

NINETEENTH ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE

STATE OF NEW JERSEY,

AND REPORT OF THE

Bureau of Vital Statistics.

1895.

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1895.

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THE STATE BOARD OF HEALTH.

Hon. HENRY C. KELSEY, Secretary of State,
 Hon. JOHN P. STOCKTON, Attorney-General, } Members *ex-officio*.
 Prof. JOHN C. SMOCK, State Geologist,

FRANKLIN GAUNTT, M.D. Burlington.
 Prof. A. R. LEEDS, Ph.D. Hoboken.
 CORNELIUS SHEPHERD, M.D. Trenton.
 JOHN A. GITHENS, Esq. Asbury Park.
 EDWARD R. O'REILLY, M.D. Elizabeth.
 LABAN DENNIS, M.D. Newark.
 Prof. CYRUS F. BRACKETT, M.D., LL.D. Princeton.

President.....CYRUS F. BRACKETT, M.D., LL.D.
 Secretary.....HENRY MITCHELL, M.D.

SECRETARY'S REPORT.

To His Excellency George T. Werts :

GOVERNOR—I have the honor, in behalf of the Board of Health of the State of New Jersey, to present to you its nineteenth annual report, and also the seventeenth report of the Bureau of Vital Statistics.

The statistical year, ending June 30th, 1895, was one of unusual healthiness throughout the State.

There were few outbreaks of preventable disease, and no widespread epidemic occurred.

The total number of deaths from the chief communicable diseases was less than during either of the two previous years.

The act of the Legislature approved March 22d, 1895, has established new and greatly improved relations between the local sanitary districts concerning the suppression of outbreaks of infectious diseases. Previous to the enactment of this statute there was no general requirement that the dangerous communicable diseases should be reported, and in many districts in the State the spread of diphtheria, scarlet fever and other epidemic diseases was unrestrained. Under the new law every physician is required to report every case of cholera, yellow fever, typhus fever, leprosy, plague, trichinosis, small-pox, varioloid and typhoid fever to the local board of health within twelve hours after he has first professionally attended any person suffering from such disease, and at least as often as once in each week the Clerk of each local board transmits a report to the State Board of Health. In this manner every outbreak is made known to the local and State health officers, and opportunity is thus afforded for the early application of suitable measures for the restriction of these diseases, viz., isolation of patients and attendants, and cleansing of infected articles and premises. The following system has been adopted by the State Board of Health in its operations under this law: All reported cases

of preventable disease are recorded in a permanent record-book, and they are also shown by pin tags on a large wall-map. Circulars drawing attention to the methods for preventing the spread of the infectious diseases are sent to the local boards of health for distribution to the families affected by the outbreak, and in cases where the disease is not held in check, an officer of the State Board immediately visits the locality and joins with the local board in vigorous efforts to prevent the further spread of the disease. In cases where the disease seems liable to spread into an adjoining sanitary district, the State Board gives warning and is thus able to place threatened communities in a position to protect themselves against invasion by the epidemic.

If the benefits to be derived from compliance with the provisions of this enactment can be judged by the history of the past six months, we may in the future anticipate a marked decrease in the number of deaths from preventable diseases, for none of the epidemics which have occurred during that period have reached serious proportions.

LABORATORY OF HYGIENE.

The progress made in applying bacteriological methods for the diagnosis of tuberculosis and diphtheria, the two most fatal diseases in New Jersey, led the board, in January, 1895, to endeavor to secure the establishment of a central laboratory where facilities would be afforded for the early detection of these affections, and make it available for the benefit of all of the sanitary districts in the State. A committee of this board was appointed to prepare and present to the Legislature a bill providing for the construction, equipment and maintenance of a laboratory of hygiene. This was done, but the appropriation was not granted. The manifest advantage to the State which would attend the establishment of this service, and the urgency of the matter, caused several public-spirited citizens to authorize the erection and furnishing of a laboratory.

The work was speedily proceeded with, and we are now able to report that the building is finished and ready for occupancy, and that the work for which it is intended will begin within a few weeks.

It is estimated that the cost of the building and equipment was \$2,500, and that the annual cost will be about \$2,800, as follows: one bacteriologist, \$2,000; one assistant in laboratory, \$500; laboratory material, \$300.

The building is situated on lands owned by the College of New Jersey, in the borough of Princeton. This central location will permit quick communication with all parts of the State.

The board has endeavored to obtain from the United States postal authorities a modification of the order which is now in force prohibiting the transportation through the mails of specimens for bacteriological examination. (See Circular 85, printed in this Report.)

DISTRICT SANITARY INSPECTION.

A review of the work already accomplished by this board, and an examination of the relations now existing between the State Board and local boards, leads to the belief that very valuable service can be rendered to the citizens of the State by still further extending systematic co-operation with local boards.

