	11	390,179	5	3,930	1	2,268	2	4,647	3	379,334
1881.....	4	6,441	3	3,380	1	3,061				
1882.....	5	6,824	3	1,994			2	4,830		
1883.....	1	2,060			1	2,060				
1884.....	2	7,766	1	370			1	7,396		
1885.....	2	7,641	1	245	1	7,396				
1888.....	1	12,972							1	12,972

* Including trust companies.

TABLE 16.—SHOWING LIFE OF MORTGAGES FORECLOSED.
ATLANTIC COUNTY,

YEAR.	TOTAL MORTGAGES REPOR'D.			MORTGAGES ON ACRES.*			MORTGAGES ON LOTS.		
	Number.	AV. LIFE.		Number.	AV. LIFE.		Number.	AV. LIFE.	
		Years.	Mos.		Years.	Mos.		Years.	Mos.
1870.....	8	6	....	4	7	11	4	4	1
1875.....	16	3	11	6	4	9	10	3	2
1880.....	12	5	....	5	5	3	7	4	7
1881.....	8	7	8	4	7	4	4	7	3
1882.....	14	10	6	8	13	2	6	7	....
1883.....	19	7	2	3	12	5	16	6	2
1884.....	19	9	5	3	16	4	16	8	2
1885.....	17	6	6	4	2	3	13	8	2
1886.....	17	5	...	13	5	3	4	4	4
1887.....	37	12	2	1	9	2	36	12	5
1888.....	13	6	9	3	10	2	10	5	9
Total.....	180	7	11	54	7	10	126	8	....

BERGEN COUNTY.

1856.....	4	11	5	4	11	5	....	....	....
1870.....	16	3	....	4	2	1	12	3	4
1875.....	64	4	5	9	7	2	55	4	....
1880.....	110	8	....	14	10	11	96	7	6
1881.....	80	8	11	13	9	7	67	8	9
1882.....	80	9	9	16	12	5	64	9	1
1883.....	61	9	3	7	7	1	54	9	7
1884.....	84	10	2	15	10	9	69	10	1
1885.....	58	10	6	7	10	8	51	10	4
1886.....	43	11	1	5	6	5	38	11	8
1887.....	47	11	10	9	10	....	38	12	3
1888.....	49	12	5	6	7	1	43	13	2
Total.....	696	9	2	109	9	7	587	9	1

BURLINGTON COUNTY.

1856.....	31	5	1	14	6	1	17	4	4
1870.....	25	6	10	10	5	11	15	7	6
1875.....	35	7	11	10	13	1	25	5	10
1880.....	52	9	7	14	14	5	38	7	9
1881.....	30	9	8	9	10	....	21	9	6
1882.....	23	11	9	6	13	1	17	11	5
1883.....	27	12	9	9	13	3	18	12	5
1884.....	18	10	....	7	9	3	11	10	6
1885.....	29	11	6	10	9	8	19	12	4
1886.....	19	10	2	11	11	....	8	9	....
1887.....	21	10	7	8	12	8	13	9	4
1888.....	27	9	9	14	14	4	13	6	11
Total.....	327	9	6	127	10	7	210	9	....

* See note to Table 3.

TABLE 16—SHOWING LIFE OF MORTGAGES FORECLOSED.—Continued.
CAMDEN COUNTY.

YEAR.	TOTAL MORTGAGES REPOT'D			MORTGAGES ON ACRES.*			MORTGAGES ON LOTS.		
	Number.	AV. LIFE.		Number.	AV. LIFE.		Number.	AV. LIFE.	
		Yrs.	Mos.		Yrs.	Mos.		Yrs.	Mos.
1856.....	23	4	21	1	2	9	22	5	0
1870.....	14	8	8	5	7	9	9	9	2
1875.....	31	5	5	1	9	6	30	5	3
1880.....	118	5	3	10	7	10	108	5	....
1881.....	73	6	2	5	7	5	68	6	1
1882.....	55	9	1	7	9	2	48	9	1
1883.....	33	4	11	4	4	9	29	4	11
1884.....	28	9	10	3	12	3	25	7	5
1885.....	43	7	11	7	11	11	36	7	2
1886.....	29	7	11	4	8	1	25	7	11
1887.....	27	7	7	2	9	9	25	7	5
1888.....	29	6	8	5	4	7	24	7	....
Total.....	503	6	7	54	8	3	449	6	5

CAPE MAY COUNTY.

1856.....	5	5	10	2	8	10	3	3	10
1870.....	2	2	7	2	2	7	....	....	....
1875.....	7	4	11	1	3	5	6	5	2
1880.....	3	7	11	1	7	8	2	8	....
1881.....	3	3	3	2	2	11	1	3	11
1882.....	6	6	8	....	....	....	6	6	8
1883.....	4	8	2	1	11	2	3	7	3
1884.....	6	7	4	....	....	....	6	7	4
1885.....	9	8	4	3	11	7	6	6	9
1886.....	9	2	9	....	....	....	9	2	9
1887.....	6	7	9	1	11	7	5	7	....
1888.....	6	4	5	....	....	....	6	4	5
Total.....	66	5	11	13	7	6	53	5	7

CUMBERLAND COUNTY.

1856.....	1	2	....	....	....	....	1	2	....
1870.....	13	4	3	10	4	6	3	3	4
1875.....	10	6	1	1	12	9	9	5	4
1880.....	13	8	....	5	7	1	8	8	7
1881.....	11	5	10	4	4	10	7	6	5
1882.....	11	7	....	2	4	....	9	7	8
1883.....	11	8	8	5	8	6	6	8	9
1884.....	12	7	....	5	6	3	7	7	7
1885.....	5	6	2	3	6	10	2	5	2
1886.....	10	8	4	7	6	9	3	12	1
1887.....	15	8	1	12	7	4	3	11	....
1888.....	13	6	8	1	5	....	12	6	10
Total.....	125	6	11	55	6	6	70	7	3

* See note to Table 3.

TABLE 16.—SHOWING LIFE OF MORTGAGES FORECLOSED.—Continued.

ESSEX COUNTY.

YEAR.	TOTAL MORTGAGES REPOR'D.			MORTGAGES ON ACRES.*			MORTGAGES ON LOTS.		
	Number.	AV. LIFE.		Number.	AV. LIFE.		Number.	AV. LIFE.	
		Years.	Mos.		Years.	Mos.		Years.	Mos.
1856.....	68	5	2	5	4	6	63	5	2
1870.....	75	4	7	4	5	3	71	4	7
1875.....	278	3	7	1	2	3	277	3	7
1880.....	249	8	1	7	8	8	242	8	1
1881.....	168	8	6	6	12	5	162	8	5
1882.....	170	9	9	2	16	10	168	9	8
1883.....	116	9	..	5	13	9	111	8	9
1884.....	104	9	4	6	8	..	98	9	6
1885.....	130	11	5	4	17	9	126	11	3
1886.....	88	9	7	1	2	8	87	9	7
1887.....	87	11	5	3	2	9	84	11	9
1888.....	90	10	2	2	7	0	88	10	3
Total.....	1,623	8	2	46	9	4	1,577	8	0

GLOUCESTER COUNTY.

1856.....	2	1	10	1	1	8	1	2	1
1870.....	5	3	8	4	4	4	1	..	10
1875.....	16	7	..	12	5	6	4	11	2
1880.....	28	9	4	19	8	..	9	12	2
1881.....	19	9	7	4	7	10	15	10	1
1882.....	15	8	4	8	6	9	7	10	2
1883.....	6	12	1	3	12	10	3	11	5
1884.....	16	10	9	9	11	4	7	10	1
1885.....	16	13	3	8	10	..	8	16	2
1886.....	17	8	1	9	6	4	8	10	1
1887.....	24	8	6	11	9	..	13	8	1
1888.....	18	10	7	10	11	9	8	9	0
Total.....	182	9	3	98	8	4	84	10	5

HUDSON COUNTY.

1856.....	38	4	1	2	3	..	36	4	2
1870.....	77	4	6	..	..	..	77	4	6
1875.....	265	3	10	..	..	..	265	3	10
1880.....	254	8	5	..	..	..	254	8	5
1881.....	172	8	..	1	8	5	171	7	11
1882.....	123	8	6	..	..	..	123	8	6
1883.....	98	10	4	..	..	..	98	10	4
1884.....	131	10	1	..	..	..	131	10	1
1885.....	123	10	9	..	..	..	123	10	9
1886.....	106	10	3	..	..	..	106	10	3
1887.....	89	11	3	..	..	..	89	11	3
1888.....	72	12	..	..	..	..	72	12	..
Total.....	1,548	8	1	3	4	10	1,545	8	2

* See note to Table 3.

TABLE 16.—SHOWING LIFE OF MORTGAGES FORECLOSED.
HUNTERDON COUNTY.

YEAR.	TOTAL MORTGAGES REPOR'D.			MORTGAGES ON ACRES.*			MORTGAGES ON LOTS.		
	Number.	AV. LIFE.		Number.	AV. LIFE.		Number.	AV. LIFE.	
		Years.	Mos.		Years.	Mos.		Years.	Mos.
1856.....	4	6	1	2	10	5	2	1	9
1870.....	8	5	3	5	7	4	3	1	11
1875.....	9	5	7	8	4	5	1	14	8
1880.....	13	7	5	9	8	3	4	5	7
1881.....	11	11	4	2	15	8	9	10	5
1882.....	4	9	5	1	4	4	3	11	1
1883.....	9	8	5	2	15	4	7	6	5
1884.....	4	11	9	1	1	11	3	15	1
1885.....	4	7	4	1	3	5	3	8	8
1886.....	8	9	10	3	11	2	5	9	1
1887.....	3	5	.....	.....	.....	.....	3	5	.....
1888.....	8	8	2	4	10	2	4	6	2
Total.....	85	8	1	38	8	3	47	7	11

MERCER COUNTY.

1856.....	13	6	3	2	4	10	11	6	6
1870.....	13	9	5	3	14	4	10	7	11
1875.....	29	6	9	7	7	2	22	6	8
1880.....	32	9	.....	4	19	7	28	7	6
1881.....	22	7	4	3	4	.....	19	7	10
1882.....	13	8	4	1	3	11	12	8	9
1883.....	11	10	3	1	23	5	10	9	.....
1884.....	24	10	3	3	7	3	21	10	8
1885.....	21	8	11	2	26	10	19	7	1
1886.....	23	7	3	2	5	2	21	7	5
1887.....	23	6	11	3	11	9	20	6	2
1888.....	36	11	10	10	12	1	26	11	9
Total.....	260	8	8	41	11	3	219	8	2

MIDDLESEX COUNTY.

1856.....	12	8	5	7	5	4	5	12	7
1870.....	6	1	9	4	2	1	2	1	6
1875.....	79	4	9	16	6	3	63	4	5
1880.....	102	7	2	18	10	6	84	6	6
1881.....	84	8	9	20	11	4	64	7	8
1882.....	38	9	6	10	10	2	28	9	3
1883.....	47	9	.....	7	11	4	40	8	6
1884.....	44	9	0	13	10	9	31	8	3
1885.....	45	8	2	9	11	5	36	7	4
1886.....	51	9	11	14	10	.....	37	9	11
1887.....	55	8	8	8	9	4	47	8	7
1888.....	41	9	10	12	9	11	29	9	40
Total.....	604	8	1	138	9	8	466	7	8

* See note to Table 3.

TABLE 16.—SHOWING LIFE OF MORTGAGES FORECLOSED.—Continued.
MONMOUTH COUNTY.