At a meeting of the State Board of Health held October 25th, 1895, a committee was appointed to present to the Governor and Legislature a statement of the advantages which would attend the service of four advisory sanitary inspectors, one to be assigned to each of the sanitary divisions of the State. Outside of the boundaries of municipalities and of the more thickly populated townships, local sanitary administration is, under the laws now in force, making little progress. The reasons for this fact seem to lie, to some extent, in the frequent changes made in the membership of township boards, and also to be due to insufficient remuneration for the services of the local health officers. But even if these causes were removed there still exists the fact that the science of applied hygiene is a new art, and few persons are yet highly skilled in its employment. The reports of cases of communicable diseases, and the records of deaths, show that typhoid fever has become a disease of the rural districts, and one of the most firmly established sanitary precautions is the closing up of wells found to be polluted on premises where typhoid fever appears. Yet few township boards of health have ever closed a polluted well. The spread of typhoid fever through milk, because the cans are washed in polluted well-water, or because the milk is adulterated by the addition of such water, is of frequent occurrence, but a thorough examination of the water-supply of dairies has not been undertaken by a township board of health. Diphtheria is destroying more lives in the State than any other one disease except tuberculosis, yet the *sine qua non*

of disease prevention, isolation of the patient and attendants during the infective period, is almost never secured by township boards.

The State Board of Health believes that the service of discreet and competent State inspectors, to constantly visit and revisit every local sanitary district, would stimulate and guide local boards in the performance of their duty under the laws, and in the judicious lines of activity which have been proved to be most effectual in preventing the spread of disease.

THE EXAMINATION OF DAIRIES.

The control of the traffic in dairy products has heretofore been conducted largely for the purpose of preventing commercial frauds upon the public, but during the past year the investigations of the Dairy Commissioner have been directed to a greater extent against the defilement of milk by the addition of polluted water and by the use of such water in the washing of the cans. Reports of these inquiries have shown that many of the persons who are engaged in the business of producing and distributing milk have little conception of the necessity for cleanliness in this vocation.

It appears that an entire revolution must occur in this business before the public can be assured that the milk supplied in the market is free from the germs of disease.

One of the prime essentials in bringing about the needed changes in the management of this business is that pure water for all domestic purposes shall be supplied on all premises where milk is produced, stored or sold. All pails, pans, bottles and other receptacles used in storing milk which is intended for sale should be made sterile before use.

As the laws now stand in this State there is no special provision for the control of conditions affecting health on dairy premises, nor for use thereon of water from a source of known purity. Local boards of health are empowered to make ordinances to prevent the use of polluted water for household purposes, but in the farming districts little effort has been made to close dangerous wells, and few township boards have provided ordinances for this purpose. An act of the Legislature which will be operative without the intervention of local ordinances seems to be necessary to correct the evils disclosed by the investigations above referred to.

MILK-BORNE INFECTIOUS DISEASES.

The act approved March 31st, 1887, gives to local boards of health the right to make ordinances to prevent the sale of milk which has been contaminated by exposure to the infection of disease, but it was found that many local boards did not provide ordinances for this purpose, and when an emergency arose no lawful means was available whereby the sale of the dangerous milk could be stopped.

Without lessening the responsibility of local boards of health the Legislature, by an act approved March 28th, 1895, authorized the State Board of Health to prohibit the sale of milk which may be produced, stored, kept or found upon premises infected by any dangerous communicable disease. Local boards are urged, however, to provide ordinances for the control of this danger, and to be prepared to act without delay in such cases.

The spread of tuberculosis through milk, under certain circumstances, has been incontrovertibly proved, and the value of tuberculin as a diagnostic test for the existence of tuberculosis in cattle has been fully demonstrated, but the application of these facts in securing purity of the milk-supply has not yet been made general. If dairies producing milk intended for children and invalids were required by physicians to furnish a guarantee that the milk is free from the germs of disease, the public at large would then soon demand and obtain the same protection.

LOCAL SANITARY INSPECTORS.

Prompt, fearless and intelligent action on the part of local health officers, which alone will produce the best results in staying the destruction which the pestilential diseases are capable of producing, is yet lacking in numerous districts. The progress of health protection is much impeded because of unfamiliarity with the principles of hygiene on the part of many of the officers charged with the actual performance of the duties which fall to local boards of health. The events of each succeeding year show more and more the necessity of supplying facilities for the instruction of these officers.

Long-term appointments and the payment of living salaries would greatly encourage these men in the study of the laws of health. The

State Board of Health has long held this subject under consideration, and it is hoped that some action may soon be taken toward supplying to local health officers a course of study in practical hygiene.

The inspection service should be highly organized, and only skilled officers should be entrusted with the administration of laws and ordinances which deal with health and life. None others can be expected to act judiciously in cases of emergency attending epidemic outbreaks, and to satisfactorily conduct the examination of dwellings, schools, factories, &c., and to point out hidden sources of danger to the public health.