YEAR.	TOTAL MORTGAGES REPOR'D.			MORTGAGES ON ACRES.*			MORTGAGES ON LOTS.		
	Number.	AV. LIFE.		Number.	AV. LIFE.		Number.	AV. LIFE.	
		Years.	Mos.		Years.	Mos.		Years.	Mos.
1856.....	11	4	3	6	5	...	5	3	4
1870.....	24	6	3	14	6	7	10	5	4
1875.....	55	5	...	21	6	9	34	3	11
1880.....	50	8	7	15	11	8	35	7	3
1881.....	40	8	3	22	8	8	18	7	10
1882.....	32	8	6	11	11	10	21	8	3
1883.....	44	11	2	9	13	10	35	10	5
1884.....	35	7	6	10	10	6	25	6	3
1885.....	60	6	6	10	11	11	50	5	5
1886.....	66	7	4	16	12	...	50	5	11
1887.....	54	6	8	13	10	2	41	5	7
1888.....	49	9	7	11	10	10	38	9	4
Total.....	520	7	8	158	9	10	362	6	9

MORRIS COUNTY.

1856.....	8	6	5	6	5	7	2	9	....
1870.....	17	3	11	8	4	5	9	3	7
1875.....	26	5	4	6	6	11	20	4	10
1880.....	49	7	...	16	6	11	33	7	4
1881.....	42	7	11	11	8	2	31	7	10
1882.....	29	7	8	7	9	1	22	7	1
1883.....	28	9	2	5	8	7	23	9	3
1884.....	25	9	...	15	7	10	10	10	8
1885.....	27	9	9	10	8	8	17	10	5
1886.....	29	9	2	12	9	...	17	9	3
1887.....	17	8	...	6	10	8	11	6	7
1888.....	28	10	9	14	10	9	14	10	9
Total.....	325	8	....	116	8	1	209	8	....

OCEAN COUNTY.

1856.....	6	2	11	4	2	10	2	3	2
1870.....	7	3	10	3	3	4	4	4	2
1875.....	24	5	1	11	5	4	13	4	10
1880.....	12	9	6	7	11	4	5	6	11
1881.....	14	9	9	9	10	....	5	9	2
1882.....	18	8	9	9	10	8	9	6	10
1883.....	10	9	6	6	8	11	4	10	4
1884.....	20	9	5	10	12	9	10	6	2
1885.....	22	6	4	8	8	3	14	5	3
1886.....	16	13	7	6	24	4	10	7	5
1887.....	16	10	3	5	17	4	11	7	1
1888.....	18	6	9	3	3	1	15	7	6
Total.....	183	8	2	81	10	3	102	6	6

* See note to Table 3.

TABLE 16.—SHOWING LIFE OF MORTGAGES FORECLOSED.—Continued.
PASSAIC COUNTY.

YEAR.	TOTAL MORTGAGES REPOR'D			MORTGAGES ON ACRES.*			MORTGAGES ON LOTS.		
	Number.	AV. LIFE.		Number.	AV. LIFE.		Number.	AV. LIFE.	
		Yrs.	Mos.		Yrs.	Mos.		Yrs.	Mos.
1856.....	16	6	4	6	10	...	10	4	2
1870.....	13	4	9	2	3	1	11	5	1
1875.....	86	4	1	2	4	...	84	4	1
1880.....	27	8	...	8	10	2	19	6	10
1881.....	77	8	6	8	10	5	69	8	4
1882.....	51	8	10	2	5	10	49	9	1
1883.....	61	10	1	4	18	6	57	9	6
1884.....	53	10	6	6	11	6	47	10	5
1885.....	56	9	1	.....	.....	.....	56	9	1
1886.....	37	8	6	2	18	.....	35	8	.....
1887.....	42	9	3	2	14	.....	40	9	.....
1888.....	39	9	6	2	8	11	37	9	7
Total.....	588	8	3	44	10	8	514	8	.....

SALEM COUNTY.

1856.....	6	3	2	3	3	2	3	3	2
1870.....	6	6	3	1	5	.....	5	6	7
1875.....	19	11	3	15	11	10	4	8	10
1880.....	28	10	1	18	12	.....	10	6	8
1881.....	7	11	.....	3	7	5	4	13	9
1882.....	2	12	3	2	12	3	.....	.....	.....
1883.....	2	4	9	.....	.....	.....	2	4	9
1884.....	4	8	6	1	10	11	3	7	8
1885.....	2	6	10	.....	.....	.....	2	6	10
1886.....	9	11	3	4	11	7	5	11	.....
1887.....	8	11	5	3	9	2	5	12	10
1888.....	13	4	6	7	4	6	6	4	6
Total.....	106	9	.....	57	9	11	49	8	.....

SOMERSET COUNTY.

1856.....	10	10	3	7	11	1	3	8	4
1870.....	11	5	6	7	7	6	4	2	1
1875.....	36	5	3	17	6	4	19	4	3
1880.....	50	8	4	32	8	8	18	8	2
1881.....	31	9	7	14	9	.....	17	10	1
1882.....	27	9	2	11	12	1	16	7	1
1883.....	23	10	.....	15	10	9	8	8	6
1884.....	27	7	10	10	9	1	17	7	1
1885.....	18	7	.....	11	7	2	7	6	9
1886.....	16	7	9	6	8	8	10	7	2
1887.....	24	8	11	11	7	7	13	10	2
1888.....	21	11	7	11	12	3	10	10	10
Total.....	294	8	4	152	9	.....	142	7	9

* See note to Table 3.

TABLE 16.—SHOWING LIFE OF MORTGAGES FORECLOSED.—Continued.
SUSSEX COUNTY.

YEAR.	TOTAL MORTGAGES REPO'T'D.			MORTGAGES ON ACRES.*			MORTGAGES ON LOTS.		
	Number.	AV. LIFE.		Number.	AV. LIFE.		Number.	AV. LIFE.	
		Years.	Mos.		Years.	Mos.		Years.	Mos.
1856.....	8	5	4	6	5	9	2	4	3
1870.....	16	4	4	12	5	1	4	2	5
1875.....	18	5	5	11	5	10	7	4	9
1880.....	26	9	10	21	9	7	5	11	1
1881.....	15	8	7	13	8	4	2	10	.....
1882.....	13	8	9	8	8	7	5	9	.....
1883.....	11	11	7	5	13	11	6	9	7
1884.....	14	9	4	10	9	4	4	9	5
1885.....	19	10	2	10	7	8	9	12	11
1886.....	14	8	8	10	7	.....	4	12	9
1887.....	17	15	2	12	15	11	5	13	5
1888.....	13	13	9	9	14	8	4	12	11
Total.....	184	9	4	127	9	2	57	9	8

UNION COUNTY.

1856.....	15	6	8	6	6	8	9	6	7
1870.....	20	6	8	4	8	6	16	6	2
1875.....	190	4	6	8	3	10	182	4	3
1880.....	138	7	3	4	8	5	134	7	3
1881.....	88	8	7	7	10	8	81	8	3
1882.....	79	9	1	4	6	11	75	9	2
1883.....	52	10	.....	2	7	8	50	10	1
1884.....	70	9	10	2	13	10	68	9	8
1885.....	55	11	1	6	11	8	49	11	.....
1886.....	43	10	8	1	15	2	42	10	7
1887.....	59	11	10	1	3	5	58	12	.....
1888.....	43	14	8	.....	.....	.....	43	14	8
Total.....	852	8	4	45	8	7	807	8	4

WARREN COUNTY.

1856.....	3	3	.....	.....	.....	.....	3	3	.....
1870.....	13	8	.....	6	7	6	7	8	5
1875.....	16	6	.....	7	7	10	9	4	6
1880.....	18	7	4	5	9	3	13	6	7
1881.....	9	9	9	2	15	.....	7	8	3
1882.....	13	8	8	2	10	6	11	8	4
1883.....	10	7	8	2	5	6	8	8	3
1884.....	10	9	11	3	7	4	7	9	10
1885.....	9	8	7	2	12	4	7	7	6
1886.....	9	14	8	2	5	2	7	17	5
1887.....	6	10	1	.....	.....	.....	6	10	1
1888.....	12	10	5	3	15	1	9	8	10
Total.....	128	8	8	34	9	1	94	8	5

* See note to Table 3.

TABLE 17.—SHOWING THE ASSESSED VALUATIONS OF REAL ESTATE.

COUNTIES.	1888.	1885.	1880.	1875.
Counties largely urban.....	\$283,059,941	\$261,065,464	\$230,013,388	\$243,905,141
largely seaside.....	43,695,384	40,388,417	26,985,982	24,134,411
both urban and rural.....	89,074,089	84,622,540	79,765,527	93,899,000
largely rural.....	103,274,558	101,818,482	99,267,741	102,292,172
TOTAL FOR STATE.....	519,103,972	487,894,903	436,032,638	464,230,724
LARGELY URBAN.				
Camden.....	22,279,190	19,897,393	15,851,344	6,240,247
Essex.....	106,099,060	97,976,720	86,725,803	96,457,307
Hudson.....	102,259,347	95,634,127	83,691,050	85,124,020
Passaic.....	28,484,474	25,591,931	22,963,966	28,189,000
Union.....	23,937,870	21,965,293	20,781,225	27,894,567
Total.....	283,059,941	261,065,494	230,013,388	243,905,141
LARGELY SEASIDE.				
Atlantic.....	6,260,671	4,488,551	3,923,132	3,767,164
Cape May.....	2,088,555	3,257,844	2,694,734	2,537,940
Monmouth.....	31,395,247	28,693,315	17,682,000	14,162,767
Ocean.....	3,950,911	3,948,707	2,686,116	3,666,540
Total.....	43,695,384	40,388,417	26,985,982	24,134,411
PART URBAN AND RURAL.				
Bergen.....	13,945,020	13,513,632	13,064,960	18,613,500
Cumberland.....	11,585,865	10,992,725	9,856,700	11,687,565
Mercer.....	30,532,886	26,320,024	23,472,372	23,861,946
Middlesex.....	14,910,004	16,278,915	15,574,111	18,778,500
Morris.....	18,100,314	17,517,244	17,797,384	20,057,489
Total.....	89,074,089	84,622,540	79,765,527	93,899,000
LARGELY RURAL.				
Burlington.....	22,446,257	21,213,795	19,958,646	21,038,796
Gloucester.....	12,653,926	12,297,735	11,180,963	12,244,302
Hunterdon.....	17,811,057	18,059,808	18,076,602	22,501,938
Salem.....	11,765,020	11,276,002	10,688,659	12,013,351
Somerset.....	13,848,378	13,923,626	14,406,097	3,974,821
Sussex.....	8,817,399	8,912,239	9,532,672	14,376,157
Warren.....	15,932,521	16,135,277	15,424,102	16,142,807
Total.....	103,274,558	101,818,482	99,267,731	102,292,172

TABLE 17.—SHOWING INCREASE (+) OR DECREASE (—) IN THE ASSESSED VALUATION OF REAL ESTATE.

COUNTIES.	From 1875 to 1880.		From 1880 to 1885.		From 1885 to 1888.	
		Percentage.		Percentage.		Percentage.
Total for State	—\$28, 198, 086	—6.	+\$51, 862, 265	+12.	+\$31, 209, 069	+6.
Counties largely urban.....	—13, 891, 753	—5.	+31, 052, 076	+13.	+21, 994, 477	+8.
largely seaside.....	+2, 851, 571	+11.	+13, 402, 435	+50.	+3, 306, 967	+8.
partly urban and rural....	—14, 133, 473	—15.	+4, 857, 013	+6.	+4, 451, 549	+5.
largely rural.....	—3, 024, 431	—3.	+2, 550, 741	+3.	+1, 456, 076	+1.

PART III.