PREVENTION OF BLINDNESS.

An act approved March 11th, 1895, makes it the duty of local boards of health to endeavor to secure skilled professional attendance in the case of young infants who may be threatened with blindness. Section 3 of this act provides that every local board of health shall furnish a copy of the act to every physician and midwife and nurse in the sanitary district over which the local board has supervision, and the Secretary of State is directed to cause a sufficient number of copies of this act to be printed, and to supply the same to local boards for distribution.

Local boards should apply to the Secretary of State for the number of copies of the act which may in each district be needed.

The duty of local boards, under Section 2 of this act, is to receive reports concerning infants who may be suffering from inflamed eyes, and to use their good offices to secure for every such infant such prompt and proper treatment as may be necessary to prevent the loss of vision.

THE PASSAIC RIVER NUISANCE.

During the summer of 1894, the long drouth aided in bringing about conditions which rendered the dwellings along the borders of that portion of the Passaic river below the city of Paterson, and above Dundee dam, almost uninhabitable.

The increase in the quantity of sewage discharged into the river at this point, keeping pace with the increase of population, and the drawing off of the impounded water for the use of the mills below the dam, together with the scanty rainfall, resulted in the pollution

of the remaining fluid to a degree which caused it, under the influence of the summer sun, to emit offensive gases, thus befouling the atmosphere of the whole vicinity.

Complaints and petitions flowed in upon the State Board of Health, asking that relief should be afforded against the continuance of this nuisance, but it was found that no authority had been given to the State Board by the Legislature for action which would afford relief to the persons affected by the filthy river. Before any improvement can be secured in the condition of the river, a new method of sewage disposal must be provided by the towns and factories which are situated in the Passaic valley.

This undertaking should be preceded by an exhaustive inquiry, by skilled engineers, into the question of collection and final disposal of the sewage, and inasmuch as numerous municipalities will be affected by the construction of works for the relief of the river, and because it is not to be expected that any harmonious adjustment of the engineering and financial problems involved in the establishment of such works can be reached by agreement between the various local governments, it seems to be necessary that the State shall determine upon a course to be followed in the purification of the river.

With this purpose in view two bills were prepared and presented to the one hundred and nineteenth Legislature, as follows:

An act for the appointment of a commission to consider a general system of drainage for the valley of the Passaic river.

1. *BE IT ENACTED by the Senate and General Assembly of the State of New Jersey*, That the governor, with the advice of and consent of the senate, is hereby authorized to appoint a commission of five persons, no two of whom shall be residents of one municipality, for the purpose of considering and reporting a general system of drainage for the relief of the valley of the Passaic river, and for the protection of the public water-supplies of the cities and towns dependent upon said river.

2. *And be it enacted*, That said commission shall have power to employ such engineering and other assistance as may be necessary for carrying out the objects of this act; the commission shall consider the various methods of disposal of sewage and the application of such methods to any portion of the territory herein mentioned, and shall report its conclusions in print to the legislature of the year one thousand eight hundred and ninety-six for the whole or a portion of said territory; said commission shall include in its report suitable maps

and plans of the territory to be drained, an estimate of the cost of the work and a recommendation as to the methods of apportioning such cost; the commissioners shall receive such compensation for their services as the governor, comptroller and treasurer of the state may determine; *provided*, that the whole amount expended under the provisions of this act shall not exceed five thousand dollars; and the term of office of said commissioners shall not extend beyond the thirty-first day of January, in the year one thousand eight hundred and ninety-six.

3. *And be it enacted*, That this act shall take effect immediately.

An act relating to sewage disposal and the purification of rivers used for public water-supply.

1. BE IT ENACTED by the Senate and General Assembly of the State of New Jersey, That the state board of health is hereby authorized and directed to examine into the condition of any river in this state now used for the purposes of public water-supply, which, for any portion of its course, is so far polluted by the discharge into it, or into its tributaries, of the sewage of towns, liquid refuse or other foreign matters, as to have become offensive to the population living upon its banks and unfit for human consumption; and likewise to examine into the condition of any river valley, the municipalities, or any of them, which are, in the opinion of said board, unable to dispose of their sewage within their own boundaries respectively, without thereby creating a public nuisance by the pollution of the water-courses or otherwise; and where the pollution of said river or valley originates, or will originate, in several municipalities which are adjacent to each other; and where upon examination as aforesaid the condition of said river or valley, or any important portion thereof, is so affected by the improper disposal of sewage and liquid refuse as to be deemed by said board to be dangerous to the public health, or to constitute a public nuisance, and to require such a remedy; said board shall consider and report to the legislature within one year from the passage of this act, or at its next annual session thereafter, a plan for an arterial or main drainage system of intercepting sewers for the reception of the contents of the local sewerage systems of the several municipalities aforesaid and any other liquid refuse subject to admission into water-courses, and for the conveyance thereof to a point or points where the discharge thereof under proper conditions will not contaminate any potable water or create a public nuisance; said board shall include in its report to the legislature suitable maps and plans of the territory so to be drained, and of the arterial system of sewers proposed therefor, with an estimate of its cost, and a recommendation as to the method of apportioning said cost among the municipalities to be affected by the proposed works.