INDUSTRIAL CO-OPERATIVE
LEGISLATION IN ENGLAND AND
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Industrial co-operation has met with but little "legislative countenance and encouragement," as the first New Jersey building and loan association statute put it. This, possibly, may explain to some extent the reason why it has made such little headway here, either to the productive or distributive direction; for organized under our general corporation acts, associations would be joint stock companies, where stock, not individuals control, and whose profits and losses are divided accordingly; while private partnership means unlimited liability. Certain it is that in England, prior to the original "industrial and provident societies act" of 1852, little progress was made by these institutions, which now are such a remarkable success there. Says McCarthy in his "history of our Own Times,"* "the law was much against the principle in the beginning. Before 1852, all co-operative associations had to come under the Friendly Societies Act, which prohibited their dealing with any but their own members. An act obtained in 1852 allowed them to sell to persons not members of their body. For many years they were not permitted to hold more than one acre of land. More lately this absurd restriction was abolished, and they were allowed to trade in land, to hold land to any extent and to act as building

* P. 409.

societies." And in 1876, when the "act to consolidate and amend the laws* relating to industrial and provident societies" was passed, the restriction upon banking, which had hitherto applied to them, was removed, subject only to such conditions as attach to the conduct of this business by joint stock companies and are required for the security of those who are invited to entrust their money to the keeping of others than themselves.†

A synopsis of this and the supplementary acts of 1880 and 1883 is given below. This is followed by the co-operative laws in full, in force in those of our States where such have been enacted. That has been done in only ten, and most of these are not very comprehensive. The first State to pass such a measure seems to have been New York, in 1867, when the "An act for the incorporation of co-operative and industrial unions" became law. The next year (1868), Pennsylvania followed with "An act relating to the organization of co operative associations for the purpose of carrying on any mechanical, manufacturing, or trading business," but this was supplanted, in 1887, by the law which is reproduced below. The other States in which similar statutes were enacted, are Massachusetts (1870); Minnesota (1870); Connecticut (1875); New Jersey (1881); Tennessee (1882); Ohio (1884); Kansas (1887); and Wisconsin (1887). In Ohio, under the Revised Statutes of 1879, distributive co-operative associations were authorized to do business, and as the commissioner of the Bureau of Labor Statistics (1886) observed, "Many industrial co-operative societies were organized, but as the law was totally at variance with every principle of co-operation, the idea of conducting them as such was soon abandoned. * * No co-operative society could live under the provisions (Rev. Stat., p. 3245), that each shareholder was entitled to a vote for every share held by him."

The following is a summary of the English acts authorizing the co-operative societies, or, as they are called, industrial and provident societies, namely: "An act to consolidate and amend the laws relating to industrial and provident societies," of August 11, 1876; and the supplementary enactments of 1880 (customs and inland revenue act), and of 1882 (Provident nominations and small intestacies act.):

* Those of 1852, 1862, 1867 and 1870 being the principal acts.

† See "The Industrial and Provident Societies Act, 1876," published by the Central Corporation Board, Manchester, England, 1876.

UNITED KINGDOM.*

1. Application for the formation of a society must be made to the Registrar of Friendly Societies, in London, Edinburgh or Dublin, according to the case, on forms supplied by the office, signed by seven persons and the secretary, accompanied by two copies of the rules signed by the same persons.

2. It becomes a body corporate, which can, by the corporate name, sue and be sued, and hold and deal with property of any kind, including shares in other societies or companies, and land to any amount.

3. Its rules are binding upon its members, though they may have signed no assent to them; but may be altered by amendments duly made as the rules provide and registered, for which a fee of 10 s. is charged. The application for registration must be made on a form supplied by the Registrar's office.

4. It can sue its own members, and can make contracts either transferable or withdrawable, and may carry on any trade, including the buying and selling of land, and banking under certain conditions, and may apply the profits of the business to any lawful purpose; and, if authorized by its rules, may receive money on loan, either from its members or others, to any amount so authorized.

5. If it has any withdrawable share capital it may not carry on banking, but may take deposits, within any limit fixed by its rules, in sums not exceeding 5 s. in any one payment, or £20 for any one depositor, pay at not less than two clear days notice—that is, it may establish "penny banks," as they are called in England.

6. It may make loans to its members on real or personal security; and may invest on the security of other societies or companies, or in any except those where liability is unlimited.

* As published by the central co-operative board.

7. If the number of its shares is not limited either by its rules or its practice, it is not chargeable with income tax on the profits of its business.

8. It can, in the way provided for by the act, amalgamate with or take over the business of any other society, or convert itself into a company.

9. It can determine the way in which disputes between the society and its officers or members shall be settled.

10. It can dissolve itself, either by an instrument of dissolution, signed by three-fourths of its members, or by a resolution passed by a three-fourths vote at any special general meeting, of which there are two forms,—(a), purely voluntary, when the resolution requires confirmation at a second meeting; (b), on account of debts, when one meeting is sufficient. In such a winding up hostile proceedings to seize the property can be stayed.

11. Members cannot be sued individually for the debts of the society, nor compelled to pay more towards them than the sum remaining unpaid on any shares which they have either expressly agreed to take or treated as their property, or which the rules authorize to be so treated.

12. If they transfer or withdraw their shares, they cannot be made liable for any debts contracted subsequently, nor for those subsisting at the time of the transfer or withdrawal, unless the other assets are insufficient to pay them.

13. Persons not under the age of 16 years may become members, and legally do any acts which they could do if of full age, except holding any office.

14. An individual or company may hold any number of shares allowed by the rules not exceeding the nominal value of £200, and any amount so allowed as a loan. A society may hold any number of shares.

15. A member who holds at his death not more than £100 in the society as shares, loans, or deposits, may, by a writing recorded by it, nominate, or vary, or revoke the nomination of any person to take this investment at his death; and if he dies intestate, without having made one subsisting nomination, the committee of management of the society are charged with the administration of the fund; subject in either case to a notice to be given to the Commissioners

of Internal Revenue whenever the sum so dealt with exceeds £80.

16. The members may obtain an inquiry into the position of the society by application to the Registrar.

17. A registered society must have a registered office, and keep its name painted or engraved outside and give due notice of any change to the Registrar.

18. It must have a seal on which its name is engraved.

19. It must have its accounts audited at least once a year and keep a copy of its last balance sheet and the auditor's report constantly hung up in its registered office.

20. It must make to the Registrar, before the first of June in every year, a return of its business during the year ending the 31st of December previous, and supply a copy of last returns gratis to every member or person interested in its funds on application.

21. It must allow any member or person interested in its funds to inspect its books other than the loan or deposit account of any other member.

22. It must supply a copy of its rules to every person on demand, at a price not exceeding one shilling.

23. If it carries on banking, it must make out in February and August in every year, and keep hung up in its registered office, a return, in a form prescribed by the act; and it has also to make a return every February to the stamp-office under the Banking Act.

The non-observance by a society of these duties exposes it and its officers to penalties varying from £1 to £50, which are in some cases cumulative for every week during which the neglect lasts.

UNITED STATES.

CONNECTICUT.*

1. Seven or more persons, of lawful age, inhabitants of the State, may, by written articles of agreement, associate themselves together for the purposes of trade, or for carrying on any lawful mercantile, mechanical, manufacturing or agricultural business within the State, and when such articles of association shall have been executed, and recorded in the office of the town clerk, in the town in which the business is to be carried on, such persons shall be and become a corporation, and enjoy all the powers and privileges, and be subject to all the duties, restrictions and liabilities set forth in all general laws, in relation to similar corporations, except so far as the same may be limited or enlarged by this act.

2. The objects for which such association is established, and the place within which its business is to be carried on, shall be distinctly set forth in its articles of agreement, and it shall not do business in any other place or places than those mentioned in its articles.

3. The business of the association shall be managed and conducted by a president, a board of not less than five directors, and a treasurer, which shall be styled a board of managers, and who shall be chosen annually by the stockholders, and shall hold their offices until others are chosen and qualified in their stead, and such association shall have such other officers as it shall prescribe by its by-laws, and the mode of appointment and choice of such officers shall also be prescribed by the by-laws.

4. The first meeting of such association shall be called in the manner provided for calling the first meeting of joint stock corporations by Section 1,945 General Laws.† Such association may make its own by-laws, provided they be not repugnant to this

* Act in relation to co-operative associations (1875). See Title 28, ch. 118, §§ 1895-1904, Gen. Statutes. This is a transcript of the original Minnesota Act of 1870.

† By two of the incorporators by notice in county newspaper, at least fifteen days before the time appointed. Such notice may be waived by written consent of all subscribers to capital stock.

chapter nor to the laws of the State, and shall file in the town clerk's office of the town where they transact their business, a copy of all by-laws by them made.

56. The amount of capital stock of such association shall be fixed and limited by its articles of association, at any sum not exceeding fifty thousand dollars. The association may increase or diminish its amount and its number of shares at any meeting of the stockholders, especially called for that purpose, and within five days after the passage of any vote increasing or diminishing the capital stock, shall cause such vote to be recorded in the town clerk's office of the town where its business is carried on, but no share shall be issued for less than its par value.

6. When the association shall have organized, it shall be the duty of the board of managers to prepare a statement of the condition of the association, containing the amount of the capital stock, the par value of the shares, the number of shares issued, the names and residences of the shareholders, and the number of shares owned by each, and the same shall be filed and recorded in the office of the town clerk of the town in which the association proposes to do business; and on or before the tenth day of March in each year thereafter, the board of managers shall prepare a like statement of the same facts as they existed on the first day of March, with a statement of the kind and amount of the property of the association on that day, and of all its debts and liabilities of every kind, and the same shall be filed and recorded in the office of the town clerk of each town in which the association does business, and shall also be filed in the office of the Secretary of State. All the statements provided for in this section shall be signed and sworn to by a majority of the board of managers.

7. Such association may take, hold and convey such real and personal estate as is necessary for the purposes of its organization, and may sue and be sued in its associate name; and no member thereof shall be entitled to hold or claim any interest therein exceeding the sum of one thousand dollars, nor shall any member upon any subject be entitled to more than one vote.

8. No certificate of shares shall be issued to any person until the full amount thereof shall have been paid in cash, and no share-

holder shall receive less than the par value of any share when disposing of the same to the board of managers. No person shall be allowed to become a shareholder in such association except by the consent of the managers of the same.

9. If the board of managers shall fail to make the returns provided for in this chapter, or shall make untrue returns, they shall be jointly and severally liable for all debts existing at the date of such return, or at the time when the same should have been made.

10. There shall be such distribution of the profits or earnings of the association among the shareholders as shall be prescribed by the by-laws; provided, that no distribution shall be declared and paid until a sum equal to ten per cent. of the net profits shall be appropriated for a contingent or sinking fund, and until there shall have been thereby accumulated a sum equal to twenty per cent. of such capital stock.

KANSAS.*

1. Twenty or more persons may organize and incorporate a co-operative society and company in the manner and form provided by law in other cases, for the purpose and to the end of more successfully promoting and conducting any industrial pursuit.

2. Every such society or company when so organized shall enjoy all the rights, privileges and powers conferred by law on other chartered or incorporated companies in this State.

3. The shareholders in any such society or company shall each have but one vote in all matters pertaining to the business of such society or company, without regard to the number of shares owned. Sections 1,068, 1,070 and 1,071 compiled laws of 1879, provides respecting corporations generally :

1. A charter must be prepared setting forth : (1) The name of the corporation ; (2) The purpose for which it is formed ; (3) The place or places where its business is to be transacted ; (4) The time for which it is to exist ; (5) The number of its directors or trustees, and the names and residences of those who are appointed for the first

* An act to encourage co-operative societies. Laws 1887, p. 171 (Ch. 116).

year; and, (6) The amount of its capital stock, if any, and the number of shares into which it is divided.