2. *And be it enacted*, That the expenses of making such examinations and report, also the surveys, maps and plans required therefor, together with all other expenses in the premises, shall be carefully kept; and the vouchers therefor, when duly audited by the comptroller and approved by the governor, shall be paid out of any money in the treasury not otherwise appropriated, and shall be limited to ten thousand dollars.

3. *And be it enacted*, That this act shall take effect immediately.

Neither of these measures became a law. During the summer of 1895, the nuisance created by the pollution of the river again became extremely objectionable, and popular demands for the improvement of the river increased.

Believing that a united effort on the part of all of the parties directly interested in the abatement of the nuisance would result in the passage of some suitable measure by the next Legislature, the State Board of Health issued the following call for a meeting:

OFFICE STATE BOARD OF HEALTH,
TRENTON, N. J., September 10th, 1895.

DEAR SIR—You are invited to attend a conference to be held in the office of the State Board of Health, State House, Trenton, on Friday, September 20th, 1895, at 2 P. M., for the purpose of considering the measures which should be taken for the prevention of the further pollution of the waters of the Passaic river.

The members of the boards of health of all of the sanitary districts which border on the Passaic river have been asked to attend this meeting.

Very respectfully,

HENRY MITCHELL,
Secretary.

The meeting held September 20th was attended by the following representatives:

Acquackanonck.—Robert I. Hopper, Hiram Keasbey, Nicholas Frederick.

Belleville.—Percy Jackson, Dr. N. D. Skinner.

Caldwell.—James Best.

Franklin.—Dr. P. C. Philhower, H. B. Duncan.

Harrison.—Peter Goodman, Dr. M. F. Squier, C. T. Vandever.

Kearny.—Dr. J. A. Exton, J. A. Stove.

Millburn.—Dr. D. E. English.

New Providence.—J. R. Vanatta.

Passaic.—Dr. P. H. Terhune, Chas. E. Denholm, D. W. Mahony, Mr. C. R. Wise, F. H. Williamson, R. H. Maynard.

Paterson.—Dr. T. Y. Kinne, Dr. J. L. Leal, Wm. I. Lewis.

Summit.—Dr. W. H. Risk.

The State Board of Health was represented by Dr. C. F. Brackett, President; Dr. Cornelius Shepherd, Dr. E. R. O'Reilly, and Dr. Henry Mitchell, Secretary.

The meeting was called to order by the President of the State Board of Health, Dr. Brackett, and the purposes of the meeting were stated by Dr. Mitchell, as follows :

MR. PRESIDENT—This meeting was called by the State Board of Health for the purpose of securing, on the part of those interested in the prevention of the pollution of the Passaic river, an understanding and agreement concerning the procedure which will, in the judgment of the persons here assembled, be most quickly followed by the abatement of the nuisance caused by the present condition of the river.

During the summer of 1894 an investigation was made by the State Board, upon request of residents along the river, and the report of the officers who conducted this inquiry showed that the discharge of sewage into the stream so loaded the river water with organic materials that the escaping gases rendered the atmosphere in the vicinity of Dundee Lake exceedingly offensive. The board thereupon formally declared the conditions described to be a public nuisance.

It was found that the Legislature had not clothed local boards of health with authority to abate nuisances of this character, and that before relief could be afforded it would be necessary to provide new methods for the disposal of the sewage which now enters the river. The State Board of Health could ask the Chancellor for an order restraining the municipalities and factories which now discharge into the river from further pollution of the stream, but until a new and practicable method of final disposal for sewage shall be provided no such order can be obeyed, and until a comprehensive system of sewerage for the whole of the Passaic valley from Paterson to Newark shall be devised by competent engineers, there would be risk that wasteful and ineffectual constructions might be undertaken by separate municipalities, and that the purification of the river would thereby be still further complicated and delayed.

Therefore, we have invited you to this meeting, with the hope that a united effort may be made upon a plan which will be here agreed upon to secure relief from this most serious nuisance.

The President announced that the meeting was now open for the presentation of such questions as might suitably come before it.

Dr. Philhower (Franklin Township)—My associate, Mr. Duncan, and myself come here rather to condemn conditions than to suggest measures.

A large section of our township borders upon the Passaic river, and the condition of the river is certainly detrimental to the growth of that part of the township. I have been practicing in Franklin Township nearly ten years, and I can say from personal observation that there has been a greater percentage of sickness in that part of the township than in any other.

As far as Franklin Township is concerned we are perfectly in sympathy with, and will gladly back up any movement to secure the abatement of this nuisance, or improve the condition of the river. We have not ourselves thought out any scheme whereby this will be done, but you certainly can count on our assistance to remove the trouble.

C. R. Wise (Passaic)—It seems to me that there are only a few questions which appertain to the matter of the pollution of the Passaic river. One is, is it as badly polluted as the public are led to believe? There is no question as to that. Anyone traveling on either side of the river will soon be convinced of that fact. The next question is, what has caused the river to seem to be more polluted within the last two years than formerly? The third question is, what are we going to do about it?

There is no doubt that the river seems to be more polluted than ever. Whether it is the diversion of water and the drainage of the Great Piece meadows, which many consider a sponge which never should have been drained at all, is something which will have to be determined and a remedy provided.

John Kehoe (Union Township)—I have lived along the Passaic river for sixty years. The river is now in a very filthy condition. We are having a good deal of malaria, something which we have not had for many years. The property along the river in my section is deserted. About 300 feet from my place there is a \$17,000 building, with a man living in it to take care of it. Another, costing \$18,000, has not been occupied by the owner for years, and he has asked me to take care of it. Another on the other side of the street the owners are very anxious to get clear of. Who is responsible I do not know. There is a member here who went before the grand jury

yesterday for the purpose of making a complaint. The grand jury adjourned over to next week to find out who is responsible. The water company has cut off the water from the Passaic river; we have not had a freshet in five years. If there was some way that we could fill up the low ground on the side of the river, it would go a good ways towards remedying the matter. If there was a continual flow of water and no ground left bare, I think it would remedy it. If the river is low and the sun has had a chance at the ground, there is an odor from it.

Mr. Maynard (Saddle River Township)—The people of my township are suffering. The people who own properties are losing tenants; the people who own homes are moving. In the little town in which I live, Millville, two years ago there were at least twenty-five new houses under way; to-day there is not a new house building.

Mr. Phillips (of Dundee)—The complaint my association makes to the State Board is against the city of Paterson for making the Passaic river a sewer for the purpose of conveying into the river the excreta of 100,000 inhabitants, which is not only polluting the river and causing a public nuisance in front of our doors, but is causing sickness which is liable to result in an epidemic. The stench is intolerable.

Now for the remedy. If it is necessary to fight in defence of our lives, health and property, we would far rather fight corporations in the courts of New Jersey than in the Legislature. For this reason we are not in a position to make any provision for the passage of any bills in the Legislature, inasmuch as a bill that was introduced was scarcely recognized by that body. Therefore, we have no reason to think that it will meet with any other fate at this session, for you all know that the corporations of the city of Paterson know how to fight. But we are not fighting except for our rights; our inhabitants are seriously affected; there have been several cases of typhoid fever right in our neighborhood said to be the direct result of the noxious odors arising from the lake.

Mr. Stove (of Kearny), after giving his views of the unsanitary condition of the river and the general depreciation of property along its banks, said: It seems to me that the State is the proper body to protect us. I believe that the State through its riparian rights

derives some profit from the shore of the river. We know that the river is a great injury to the health of our community; we know very well, as a gentleman here has said, that there are 100,000 people pouring their excretions into the stream. Now, what the disposition of the people at the upper part of the river is I do not know, but it may be that there is going to be a fight. It may be that we who are suffering the most must enter into a contest with those who are wrongfully polluting this stream. I hope it will not be so. I have heard recently from friends in Paterson that there is a public sentiment against the further pollution of the river.

Now, sir, the remedy is not impossible. I am not here to say what it shall be. I have my own idea that a trunk sewer is a proper thing, and I have advocated it for several years.

Mr. Stove—I will say that there is one public sewer fairly large, one small public sewer and one private sewer running from Kearny into the river; the great bulk of the sewage of Kearny, however, is taken care of in the other direction. I can safely say that if a plan is adopted for the relief of the river that Kearny will do anything that falls to her share to help purify it.