2. The charter of an intended company must be subscribed by five or more persons, three of whom, at least, must be citizens of this State, and must be acknowledged by them before an officer duly authorized to take acknowledgements of deeds.

3. Such charter shall thereupon be filed in the office of the Secretary of State, who shall record the same at length in a book kept for that purpose.

Section 1, Chapter 117, Laws of 1887, provides that—

Any corporation may increase its capital stock to any amount, not exceeding three times the amount of its authorized capital, by a vote of the stockholders in conformity with the by-laws thereof; or such a corporation may increase its capital stock to any amount by a vote of the stockholders in conformity with the by-laws thereof, by an actual *bona fide* additional paid-up cash subscription thereto, equal to the amount of such increase; and if the majority of the stockholders shall vote for the increase of stock, the same may be increased by the board of directors, trustees or other business managers of such corporation; and upon such increase being made in accordance with the by-laws, the date and amount of such increase shall be certified to the secretary of state by the directors or trustees, and from the time such certificate is filed, the increase of stock shall become a part of the capital thereof; provided, that co-operative associations organized under the provisions of this act may, in the manner hereinafter provided, further increase their capital stock to any amount not exceeding one hundred thousand dollars.

Section 1073 of Compiled Laws (1879) provides:

Every corporation, as such, has power, (1) to have succession by its corporate name for the period limited in its charter, and when no period is limited, for twenty years; (2) maintain and defend judicial proceedings; (3) to make and use a common seal, and alter the same at pleasure; (4) to hold, purchase, mortgage or otherwise convey such real and personal estate as the purposes of the corporation shall require, and also to take hold and convey such other property, real, personal or mixed, as shall be requisite for such corporation to require, in order to obtain or secure the payment of any indebtedness or liability due to or belonging to the corporation;

(5) to appoint and remove such subordinate officers and agents as the business of the corporation shall require, and to allow them a suitable compensation; (6) to make by-laws not inconsistent with existing laws for the management of its property, the regulation of its affairs and transfer of its stock; (7) to enter into any obligation or contract essential to the transaction of its ordinary affairs; (8) to increase or diminish, by a vote of its stockholders, cast as its by-laws may direct, the number of its directors or trustees, to be not less than three nor more than twenty-four, and may in like manner change its corporate name, without in any way affecting its rights, privileges or liabilities.

MASSACHUSETTS.*

1. Any such number of persons as is herein provided, who associate themselves together by such an agreement as is herein described, with the intention of forming a corporation for any purpose herein specified, upon duly filing a certificate of organization, shall be and remain a corporation :

2. For the purpose of carrying on any mechanical, mining, or manufacturing business (except that of distilling or manufacturing intoxicating liquors), cutting, storing, and selling ice, in carrying on any agricultural, horticultural, or quarrying business, or of printing and publishing newspapers, periodicals, books, or engravings, and of co-operative trade. Seven or more persons may associate themselves, with a capital of not less than one thousand nor more than one hundred thousand dollars.

3. Such agreement shall set forth the fact that the subscribers thereto associate themselves together with the intention of forming a corporation, the corporate name assumed, the purpose for which it is formed, the town or city, which shall be in this commonwealth, in which it is established or located, the amount of its capital stock and the par value and number of its shares.

4. Any corporate name may be assumed which indicates that it is a corporation, and which is not in use by an existing corporation

* Public Statutes (1882), chap. 106, §§ 6-9, 16-21, 31, 34, 38, 72, 73; chap. 171, § 34. The sections quoted are portions of the general corporations act passed in 1870. Special charters have also been granted by the legislature.

or company ; and the name assumed shall be changed only by an act of the general court. The words "corporations" shall form a part of the same.

5. The first meeting shall be called by a notice signed by one or more subscribers to the agreement, at which an organization shall be effected. The president, treasurer and a majority of the directors shall forthwith make, sign and swear to a certificate, setting forth a true copy of the agreement of association, with the names of the subscribers thereto, the date of the first meeting, etc. Such certificate, after approval by the commissioner of corporations, shall be filed in the office of the Secretary of State.

6. Every such corporation shall distribute its profits or earnings among its workmen, purchasers and stockholders, at such times and in such manner as shall be prescribed by its by-laws, and as often at least as once in twelve months ; but no distribution shall be made until at least ten per cent. of the net profits has been appropriated to a contingent or sinking fund, until there has accumulated a sum equal to thirty per cent. in excess of the capital stock.

7. No person shall hold shares in any co-operative association to an amount exceeding one thousand dollars at their par value, nor shall any stockholder be entitled to more than one vote upon any subject.

8. The par value of any such corporation may be one hundred dollars or any sum fixed in its articles of association, and any such corporation at a meeting of the stockholders, called for the purpose, may change the par value of its shares ; provided that a certificate of such change shall within ten days thereafter, duly signed and sworn by its officers, be filed with the Secretary of State.

9. Every corporation, at a meeting called for the purpose, may increase or reduce the amount of its capital stock and the number of shares therein, within the limitations provided.

10. When a co-operative association increases its capital stock, the new shares may be sold or issued in such manner as the stockholders may by vote direct, but not for a less amount than the par value thereof.

11. Shares in co-operative associations, not exceeding twenty dollars in value in the aggregate shall be exempted from attachment for debt.

MINNESOTA.*

The Connecticut Statute, already quoted, is a transcript of the original act of 1870. Section 6 was repealed in 1881, and the following new section added :

If any person shall recover judgment against any association created under the provisions of this act, and if, after the issue of execution upon such judgment, demand shall be made on the treasurer, or any of the board of managers, for payment of the same, or for property to be exposed to satisfy such execution, and if the same shall not be paid or satisfied, the officer shall make return of such fact upon the execution, or upon any *alias* execution that may issue, so long as any part thereof remains unsatisfied; and, if after thirty days shall have elapsed, the balance of such execution remains unpaid, the creditor may apply to the Supreme judicial court, setting forth the facts and praying for an injunction to restrain such association from alienating or transferring any of its property, and doing any business until such judgment is satisfied, and the said court shall grant such injunction; or the judgment creditor may apply to the district court in the county in which such an association has a place of business, setting forth the facts, and after due notice and hearing thereupon, a warrant shall issue under the law in relation to insolvent corporations; and proceedings shall be had as in other cases of insolvent corporations; and said association may at any time apply for the benefit of the acts in regard to insolvent corporations.

NEW JERSEY.†

1. That it shall be lawful for any number of persons, not less than seven, residents in this state, to associate themselves into a society for the purpose of carrying on any lawful mechanical, mining, manufacturing or trading business, or for the purpose of trading and

* General Statutes (1878), chapter 34, sections 155-165: "Act in relation to co-operative associations," March 4, 1870. Section 6 was repealed in 1881.

† An Act to provide for the formation and regulation of co-operative societies of workingmen, approved March 10, 1884. This supercedes the act of 1881.

dealing in goods, wares and merchandise or chattels, or for the purpose of buying, selling, settling, owning, leasing and improving real estate and erecting buildings thereon, within this state, upon making and filing a certificate of association, in writing, in manner hereinafter mentioned, and as such shall be deemed to be a corporation, and to possess all powers incident thereto.

2. That such certificate of association shall set forth :

I. The name assumed to designate such society and to be used in its business and dealings, which name shall have the word "co-operative" as a distinguishing part thereof, but shall in no respect be similar to that of any other society organized under this act ;

II. The place or places in this state where the business of such society is to be conducted, and the location of the principal office of the same ;

III. The objects for which the society shall be formed ;

IV. The total amount of capital stock of such society, the number of shares into which the same is divided, the par value of each share, the manner in which the installment on the shares shall be paid, the number of shares subscribed, and the amount actually paid in cash on account of the same ;

V. The terms of the admission of members ;

VI. Mode of application of profits ;

VII. The mode of altering or amending the certificate of association and the by-laws of the society.

3. That the said certificate of association shall be signed by the persons originally associating themselves together, and shall be proved or acknowledged by at least seven of them before an officer qualified to make acknowledgements of deeds of real estate, and after being approved by the chief of the bureau statistics of labor and industries, shall be recorded in the office of the clerk of the county where the principal office or place of business of such society shall be established, and a copy of such certificate shall be filed in the office of the chief of the bureau of statistics of labor and industries.

4. That the business of every such society shall be managed and conducted by a board of not less than five directors, who shall respectively be members of said society and shall be annually elected at such time and place as shall be provided in the by-laws of the

society, and one of such directors shall be chosen president and one of them shall be chosen treasurer, and such directors and officers shall hold their respective offices until their successors are duly qualified; and that such society shall also have a secretary and such other officers, agents and factors as may be necessary to carry on its business, and shall choose them in the manner prescribed by the by-laws thereof.

5. That the first meeting of such society shall be called by a notice signed by a majority of the persons named in the certificate of association, and designating the time, place and purpose of the meeting, and shall be personally served on all the persons signing said certificate, or by advertisement in a newspaper published in the county where such society shall have been incorporated, if such personal service cannot be made; and at such meeting so called, or at any adjourned meeting thereof, a majority of the persons so signing shall constitute a quorum for the transaction of business, and shall have power to elect the directors and other officers provided for in section fourth (4) of this act, who shall serve until their successors duly qualify, and to adopt by-laws, rules and regulations for the government of such society.

6. That the by laws of such society shall provide:

I. For an annual meeting of the members thereof, and such other regular and special meetings as may be deemed desirable, the number of members necessary to constitute a quorum for the transaction of business, and the right of voting at the same;

II. For the election of directors and other officers, agents and factors, and their respective powers and duties;

III. For the limitation of the amount of such real and personal estate as the purposes of the society shall require;

IV. Whether the shares, or any number of them, shall be transferable, and in case it be determined that the same shall be transferable, provision for their transfer and registration, and the consent of the board of directors to the same; and in case it shall be determined that the shares shall not be transferable, provision for paying to members the balance due to them on withdrawal, or of paying nominees in cases hereinafter mentioned;

V. How members may withdraw from the society;

VI. Whether and by what authority any part of the capital may

be invested in or on security of another society through which its products are disposed of or its supplies secured ;

VII. Whether and to what extent credit in its business transactions may be given or taken ;

VIII. In what sum and with what sureties the treasurer and other fiduciary officers or agents shall give bonds for the faithful performance of their respective duties ;

IX. For the audit of accounts ;

X. For the distribution of the net profits ;

XI. For the custody, use and device of the seal, which shall bear the incorporated name of the society.

7. That every society incorporated under this act shall paint or affix, and shall keep painted or affixed, its name on the outside of every office or place in which the business of the association is carried on, in a conspicuous position in letters easily legible.

8. That every society incorporated under this act shall have a registered office to which all communications and notices may be addressed, and notices in writing of the location of such office, and of any change therein, shall be filed with the chief of the bureau of statistics of labor and industries, and in the office of the clerk of the county where the office of such society is located.

9. That the capital stock of such society shall be divided into shares the par value of which shall not be more than fifty (50) dollars, and no share shall be issued for less than its par value ; and that no certificate of shares shall be issued to any member until the shares are fully paid up.

10. That no member of such society shall be entitled to more than one vote upon any subject, which must be cast in person ; and that the board of directors shall have power, unless otherwise provided in the by-laws of the society, to fix and regulate the number of shares to be held by any one member.

11. That any society incorporated under this act may hold in its corporate name any amount of interest in any other society through which its products are disposed of or its supplies secured ; *provided*, that such interest so held shall not exceed one-third in value of the paid-up capital of the society holding said interest.