Dr. Exton—If there is a gentleman in the room who thinks the river is not foul I would advise him to prepare himself for a trip up there and we will satisfy him as to that fact. There has been in our village over one hundred houses that could not find occupants on account of the water of the Passaic river which we have been obliged to use. Now, we did not know in our town just what course this meeting might take. Consequently, we thought it advisable to ask the local boards of health of Harrison, Belleville and Kearny to come together the other evening to talk the matter over. Without any idea as to what might be the result of this meeting, the following preamble and resolutions were adopted:

WHEREAS, We, the representatives of the several boards of health of the districts herein stated, have been requested by the State Board of Health to meet at Trenton on the 20th of September, 1895, to discuss the subject of the pollution of the Passaic river; and whereas, the condition of the Passaic river has been for some time past and is now such that, in our judgment, an epidemic is liable to arise therefrom at any time, and is such that the property for some distance from each of its banks has decreased in valuation by reason of the stenches and smells arising from the sewer matter at the present time disposed

of in said river; *and whereas*, by the pollution of the river, as aforesaid, the river has become a public nuisance and a menace to the public health; *and whereas*, in our opinion, the proper and only method to prevent the pollution aforesaid is by the passage of an act by the Legislature prohibiting each and every municipality, community, or person from making use of the said river for public or private sewer purposes; now, therefore, be it

Resolved, That the State Board of Health be and it is hereby requested to prepare an act to prohibit the making use of the river as a public or private sewer, under a penalty prescribed, and that it use its influence to have the same passed by the Legislature which is to meet in January next.

Dated September, 1895.

PERCY JACKSON,	of Board of Health of Belleville.
D. M. SKINNER, M.D.,	“ “ “
MARCUS F. SQUIER, M.D.,	“ “ Harrison.
CLARENCE T. VAN DEREN,	“ “ “
JAMES A. EXTON, M.D.,	“ “ Kearny.
WILLIAM BARDSLEY,	“ “ “
LORENZO H. WOOD,	Kearny.
J. M. LOUDEN,	Kearny.
SAM'L WORTHINGTON,	Kearny.
JAMES M. MATTHEWS.	
JOHN BROWN,	Health Inspector, Kearny.

Mr. Wise—Every gentleman who takes the floor tells us how polluted the Passaic is. Would it not be as well and more convenient to drop this matter now, as we all know the Passaic is polluted, and go on with the discussion as to the solution of the problem.

The remedy proposed by the gentleman from Belleville and Mr. Phillips seem to me, not to use a harsh term, absurd. The city of Paterson contains a population of 100,000 people. Is it likely that the representatives of Newark, Passaic and Paterson are going to prepare a bill and prevent themselves from sewerage into the Passaic. The Passaic river is the drainage basin for the Passaic valley. So far as the science of drainage has gone, the plan has been to use the river. That seems to be the custom not only in our country, but in all countries. My suggestion is this, that all the communities interested in the Passaic valley form an organization, each community to have representation in the central organization; that there be an executive committee, and the executive committee take charge to ascertain

whether it is constitutional for the State to build a trunk sewer; whether the State could create a commission and assess in proportion to the benefits received; also give the commission power to issue bonds. The sooner we proceed with this matter in that way the sooner we will solve the problem.

Mr. Jackson—The gentleman from Passaic has, in my judgment, struck the point in regard to the question of the actual fact of the Passaic river being polluted. I personally think it is loss of time to discuss here whether the Passaic river is polluted or not. We know that it is, and that the pollution comes from each and every municipality along the river using the Passaic river as a dumping ground. The question arises here, Is it right for any one of us to so use an object as to injure our neighbor? The common law forbids it; that being so, we individuals could apply to the court for protection. The difficulty has been, however, and still is, in regard to positive evidence. In applications to the court in suits of this character it is necessary to have positive evidence that the person who is charged with having done an offense has done it, or in this matter that the sewage matter has come from one specific spot, and that injury has arisen from that sewage. That is the difficulty which the different boards of health along the Passaic have had. It is the difficulty that the board of health at this time would have. It is, Can you prove the injury comes from any one of the districts you charge it comes from? You cannot do it. You can prove, however, that the river as a whole is being polluted, and you can prove that there is an injury. I say that the only method of doing this, since we are not such good Christians as to protect our neighbors at our own expense, is by some act forcing us to do it. I say that if an act of the Legislature is passed forbidding every one of us from using the Passaic river as a sewer, the river will be saved from its present condition, and each one of the houses along the river will provide some other means to dispose of their sewage. We are not here to discuss the different methods of the disposal of the sewage. We do not care whether it is by a main sewer or otherwise; but what we are here for is to say that the river must not be polluted. The boards of health of Kearny, Harrison and Belleville have met, and they said, in talking over the matter, “Why, the simplest way is to have the Board of Health of the State apply to the Legislature, not for a local act like the first one here, but an act forbidding the pollution of

every river under a penalty, giving the State Board of Health the power to enforce it, and then each and every individual, if that law were enforced, as undoubtedly the State Board of Health would enforce it, and each town and village along the river would be brought up under that penalty." The question is, Can such an act be passed by the Legislature? It seems to me that it can be. The legislators as a rule are men of sense. They realize that a large community of this State will not have its rights with impunity trespassed upon; they will naturally come forward to protect them. If the city of Paterson or the city of Passaic send representatives down here with the idea that because they have expended a few million dollars in draining into the Passaic river that they can thereby stop the Legislature from passing an act which would benefit the country, they have in my judgment a wrong conception of what the Legislature of New Jersey is composed of. We want a bill that is loaded down with common sense. Let us appoint a committee to act with the State Board of Health to draw a bill; after that bill is drawn let the local communities call public meetings and see how the people feel, and the coming primaries will soon let you know the result.

Mr. Phillips read extracts from two acts of the Legislature, and asked for information.

Judge Lanning—The first act read by the gentleman, Mr. Chairman, according to my recollection, has been amended. He has read from the supplement to the revision which was published in 1886. My impression is that the act of 1880 has been amended, but in its substantial form, as read, I think it still stands as the law of the State. It will be observed, however, that it makes the pollution of streams a criminal offense and prescribes a penalty of a fine not exceeding \$1,000, or imprisonment not exceeding two years, or both, making the offense a misdemeanor and consequently a matter over which the State Board of Health has no jurisdiction whatever. It is a matter that would come before the grand jury.

The act passed in 1886, according to my recollection, has also been amended. I cannot speak with certainty here without taking the time to examine the statutes. But my recollection is that it has been amended in such a way as to strike out the word river. The effect of that amendment would seem to indicate a legislative intent to make the act inapplicable to rivers.

The question as to the constitutional rights of men in regard to the enforcement of sanitary law is apparently a new field of labor. Sanitary law has occupied the thoughts of legal minds to no great extent except within the last dozen years. It is a growing field of law. What the courts might hold upon various questions asked as to constitutional rights it would be impossible for anybody to say. I am sure you would have to wait until the highest courts had determined those questions.

Resolution offered by Mr. Jackson read:

WHEREAS, The waters of the Passaic river are polluted by the sewerage of numerous municipalities and by hundreds of isolated mills and factories. The degree of pollution has rapidly increased from year to year, and during the past two summers the gases emitted by the water of the river, below the city of Paterson, have been exceedingly offensive to the sense of smell, rendering dwellings along the borders of the river almost uninhabitable, and greatly damaging the value of property; *whereas*, said contamination of the waters of the Passaic river and of the air of the locality constitute a public nuisance, a source of foulness and a cause of sickness hazardous to the public health; *whereas*, abatement of the said nuisance can only be secured by discontinuing the discharge of unpurified sewerage into the river.

Resolved, That a committee of this conference shall be appointed to prepare and present to the Legislature a bill which shall provide for the prevention of the further defilement of the Passaic river, and for the just and equitable payment of the expenses which may attend the construction of the necessary works.

By the Chair—It seems to me that one member of each community represented here should be placed on the committee, and perhaps one member of the State Board of Health might also be added.

Amendment—That in addition to the State Board of Health one member from each sanitary district, as represented in the call, be added to form the committee. Carried.

Mr. Jackson—It seems to me that it would be ill-advised to have such a large committee.

Dr. Kinne—I am perfectly willing that the question should be put. I have no desire to say anything upon this matter, although I should vote against the resolution as it stands, not because I am opposed to the resolution as presented by Mr. Jackson, but because I do not deem the State Board of Health the proper body to prepare

that bill. As has been rightfully remarked, Mr. President, the State Board of Health is an executive body; they are to carry out the mandates of the Legislature, which are supposed to be in accordance with the will of the people. I claim it should be done by citizens who are interested in this matter; that a committee should be formed from parties represented all along the line of the Passaic river. There is preliminary work to be done. It is not to get to work, to get representatives to dictate to the Legislature what should be done; we do not know just what should be done. I think first of all there should be a commission of sanitary engineers appointed (employed, if you like) by the different municipalities affected by this river. They should determine in their wisdom the best means of obviating this trouble. I am opposed to the resolution as it stands because I think the power should be somewhere else.

Dr. Mitchell—Dr. Kinne has expressed views which are also held by the State Board of Health in reference to this question. As the motion now stands the State Board of Health is asked to put a bill through the Legislature. That is not our function, gentlemen, and we are confident that you will succeed far better than we can in securing legislation.

Mr. Lewis—While I do not intend to speak upon this question from a sanitary standpoint, I would like to speak upon it in its practical aspect. This resolution provides for the appointment of a committee to go before the Legislature to secure the passage of a bill to prevent the further pollution of the Passaic river, and for the imposition pro rata, in some fair manner, of the expense of doing that thing. The committee, as I understand it, if appointed, would be appointed from the city of Paterson and from the townships down to the line of the city of Newark. The first question which would come before the committee would be, How is the bill to be drawn? There would at once, upon selfish grounds, be a diversity of opinion upon the method adopted. Suppose they say, we must have a trunk sewer which must take up the sewage of Paterson or Newark; they have the great city of Newark to consult with. If, on the other hand, the proposed plan should not be kindly received by the city of Paterson, they would have the opposition of practically the county of Passaic. The consequence would be they would not be able to agree upon a bill. The result would be that nothing would pass whatever. If

the gentleman will permit me, I will move as a substitute for the original motion that the State Board of Health communicate to the Legislature, by special communication, the allegation as to the state of affairs in the valley of Passaic, and that it request the Legislature to appoint a commission of sanitary engineers to inquire into the evil and report upon a proper remedy. When such commission is appointed, when such commission makes its report to the Legislature, it is not received as the mere application of myself or somebody else as individuals, but it is received by the Legislature as the report of a State body and receives proper attention, and if it possesses any strength whatsoever, will be coincided in by the Legislature.