12. That the board of directors of every society incorporated under this act shall annually make a statement in writing of the

condition of such society, setting forth the amount of capital stock, the number of shares issued and the par value thereof, the number of stockholders and number of shares held by each, the amount and character of the property of the society and of its debts and liabilities; and said statement shall be signed and sworn to by a majority of directors, including the treasurer, and filed in the office of the clerk of the county where the principal office of such society is located, and that immediately thereafter a copy of such statement shall be forwarded to the chief of the bureau of statistics of labor and industries, who, if he shall have reason to doubt the correctness of such statement or upon the written request of five members of such society, shall cause an examination of the books and affairs of such society to be made and render a correct statement to the members thereof; and every member or creditor thereof shall be entitled to receive from the secretary a copy of such annual statement; and every director or other officer refusing to comply with the requirements of this section, or making and signing a false annual statement of the condition of the society, shall forfeit for each offense the sum of one hundred dollars, to be recovered in an action of debt in any court of competent jurisdiction in this State by any member or creditor of the society who shall sue for the same.

13. That any member or other person having an interest in the fund of any such society, may inspect the books thereof, at all reasonable hours, at the office thereof.

14. That there shall be such distribution of the profits of such society, among the workmen, purchasers and members, as shall be prescribed in the certificate of association, at such times as therein prescribed, as often at least as once in twelve months; provided, that no such distribution shall be made until a sum equal to five per centum of the net profits shall have been appropriated for a contingent or sinking fund, and that such appropriation shall continue to be made until there shall be accumulated a sum equal to thirty per centum of the capital stock of such society.

15. That any member of such society, by writing under his hand, delivered at the office of the society, may nominate any person, being the husband, wife, father, mother, child, brother, sister, nephew, or niece, or other relative of such member, to whom his or her

share of the capital stock of the society shall be transferred at his or her decease, and from time to time may revoke or vary such nomination, by a writing similarly delivered ; and such society shall keep a book, wherein the names of all persons so nominated, and the number of shares to be transferred shall be recorded ; *provided, nevertheless*, that in lieu of making such transfer, the society may provide for payment to all such nominees of the full value of shares intended to be transferred ; *provided, also*, that if by the by-laws of the society the shares are transferable, this section shall not be construed to forbid the transfer of such shares by sale or will, or otherwise, subject to the consent of the board of directors.

16. That any such society may be dissolved in the manner in which any other corporation may be dissolved under existing laws.

17. That where the whole capital of such society shall not have been paid in, and the assets of such society shall be insufficient for the payment of its debts, liabilities and obligations, each stockholder shall be bound to pay, on each share held by him, the sum necessary to complete the amount of such share, as fixed in the certificate of association, or such proportion as shall be required to satisfy such debts, liabilities and obligations ; provided, however, that no such contribution shall be required from any person after the expiration of one year from the time he has ceased to be a member, or for any debt, liability or obligation contracted after he has ceased to be a member of such society.

18. That an act entitled "An act to encourage the organization and regulate co-operative associations of workmen," approved March twenty-second, one thousand eight hundred and eighty-one, be and the same is hereby repealed, but no association established under said act, or any person having claims or demands against such association shall be affected by the repeal thereof, but in respect to such association, the said act shall still be in full force and effect ; provided, however, that any such association may come under and be subject to the provisions and liabilities of this act, in the same manner as if formed under the same, if such association make and file the certificate of association required by this act.

NEW YORK.*

1. Any number of persons, not less than three, may associate and form an incorporation or company for the purpose of uniting their labor, capital or patronage, in any business or occupation upon the co-operative plan, upon filing in the office of the secretary of state a declaration, signed by the incorporators, expressing their intention to form such a company, together with a copy of the charter proposed to be adopted by them.

2. The charter so filed shall set forth the name of the company, the town and county, the mode and manner in which the corporate powers granted by this act are to be exercised, the duration of the charter which shall not exceed twenty-five years, the number of trustees or directors, and the mode and manner of electing them for the first year and of filling vacancies, the period for the commencement and termination of its fiscal year, and the amount of capital to be employed in the transaction of its business; but no company shall be organized under this act with a capital of less than one thousand dollars, nor shall the declaration or charter of any company proposed to be formed be filed as required by the first section, except upon due and sufficient proof to be made to the secretary of state, upon the oath of at least two of the incorporators, that the whole amount of said capital has been subscribed in good faith, and at least ten per cent. thereof actually paid in, in cash.

3. A copy of said declaration and charter should also be filed in the office of the clerk of the county wherein the said company shall be located, and a notice of the intention to form such a company shall be published once in each week for at least four weeks in a newspaper published in said county.

4. Upon filing a declaration and charter as aforesaid, the persons who have signed the declaration, and their associates and successors shall thereupon, by virtue of this act, be a body politic and corporate; and by the name stated in such charter, and by that name they and their successors shall and may have succession, and shall be capable of suing and being sued, and they and their successors may have and use a common seal, and the same alter and change

* "An act for the incorporation of co-operative and industrial unions,"—Laws of 1867, Chap. 971; and amended by chap. 65, Laws of 1878; also changing title to "An act incorporating co-operative companies"; and by chap. 293, Laws of 1879.

at pleasure ; and they and their successors, by their corporate name, shall, in law, be capable of taking, receiving, purchasing and holding real estate, for the purpose of their incorporation and business, not exceeding two hundred thousand dollars in value, and of mortgaging, selling, conveying and otherwise disposing of the same, as the interests and objects of the company may require.

5. The business of the companies incorporated under this act shall be managed and conducted by a president, a board of not less than three directors, and a treasurer, who shall be chosen annually by the stockholders, and shall hold their offices until others are chosen and qualified in their stead, and by such other officers as they may prescribe by their by-laws. At elections of officers, and at all other meetings, each stockholder shall have one vote and no more. Companies organized under this act shall have the word "corporative" as a part of their corporate or business name wherever used, either in advertising or transacting their business.

6. The incorporators or trustees, or directors, as the case may be of any company organized under this act, shall have power to make such by-laws, not inconsistent with the laws of this State, as may be deemed necessary for the government of its officers and conducting its affairs, and the same to alter and amend at pleasure ; and they may also, by such laws, provide as to the manner of paying in the capital stock, and the manner of issuing certificates thereof, as to the manner of conducting the elections in said company, as to the control of its affairs that each officer shall have, as to the number of shares each stockholder may hold, as to the manner of compelling the transfer or exchange of stock any one stockholder may acquire, in excess of such number of shares, as to the manner of distributing the profits, and in such proportion as may be thought proper, upon the labor and patronage in the business of said company, as to the amount and time for which debts may be contracted, and as to the time and manner in which the trustees or directors shall make reports and render accounts as to the condition of the company and its affairs. But every such company shall, at the beginning of each fiscal year, fix and determine the maximum per cent. of dividend, which may be apportioned upon the stock out of the profits which may accrue during the year.

7. The indebtedness of any such company shall not at any time exceed one-half the amount of its capital stock; and any director or trustee assenting thereto shall be personally and individually liable for such excess to the creditors of said company.

8. All the stockholders of every company under this act shall be severally individually liable to the creditors of the company in which they are stockholders, to the amount of stock held by them respectively, for all debts and contracts made by said company.

9. Every corporation created under this act shall possess the general powers, privileges, and be subject to the liabilities and the restrictions contained in title third, chapter eighteen of the first part of the Revised Statutes,* and the provisions of section six, article first, title two, chapter thirteen of the first part of the Revised Statutes,† shall apply to every such corporation.

10. The trustees or directors of any such corporation may be elected by a majority of the stockholders present and voting at a meeting called and held for that purpose, and of which a notice, specifying the object thereof, the time and place when and where such meeting will be held, shall be served on each stockholder by depositing in the post office where the principal office of such corporation is situated, at least ten days previous to the day named therein for holding such meeting, a written or printed copy thereof, properly folded and enclosed in an envelope, addressed to him at his usual place of residence, and prepaying the postage thereon, anything in the charter of any corporation or in any act to the contrary, notwithstanding.

OHIO.

The Revised Statutes (1879) provide, that any persons, not less than five, a majority of whom are citizens, may become incorporated for any purpose for which individuals may lawfully associate, except for dealing in real estate or carrying on professional business. Section 3837 further provides that :

An association incorporated for the purpose of purchasing, in quantity, grain, goods, groceries, fruits, vegetables, provisions or

* The general powers, privileges and liabilities of corporations.

† Taxation of corporations.

any other articles of merchandise, and distributing the same to consumers at the actual cost and expense of purchasing, holding and distributing the same, may employ its capital and means in the purchase of such articles of merchandise as it deems best for the company, and in the purchase or lease of such real and personal estate, subject always to the control of the stockholders, as may be necessary or convenient for purposes connected with or appertaining to its business, and may adopt such plan of distribution of its purchases among the stockholders and others as it seems most convenient and best adapted to secure the ends proposed by the organization; and any profits that may arise from the business of the company may be divided among the stockholders from time to time, as it deems expedient, in proportion to the several amounts of their respective purchases.

By a supplement to the Revised Statutes of 1879, passed March 19, 1884, it was provided:

1. A corporation may provide in its articles of incorporation that each stockholder, irrespective of the amount of stock he may own, shall be entitled to one vote, and no more, at any election of directors or upon any subject submitted at a stockholders' meeting, and when such provision is made it shall be governed thereby.

2. Every such corporation shall be subjected to the following provision:

a. No person shall hold or own stock in excess of one thousand dollars face value.

b. The directors shall annually, within thirty days after the thirty-first day of December, make and file with the recorder of the county in which the corporation is doing business, a statement of its financial condition upon the said thirty-first day of December, plainly setting forth its assets and liabilities in detail, the amount of its paid up capital stock, the names of its stockholders, and the number of shares owned by each, and said statement shall be signed and sworn to by a majority of the directors, including the treasurer, before any officer authorized to administer oaths in this State. If the Board of Directors fail to make the annual statements required by this section, or if they make a false statement, they shall be personally liable for all claims and demands against such corporation.

c. By-laws for the government of the corporation, and for the distribution of its net earnings among its workmen, patrons and shareholders, not inconsistent with the constitution and laws of the State, may be made by the stockholders.

PENNSYLVANIA.*

1. Co-operative associations, productive and distributive, may be incorporated under this act, upon compliance with its requirements, by any five or more farmers, mechanics, laborers or other persons, who shall have associated themselves together by written articles of association, such as are hereinafter described, for the purpose of carrying on any agricultural, horticultural, mining, quarrying, building, mechanical, manufacturing or commercial, or for the purpose of manufacturing, cultivating, raising, trading or dealing in all kinds of goods, wares, merchandise, chattels, grain, vegetables, roots, fruits and other produce, or animals for sale, food or other purposes, or for the purpose of buying, selling, holding, leasing or improving lands, tenements or buildings; and that such persons, so associating, may adopt any corporate name, indicating their co-operative character and which has not been previously adopted by any other corporation, formed under this act; provided, that the two last words of such name shall be "co-operative association," and that it shall not be lawful to use, in such name, either the words "Society" or "Company," and that any violation of this proviso by any corporation, formed under this act, shall render each member thereof personally liable for all debts.

2. Before any association framed under this act shall commence its business, its articles of association shall be filed and recorded in the office of the Secretary of State of this State, and two copies of said articles shall be made, which the said Secretary of State shall certify by his official signature and the seal of this State as being correct copies of said articles so filed and recorded, one of said certified copies shall be filed and recorded in the office of the recorder of deeds of the county in which the principal office of the

* Laws 1887, chapter 252.

association shall be located, and the said recorder of deeds shall certify by his official signature and the seal of his office that the said certified copy of said articles has been filed and recorded in his office, and the other certified copy of said articles shall be held by the association named therein; and the said articles or copies thereof duly certified by either of the aforesaid officers may be used as evidence in all courts and places of the incorporation of as well for or against such association; and the said Secretary of State and the said recorder of deeds shall each be paid for said filing, recording and certifying, at the rate of ten cents for each one hundred words contained in said articles; and after such articles of association shall have been made, filed and recorded, as herein required, the person signing the same, and such other persons, partnership or corporations, who shall, from time to time, own and possess any share or shares in the stock capital of such association, and their several successors and assigns shall be deemed and taken to be a body corporate and politic, by the name and for the purposes mentioned in such articles of association.

3. The articles of association shall be signed by the persons originally associating themselves together, and shall be acknowledged by at least five of them, before a notary public, and shall state distinctly:

First. The name by which such association shall be known.

Second. The place in this State where its principal officer is to be located.

Third. The purpose or object for which it is formed.

Fourth. Whether its stock capital is fixed, and, if so, what amount, or whether such capital is to be of an amount varying from time to time, as the business may require.

Fifth. The amount of each share of permanent stock and ordinary stock of such capital, and how such shares may be paid for.

Sixth. The amount of capital that will be actually paid in before commencing business.

Seventh. The terms on which persons may become members.

Eighth. On what days in January, April, July, and October, regularly or quarterly meetings of the members are to be held.

Ninth. Such other matters, not repugnant to this act, as may be deemed proper and necessary.

Tenth. The term of its existence, not to exceed thirty years, and

Eleventh. The names of the first associates, their respective residences and the number and class of shares held by each of them.

4. The stock capital of any such association shall consist of the amounts standing to the credit of members on account of the shares allotted to them, certificates for which shall be issued, from time to time, as such shares may have become fully paid up; and there may be two classes of shares, one of which classes shall be styled and known as "permanent stock," which shall not be withdrawable but may be transferred, subject to the by-laws of such association, and each member thereof shall take and hold at least one share of said permanent stock; and the other class of shares may be styled and known as "ordinary stock," which may be repaid, transferred or withdrawn, in accordance with the by-laws of such association; and the shares of either class may be of amounts not less than five nor more than twenty-five dollars each, and may be paid for in one sum, or by periodical installments, or by occasional subscriptions, or by the interest thereon, or by profit dividends.

5. It shall be the duty of any such association to exhibit in some conspicuous place, in its principal office, not later than three o'clock, post meridian, on the first business day of every month, and to continue the same in such place until the next exhibit shall be thus made, a statement showing correctly and distinctly the amount of such invested stock capital, and what proportion such stock capital bears to such loans or deposits, such statements to be made up to the close of the next preceding month, and to be signed by the president and treasurer, or by any two of the directors, and to be attested by the secretary and auditors of such association, and if any of such officers as aforesaid shall wilfully make or knowingly consent to any false statement in such exhibit, he shall, by so doing, be deemed to have committed a misdemeanor, and shall, upon conviction thereof, be punished as provided in section thirteen of this act: *Provided*, Any member or other person having an interest in the funds of such association, or any person legally authorized to assess property for taxes, may inspect the books and accounts during the official business hours, but no such member, person or assessor, unless he be an officer of such association, or be especially authorized by a resolution thereof, shall have the right

to inspect the share or other account of any other member or person, without his written consent.

6. The amount of stock capital of such association to be taken, held or claimed at any one time by any person or persons, jointly or by partnerships, or by corporations, shall not exceed one thousand dollars, except consent therefor be voted by the members, at any regular quarterly meeting thereof, nor shall any member, upon any subject at any meeting, be entitled to more than one vote, which shall be given in person and not by proxy, and any stock capital held by persons jointly or by partnerships, or by corporations, shall be voted upon as if held by one person only respectively, and subject to the laws of such association.

7. It shall be lawful, if the by laws so provide, for any minor to take and hold shares in or to make loans or deposits of money to or with any such association, and for such association to pay to any minor any moneys that may be due to him in respect of any such shares, loans or deposits standing in his name, and his receipt therefor shall be in all respects valid in law, but such minor shall not be eligible to hold any office in such association, though he may, subject to its by laws, vote at any meeting of its members.

8. Any such association may buy from, sell to and trade or deal with any of its members, or other persons, partnership or corporation, but all transactions shall be for cash, and no credit shall either be given or taken, except that such association may control for and pay the wages and salaries of its employees once in each week in cash, and except that such association may sell real estate, improved or otherwise, on such terms that at least one-fourth of the agreed price shall be paid in cash, at the time of sale, and that not more than three-fourths of the agreed price, together with interest on the amount of principal, interest and charges owing from time to time, at a rate not exceeding six per centum per annum, may be secured by bond and mortgage, or by promissory notes and mortgages, and be made payable by fixed and equal installments: *provided however*, That such association may take or grant leases of real estate for such terms as may be agreed upon, but no such lease for any time exceeding one year, or creating a credit or liability for any sum exceeding three hundred dollars, shall be lawful or valid until the same shall be approved by a vote of the members at

any regular quarterly meeting thereof: *and provided further*, That any credit given to any such association in violation of the provisions of this act shall cause a forfeiture of any credit thus illegally given, and that a notice to such effect be published, by such association, on its letter and bill heads, advertisements and other publications.

9. The members shall be severally and jointly liable for all debts for labor or other services of any kind performed for such association, and for any other debts lawfully incurred under the provisions of this act each of the members shall be liable to the amount of his unpaid stock capital and no more, but no suit shall be brought or any execution issued against any member individually until a judgment be first obtained for such labor, services, or any other lawful debts against such association, and execution thereon be returned unsatisfied in whole or in part; and in case any member shall be compelled to pay such judgment, or any part thereof beyond his *pro rata* liability therefor, he shall have the right to call upon all the members to pay their *pro rata* share of the same, or up to their *pro rata* liability therefor, and may sue them jointly or severally, or any number of them, and recover in such action the ratable amount due from the member or members sued; provided, that stock capital to the extent of twenty-five dollars belonging to any member in such association, who is a householder and has a family, shall not be subject to attachment or execution, or liable in garnishment for his individual debts.

10. Any such association may carry on its business, or any part thereof, at any one or more places within this State; and may take, hold, lease, and convey such personal and mixed estate as may be necessary for the purposes of its organization; and may sue and be sued in its corporate name, and may submit any matter in dispute to arbitration; and shall have a common seal, which shall not be altered or imitated, and shall bear the corporate name of, together with such device or motto as may be adopted by such association, and such seal shall be impressed upon the articles of association; and any such association may, for all and every, and any of the purposes of its organization, and for every and any other purpose incidental thereto, or in this act mentioned or referred to, lay out and use its capital or other moneys and property for the time being, or

any part thereof, with power to do, authorize, and exercise all acts and powers whatsoever in the opinion of the directors of such association requisite or expedient to be done or exercised in relation thereto.

11. Any such association may, by a majority vote of its members at any meeting specially convened therefor, authorize the directors thereof to invest, in the name of such association, such an amount of its stock capital or reserve fund, and on such terms as such meeting shall determine, in the stock capital of any other duly incorporated co-operative association in this State, or in any other State or county, and any such association may, by a like vote, permit an investment in its stock capital by any other co-operative association duly incorporated in this State or in any other State or county; provided, that the original laws of such associations permit or authorize such investments.

12. The final meeting of any such association may be called by a notice signed by any two of the associates, who signed its articles of association, setting forth the time, place, and object of such meeting; such notice to be mailed to the address of each associate at least four clear days prior to such meeting, and a majority of such associates at such meeting shall be competent to make all such by-laws as they may deem necessary for the proper management of the business, property and affairs of such associations, so that such by-laws are not repugnant to or inconsistent with the provisions of this act, or of any law of this State and of the United States, to elect the first president and directory, both of whom shall be directors ex-officio, treasurers and either six, eight or ten directors and two auditors, all of whom shall be members of such association, and hold their offices until their successors shall have been elected in accordance with section fifteen of this act, and to transact any other business necessary for the organization of such associations, and appropriate to such meeting; and the secretary of such meeting shall make full and correct minutes of its proceedings upon the book of such association and the same, being signed by its chairman, shall be deemed and taken to be *prima facie* evidence of the action of such meeting.

13. Every such association shall hold quarterly meetings of its members in the month of January, April, July and October, at

such place as the director shall determine and publish, for the purpose of considering and determining upon any matter not requiring special notice, relating to the business of such association, and at each quarterly meeting the director shall present a full and complete report, signed by the president of such associations, transaction during the last preceding quarter, accompanied by such information and suggestions in relation to the future management thereof as may be for the best interest of the association and they shall also present at each quarterly meeting, an account of all cash receipts and payments of the losses and gains of such association for the last preceding quarter, and also a general statement or balance sheet of such association's funds, effects and liabilities and assets as at the close of the last business day of said quarter, and such account and general statement shall be signed by the president and treasurer, and be attested by the secretary and auditor of such association, and a copy of such report, account and general statement shall be kept posted up for three months at least, in a conspicuous place in the principal offices and other places of business of such association; and any director, president, treasurer, secretary, auditor or other officer, who shall include or knowingly consent to any false statement in such report, account or general statement, or in any other statement required to be made by this act, or by any vote of the members at any meeting thereof, shall be deemed guilty of a misdemeanor, and upon conviction thereof, be punished by a fine of not more than one thousand dollars, or by imprisonment in the State prison for not more than one year, or both such fine and imprisonment, in the discretion of the Court.

14. After the first election of the directors, officers and auditors, as provided in section twelve of this act, the president, secretary, treasurer and one-half of the directors and auditors shall be elected at the quarterly meeting in January, and the other half of the directors and auditors shall be elected at the quarterly meeting in July, and shall hold the several offices for one year, or until their successors are elected, and the directors shall decide by lot or otherwise the first half of the directors and auditors to retire at the first election that may be made at a quarterly meeting aforesaid. The by-laws of such association shall provide how nominations shall be made and votes be taken for president, secretary, treasurer, directors and

auditors, and also their eligibility and qualifications for their several duties, responsibilities and remuneration, and for their removal from office for good and sufficient cause; provided, that each of the official acts of the board of directors shall be by a majority vote of all the directors-elect, and shall be recorded with the year and month thereon, in the minute-book of the association.

15. The profit shall be ascertained and declared on all business carried on in each department or branch, or by, or for, or on account of any such association for each quarter year ending with the months of March, June, September and December, and the profits realized shall be applied as follows:

First. In reduction of the value of the fixed stock and plant of such association at the annual rate of ten per centum, or more, on fixtures, machinery, tools, *et cetera*, and of two and one-half per centum, or more, on warehouses, stores or other buildings as the directors shall determine and order.

Second. In the reduction of the preliminary expenses, if any, incurred in the formation of such associations, and remaining unwritten off in its books at such rate, being not less than five per centum per annum, as the directors shall determine and order.

Third. In the providing for or payment of interest, at the annual rate of six per centum, on permanent stock, and five per cent. on ordinary stock and the reserve fund; provided, however, that such interest shall be credited to each member, but shall not be paid until his stock is fully paid up.

Fourth. In forming, by applying such sum or percentage of the net or remaining profits after providing for the preceding charges on the directors, shall determine and order a new fund, to which also all fines and forfeitures shall be carried, applicable as follows: First, to the equalization of dividends, second, to meet any other contingency affecting the business of such association; and third, to any other purpose as may be voted by the members, on the recommendation of the director.

Fifth. In forming and maintaining a propaganda and social fund, to which shall be credited such sum, being not less than two and one-half per centum of the net profits, as the directors shall determine and order.

Sixth. And the remainder of the net profits shall be divided, as

follows: On the wages and salaries of employes the same rate that may be allotted on the purchases of members, such wages or salaries to be the amount earned, and such purchases to be the amount actually paid in cash during the period to which such dividend relates; *provided*, That no profit dividends shall be allowed on the purchases of such articles as the directors may have given previous notice of their intention to exclude from participation in profits; *and provided further*, That all such profit dividends shall be credited to such members, non-members and employes, respectively, to accumulate and be applied in or toward the payment of shares of permanent stock or ordinary stock, or the directors may from time to time determine and order the issue of paid up certificates therefor, until the amount of stock capital held in such member individually reaches the limit allowed by this act; after which the profit dividends may be paid to such members as shall be provided for in the by-laws of such association.

16. Every such association shall have a regular business office, to which all communications and notices shall be addressed; and service of any legal process on any such association shall be made by leaving at such office a true copy of such process with any director, officer, clerk, or agent of such association; and, in case such office shall be kept closed against such service, then service of such process may be made on such association by giving a true copy thereof to any of its directors or officers, if found in the county wherein such office is located, and if on a return of such a process it appears that such office is kept closed, or that such directors or officers could not be found within the said county, then such process may be served on such association by serving a true copy thereof on any of its directors or officers wherever found in the State; and failing in that, and on a return made to such effect, the court may order such public action as it may deem requisite to be made in the premises for at least one month in at least one newspaper, published at or as near as may be to the place where the principle officer of such association is located, and proof of such publication shall be held to be due service on such association.

17. Every person appointed to any position in any association retaining the receipt, payment, management, or use of money belonging to such association, shall, before entering upon the dis-

charge of his duties, become bound, with two or more good and sufficient securities, in such sum and form as the directors shall require and approve; and the directors may also require from any other employe of such association bonds, with good and sufficient security, for the faithful discharge of those duties.

18. Any such association may charge any of its members, employes, or other person doing business with it, by way of fine, for any breach or non-observance of its by-laws, or any of its business rules and regulations, such reasonable sum, not more than five dollars for each offense, as the directors may determine and order, and all such fines shall be due and payable forthwith, and if not paid the same may be deducted from any moneys due, credited, or accruing to the party so offending.

19. If any director, officer, clerk, agent or other person in the employment of such association, shall embezzle or fraudulently dispose or convert to his own use, or shall take or secrete, with intent to embezzle and convert to his own use, any money or other property of such association, or if any of its dealers or customers, which shall have come into his possession, or shall be under his charge by virtue of such office or employment, or otherwise, he shall be deemed, by so doing, to have committed the crime of embezzlement, and shall, upon conviction thereof, be punished as the law directs.

20. Any such association may alter or amend its articles of association, and may alter or rescind any by-laws, or make any additional by-law, with the consent of a majority of its members present at a special meeting convened for such purpose, but the notice calling such meeting shall set forth fully and clearly the proposed alteration, amendment, rescision or addition; and any alteration or amendment of the articles of association shall be filed, recorded and certified in the same manner as the original articles of association.

21. The articles of association and by-laws, and any amendments thereto or alterations therein, respectively, of any such association shall be recorded in a book to be kept for that purpose, and such book shall be open during business hours at the principal office of such association for the inspection of its members and other persons having an interest in its funds, and such articles of association,

by-laws and amendments thereto and alterations therein, respectively, so recorded, shall be binding on such association, its directors, officers, members and employees, and on all other persons having an interest in the funds of or dealing with such association, and all persons claiming on account of any or either of them, or under such articles of association, by-laws or amendments thereto or alterations therein, respectively, to the same extent as if each and every such person had subscribed his name and affixed his seal thereto, and there were in such articles of association by-laws or amendments thereto, or alterations therein, respectively, contained a covenant on the part of himself, his heirs, executors, administrators and assigns to conform to such articles of association, by-laws and amendments thereto, or alterations therein, respectively, subject to the provisions of this act, all of whom shall be deemed and taken to have full notice thereof by such record as aforesaid, and the entry of such articles of association, by-laws and amendments thereto or alterations therein, respectively, in the books of such association, or a true copy of the same, examined with the original, shall be received as evidence thereof in all courts and places.

22. Any co-operative association now in existence in this State, whether incorporated or unincorporated, shall be entitled to all the benefits of this act by complying with its provisions, and may, by a vote of the majority of the members of such co-operative association to be taken according to its existing articles of association or by-laws, determine to avail itself of the provisions of this act and to take and assume corporate name and powers thereunder, and may, by a like vote, transfer to such association, so formed under this act, all its property, real, personal and mixed, and thereupon such association, to which said property is so transferred, shall take the same in the same manner to the same extent and with the like effect as the same were previously owned and held by the association so transferring the same, and may, in its corporate name, sue for and collect all dues and demands, subscriptions and other benefits belonging to such original incorporated or unincorporated association; *provided, however,* That such association so taking such property as aforesaid, shall take the same subject to all liens and trusts, both legal and equitable, to which the same was subject before such transfer, and shall also be liable for all debts and obliga-

tions of such previous association and shall pay the same to the full extent of the value of such property at the same time of so taking the same.

23. Any such association desiring for any reason to be dissolved prior to the expiration of the term of years specified in its articles of association may, by a resolution passed at a special meeting therefor, by a majority vote of all the members of such association, authorize its directors, or a special committee of members, to prepare or have prepared a full and true exhibit of the affairs, property and condition of such association, including an itemized statement of all its assets and liability and also to report whether, in the opinion of such directors or committee it would be best to continue or close up any or all of the business of such association, and, in the latter case to recommend such methods and means as in their judgment would be best adapted for closing up such business; such exhibit, report and recommendation to be printed and a copy thereof to be mailed, postage prepaid, to the last recorded address of every member of such association, together with a notice from the president of such directors, or chairman of such committee, as the case may be, convening a special meeting of the members to be held at such time, being not less than ten nor more than fifteen days from the date of mailing such notice, as such directors or committee shall determine and order for the purpose of considering and acting on such exhibit, report and recommendation as to such special meeting shall seem best: *provided*, That all votes taken on such recommendation at such special meeting shall be by ballot and that it shall require three-fourths of all the ballots cast to carry any motion for the winding up and dissolution of such association: *provided* also, That such president or chairman as aforesaid shall mail to every member of such association, along with the notice for the last mentioned special meeting a printed form of ballot for the use of such members as may be unable to attend at such special meeting, on which shall be printed two questions as near as may be in the following words: are you in favor of the winding up and dissolution of the association? answer yes or no, are you in favor of the plan as recommended for these purposes? answer yes or no, and such answer shall be signed by the members so answering, and such ballots may be addressed and mailed, postage prepaid, or be

personally delivered to such president or chairman as aforesaid at the principal office of such association; and all such ballots so received prior to or at the time appointed for such special meeting shall be opened and counted by the secretaries or tellers appointed by such special meeting along with the ballots cast on the same or like questions by the members present at such special meeting: *and provided further*, That in the event of a resolution being passed, as aforesaid by such special meeting for the winding up and dissolution of such association, a copy of such resolution, duly certified by the official signature of the president and secretary and sealed with the common seal of such association, shall be given to, and shall contain full instructions and authority for the parties to be named therein to answer and discharge the duties entrusted to them by such resolution; and upon the completion of such duties by said parties, they shall make a certificate, signed and sworn to by them before a notary public, upon such certified copy of the aforesaid resolution, that they have truly and faithfully discharged all the duties entrusted to them thereby, and that they have realized all the assets, and settled all the liabilities of such association in accordance with the instruction and authority given to them by such resolution; and such certificate and certified copy of such resolution shall be filed by such parties in the office of the Secretary of State of this State and of the recorder of deeds of the county wherein the principal office of such association was located, and such certificate and certified copy of resolutions shall be recorded by the said secretary and recorder of deeds in like manner as the articles of association of such association were recorded.

TENNESSEE.*

1. Co-operative associations may be organized with the privilege of buying and selling any agricultural products, and dealing in merchandise.

The form of charter of a co-operative association shall be as follows:

“State of Tennessee—Charter of Incorporation.

“Be it known, that [here insert the names of seven or more persons not under the age of twenty-one years] are hereby constituted a body politic and corporate, by the name and style of” (here insert the name of the company).

3. The said corporation shall have the power to deal in goods, wares and merchandise, wholesale and retail, upon paying license and taxes, as others engaged in like business, and taxes incidental to corporations.

The general powers of said corporations are—

(a). To sue and be sued by its corporate name.

(b). To have and use a common seal, which it may alter at pleasure; if no common seal, then the signing of the name of the corporation, by any duly authorized officer, shall be legal and binding.

(c). To purchase and hold, or receive by gift, in addition to the personal property derived by said corporation, any real estate necessary to the transactions of the corporate business, and also to purchase or accept any real estate in payment, or part payment, of any debt due to the corporation, and sell realty for corporation purposes.

d. To establish by-laws, and make all rules and regulations not inconsistent with the laws and constitution, deemed expedient for the management of corporate affairs.

e. To appoint such subordinate officers and agents, in addition to the president, secretary, or treasurer, as the business of the corporation may require.

f. To designate the name of the office, and fix the compensation of the officers.

g. To borrow money and issue notes or bonds upon the faith of the corporate property, and also to execute a mortgage or mortgages, as further security for repayment of money thus borrowed.

4. The following provisions and restrictions are coupled with said grant of powers:

a. A failure to elect officers at the proper time does not dissolve the corporation, but those in office hold the election or ap-

pointment and qualification of their successors.

b. The term of all officers may be fixed by the by-laws of the corporation, the same, however, not to exceed two years.

c. The corporations may, by by-laws, make regulations concerning the subscription, or transfer of stock ; fix upon the amount of capital to be invested in the enterprise ; the division of the same into shares ; the time required for the payment thereof by the subscribers for stock ; the amount to be called at any one time ; and in case of failure of any stockholder to pay the amount thus subscribed by him at the time and in the amounts thus called, a right of-action shall exist in the corporation to sue said defaulting stockholder for the same.

WISCONSIN.*

1. Any number of persons, not less than five, may become a body corporate for the purpose of engaging in and carrying on any trade or business upon the mutual, reciprocal or co-operative plan, under such rules and regulations as they may adopt conformably to the provisions of this chapter.

2. Such associations, having duly filed articles of incorporation according to law, may sue and be sued, hold property and execute deeds and contracts, and have all the rights and privileges of other corporations or of citizens.

3. No member of such association shall hold more than one office at one time.

4. Members and not shares of stock shall vote in electing officers and transacting any business of the association of whatsoever nature, but no proxies shall be allowed. No officer shall be elected, nor the constitution or by-laws be changed, added to or repealed, except by a two-thirds vote by ballot of all the members present at a regular meeting, of which each member shall have reasonable notice, nor shall any new business or trade be entered into, or contracts made or property bought or sold except by a two-thirds vote by ballot of all the members present, unless the executive committee or other duly elected officers shall be expressly empowered to do so by the constitution or by-laws.

* Laws of 1887, chapter 126, pp. 120-122.

5. The shares shall not be less than one dollar nor greater than ten dollars each. But members of any such association, or the association, itself, may own shares in any similar association, limited by section three of this act; provided, that the association as such may own as much as one-third of the capital stock of any similar association; but no association shall have more than one vote in the management of the affairs of any other association in which it may be a shareholder.

6. Persons not members may be employed by such associations, but no officer, member or employe shall hold or handle any funds belonging to the association, or in any manner transact its business without first giving good and sufficient security, signed by at least three persons who will each justify in twice the amount of the bond.

7. No association permitted by this chapter shall ever, under any circumstances, become indebted, or enter into obligations for real estate, goods or any property or thing whatsoever for more than two-thirds of the capital stock fully paid up.

8. Persons not members may purchase goods from such associations, but never for anything but cash or products at cash prices. All sales at retail shall be for cash or products at cash prices; provided that any association formed in pursuance of this act, when engaged in manufacturing or wholesaling, shall not be prevented by this section from granting the terms and credits usual to the trade, so far as may be deemed judicious and safe.

9. The capital stock of members shall be exempt from execution and attachment, except for the debts of the association; and no member shall be liable for such debts, beyond a sum equal to the par value of his capital stock paid up; and then only in the proportion that his stock bears to the entire stock paid up of the association.

10. Taxes shall be levied and collected on the property and goods actually owned and possessed by any association formed under this chapter at the time of making the assessment, and not on the capital stock, or shares.

11. Nothing contained in this act shall be construed to apply to or add to or take from the powers and privileges of existing corporations, nor to enlarge or abridge or take the place of statutes now in force relating to corporations.

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PART IV.

LABOR LEGISLATION.



Part IV.

Labor Legislation.

LAWS RELATING TO THE EMPLOYMENT OF LABOR AND AFFECTING THE INTERESTS OF WAGE EARNERS IN THIS STATE.*

CHAPTER IX.

A Supplement to an act entitled "An act providing for the establishment of schools for industrial education," approved March twenty-fourth, one thousand eight hundred and eighty-one, and making the trustees of such schools a body corporate, and giving them power to lease and purchase real and personal property, to sell and mortgage the same, and to accept and receive donations and bequests of money and property.

1. That the board of trustees of schools for industrial education, provided for and organized under the act to which this is a supplement, be and they are hereby created a body corporate under the name and style of "the board of trustees of schools for industrial education," with the right of perpetual succession, to sue and be sued, to purchase, lease and hold personal and real property, and to sell and mortgage the same, and with power to accept donation and bequests of money and property to be used for the purposes for which the said boards are constituted and organized.

2. That this act shall take effect immediately.

Approved March 3d, 1890.

* For the labor legislation of previous years, see the eighth (1885) and subsequent Bureau reports.

CHAPTER LXIII.

An Act relative to fire escapes.

1. That all buildings now or hereafter erected in which twenty or more persons live or congregate or are employed, temporarily or otherwise, above the first or ground floor thereof, shall have one or more, as the proper authority shall direct, external wrought iron fire escapes, of such dimensions and character and subject to such regulation and construction as the said proper authority shall designate.

2. That in all incorporated municipalities the board of aldermen, city council or borough commissioners shall provide for the enforcement of the provisions of this act by ordinance.

3. That in all sections outside of incorporated municipalities township committees shall have power to enforce the provisions of this act.

4. That this act shall take effect immediately.

Approved March 24, 1890.

CHAPTER CXVII

An Act to authorize common councils of cities to appropriate moneys to establish or aid public libraries and free reading rooms.

1. That it shall be lawful for the common council of any city of this State to appropriate, from any moneys not otherwise appropriated, such sum of money, not exceeding one thousand dollars, as may in their judgment be deemed necessary to establish or aid public libraries and free reading rooms.

2. That this act shall take effect immediately.

Approved April 2d, 1890.

CHAPTER CCLI.

An Act relative to banking, savings, trust, guarantee, safe deposit, indemnity, mortgage, investment, loan and building corporations.

1. That every banking, savings, trust, guarantee, safe deposit, indemnity, mortgage, investment, loan and building corporation or association organized under the laws of other states or foreign governments, on application for authority to transact business in this State, shall file in the department of State a duly authenticated copy of its charter or certificate of organization or incorporation, and a report of its condition at the close of business on the thirty-first day of December last preceding, in such form as may be prescribed by the board of bank commissioners, constituted by "An act concerning savings banks," approved April twenty-first, one thousand eight hundred and seventy-six, which shall be verified

by the affidavits of the president or vice-president and the treasurer or cashier or secretary of such corporation, and it shall be the duty of the Secretary of State to furnish blank forms for the report required, and the said board shall call for like reports at such other times as may seem to them expedient.

2. That if it shall appear by the report aforesaid that such corporation is possessed of an actually paid in, well invested and unimpaired capital stock of at least one hundred thousand dollars, it may be admitted to transact business in this State upon a certificate of authority to be issued by the Secretary of State, under the direction of the said board, which certificate shall only be issued when such corporation shall have complied with the further requirements of this act.

3. That the bank commissioners, before directing the issue of the certificate of authority as aforesaid, shall require every such corporation to deposit with the secretary of state such securities as they may prescribe, amounting to at least thirty thousand dollars, which securities shall be held by the secretary of state in trust, for the benefit of the creditors of such corporation within this State, and the bank commissioners shall have authority to order a change of such securities or any part thereof at any time, and no change or transfer of the same shall be made without their assent; such deposit shall be maintained intact in the full sum of thirty thousand dollars at all times, but the corporation shall be at liberty to receive the dividends or interest on the securities deposited; provided, that if any such corporation shall have and keep a deposit of at least one hundred thousand dollars with any department or officer of the State where organized, it may be admitted to the State without making the deposit herein required.

4. That every such corporation shall file a like report in January, annually, and if such corporation shall fail to file such annual report prior to the fifteenth day of February, or to furnish such additional reports or information as may be called for by the bank commissioners, within five days after notice to do so, it shall be liable in a penalty of two hundred and fifty dollars and costs of action, to be sued for and collected in the name and for the benefit of the State.

5. That every such corporation shall pay for filing a certified copy of its charter or certificate of organization or incorporation, twenty dollars; for filing original and annual reports, twenty dollars; for certificate of authority, annually, two hundred and fifty dollars; for certificate for each agency, five dollars, and shall defray all expenses incurred in making any examination of its affairs as herein provided for; and the bank commissioners may maintain an action, in the name of the State, against such corporation, for the recovery of such expenses, in any court of competent jurisdiction.

6. That if any such corporation or association itself, or by agents, attorneys, solicitors, surveyors, canvassers, collectors or other representatives of whatever designation, or any agent, attorney, solicitor, surveyor, canvasser, collector or other representative, or any individual or firm, whether on behalf of such corporation or not, shall solicit, negotiate or in anywise transact any business in this State, except in the enforcement of contracts by legal process, without having complied with the requirements of this act, they shall be liable in a penalty of two hundred and fifty dollars and all costs of suit, to be sued for and collected on complaint, in the name and for the benefit of the State, by the bank commissioners; the first process against any corporation or person complained of may

be by *capias ad respondendum*, and the person or persons against whom judgment may be obtained shall be committed to any county jail until such penalty and costs are paid, and the necessary expenses incurred by the bank commissioners in carrying out the provisions of this act, when not otherwise provided for, shall be paid by them out of the fees and taxes collected as herein provided for.

7. That the bank commissioners shall have authority themselves, or by such person or persons as they may designate, to examine the affairs of any such corporation whenever they may deem it expedient, and it shall be the duty of the officers and employes of every such corporation to exhibit its books, securities, records and accounts for such examination, and to otherwise facilitate the same so far as may be in their power to do, and the bank commissioners, or any examiner appointed by them, shall have power to examine, under oath or affirmation, the officers and employes of any such corporation relative to its business affairs, and for that purpose any such examiner shall have power to administer oaths and affirmations.

8. That whenever it shall appear, as the result of examination or otherwise, that the affairs of any such corporation are in an unsound condition because of illegal or unsafe investments, or that its liabilities exceed its assets, or that it is transacting business without authority, or in violation of law, or for any other reason which may seem to them satisfactory, the bank commissioners shall have power to cancel the authority of any such corporation of another state to transact business in this State, and as to such corporations of this State it shall be the duty of the attorney-general, on notice by the bank commissioners, to apply forthwith, by petition or bill of complaint or information, to the chancellor for an injunction restraining such corporation from the transaction of further business, or the transfer of any portion of its assets in any manner whatsoever, and for such other relief and assistance as may be appropriate to the case, and the chancellor, being satisfied of the sufficiency of such application, or that the interests of the people so require, may order an injunction, and make other appropriate orders in a summary way, and thereafter proceed in said cause according to law and the practice of the court of chancery.

9. That no such corporation, excepting building loan associations, shall hereafter be established under any law of this State without a certificate of authority by the bank commissioners, which shall not be issued in any case except after due inquiry and information, from which the commissioners shall be satisfied that the establishment of such a corporation will be of public service; and no such corporation, except as aforesaid, shall be organized or authorized to commence business until it has a capital stock of at least fifty thousand dollars, actually paid in cash, or securities to be approved by the bank commissioners, nor until they are satisfied that such corporation has complied with all the requirements of law; provided, that savings banks may be organized without capital stock; the charge for filing all reports by such corporations of this State shall be twenty dollars.

10. That in all suits or actions brought in any court of this State against any such corporation, not organized under the laws of this State, process served upon the Secretary of State shall be good and valid to all intents and purposes, and on

service of such process in duplicate it shall be the duty of the Secretary of State to notify such corporation immediately.

11. That the board of bank commissioners shall make annual report to the legislature, which shall embrace a statement of proceedings taken under this act and a summary of the annual report made by each corporation.

12. That all acts and parts of acts inconsistent with this act, be and the same are hereby repealed, and that this act shall take effect immediately.

Approved June 10, 1890.

CHAPTER CCXLVI.

A Supplement to an Act entitled "An act to encourage the establishment of mutual loan, homestead and building associations" [Revision], approved April ninth, one thousand eight hundred and seventy-five.

1. That it shall be lawful for any association incorporated under the provisions of the act to which this is a supplement, or otherwise lawfully existing in this State, to change the name set forth in its original certificate of incorporation, by a two-thirds vote of the board of directors of such association; provided, that a certificate under the hands of the president and the secretary of such association setting forth such proposed new name, and that the same was adopted by a two-thirds vote of the board of directors of such association at a meeting regularly held on a date specified in said certificate, shall be delivered to the clerk of the county where such association is or shall be located, to be by him filed and recorded.

2. That the name so certified to have been adopted shall, from the time of filing such certificate of change, be the true and proper corporate title of such association instead of the name set forth in the original certificate of incorporation; and all deeds, mortgages, contracts, actions, judgments, transactions, and proceedings whatsoever heretofore or hereafter made, received, entered into, carried on or done by said association before the adoption or certification as aforesaid of such change of name, but wherein the said association shall have been called by the name so subsequently adopted, are hereby declared to be as good, valid, and effectual in law as though said association were called therein by the name set forth in its original certificate of incorporation.

3. That this act shall take effect immediately.

Approved June 9, 1890.

CHAPTER CCLXI.

An Act relating to mutual loan, homestead and building associations.

1. That every mutual loan, homestead and building association organized under the laws of this State, or doing business therein, shall furnish through its secretary or other appropriate agent to the chief of the bureau of statistics of

labor and industries an annual statement of its business and condition according to the form required and on blanks furnished by said chief, which said statement shall be duly attested, under oath or affirmation, by the treasurer and an auditing committee of the stockholders or board of directors of said association, and the said board of directors are authorized to appropriate from the current income of said association a sufficient remuneration to the secretary thereof for preparing the statement aforesaid.

2. That on any failure to make such statement, the said chief, or his authorized agent, with the approval of the governor, may make an investigation, of the books, securities and accounts of any delinquent association which books, securities and accounts shall at all times be open to the inspection of the said chief or his duly authorized agent as aforesaid.

3. That it shall be the duty of said chief of the bureau of statistics of labor and industries to publish annually a concise report on the standing and condition of all the said associations doing business in this State, and to furnish each of said associations with one or more copies of such reports.

4. That this Act shall take effect immediately, and that all acts or parts of acts inconsistent therewith are hereby repealed.

Approved June 13, 2890.

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