If such commission, I may confidently say, report to the Legislature that the cities of Newark, Jersey City, Paterson, as well as the townships, are to blame in this matter, the Legislature will compel all those cities to pay a proper share towards doing away with the evil.

Mr. Jackson—The object of my friend from Paterson, Mr. President, is clearly apparent. He wishes delay. We have already gone beyond the commission. We know that the river is polluted, and there is absolutely no need of our calling on the Legislature to appoint a commission to tell them that the river is polluted.

Dr. Leal—We come here prepared to do everything possible to secure anything better than what we have now. We are told that the city of Paterson is the cause of this nuisance. We acknowledge our share of the cause; we claim that others are equally guilty. Every speaker has declared that the Passaic river is polluted. The only remedy suggested is the passage of a bill. Now, does anyone for one moment suppose that the city of Paterson can be prevented from sewerage into the Passaic river without making provision for the disposal of the sewage? We are willing to do it if a way can be shown. Now, as to that way. No speaker yet has suggested a practical method for the doing away of this nuisance. They simply say it must be stopped. It cannot be stopped until some other means have been provided. I do not believe there is a person here who is willing to say just what the best means is of taking away the sewage of the whole Passaic valley. But we at least are not engineers, and we are not qualified to give an opinion. The only possible way we can accomplish this matter is on the line of what Mr. Lewis has stated.

By the Chair—The motion before the meeting is that one representative of each of the various bodies named in the call be formed into a committee to present the matter suitably before our Legislature, and as a substitute the State Board of Health be asked to petition the Legislature to appoint a commission to look into the matter.

Mr. Wise—I wish to offer an amendment to Mr. Lewis' substitute, that the State Board of Health be authorized by this meeting to select any number of citizens from the districts along the river.

Mr. Lewis—The gentlemen do not seem to take it for granted that the cities of Newark and Paterson will join them in any plan that they may formulate. To get this matter before the Legislature in proper form, a commission appointed by the Legislature is the only way.

Dr. Kinne—We want to use the State Board of Health either advisory, in an executive capacity or some other way in accomplishing our purposes. The only way to unite all the municipalities in the Passaic valley is by a commission which shall authoritatively state what can be done to relieve those municipalities. Delay is talked of. Mr. Lewis has explained that there shall be no delay in this.

Mr. Lewis—Where the inhabitants of a great valley request the State Board of Health to help them the board should do it. I want to assure you, gentlemen, that a communication of the State Board of Health to the Legislature will be of much more weight and receive more consideration than if we, as individuals, should go and request their action.

Substitute voted upon and lost.

Original resolution, introduced by Mr. Jackson, was then voted upon and carried.

Mr. Jackson—I move that one member be selected by each of the local boards of health, here represented, which members shall constitute the committee to act on the resolution as passed. Carried.

Adjourned.

The following notice was sent to each of the persons selected by the local boards of health to serve on the committee :

OFFICE STATE BOARD OF HEALTH,
TRENTON, N. J., Oct. 22d, 1895.

To

DEAR SIR—A meeting of the committee appointed to prepare a bill for presentation to the next Legislature for the purpose of preventing the further pollution of the Passaic river, will be held in the city of Passaic October 29th, 1895, at 2 P. M., in the Board of Trade Hall, No. 237 Main Avenue. You are requested to be present.

Very respectfully,

HENRY MITCHELL,
Secretary.

At the meeting held in Passaic October 29th, 1895, twenty-one members of the committee were present, and the following bill was agreed upon :

“That the State Board of Health be and the same is hereby directed and authorized to consider and to report a general system of drainage for the relief of the valley of the Passaic river, and for the protection of the public water-supplies of the cities and towns dependent upon said river.

“And that the said State Board of Health shall have the power to employ such engineering and other assistance as may be necessary to carry out the objects of this act; the State board shall consider the various methods of disposal of sewage and the application of such methods to the whole or to any portion of the territory herein mentioned, and shall report its conclusions in print to the Legislature without unnecessary delay for the whole or a portion of said territory; said board shall include in its report suitable maps and plans of the territory to be drained; methods of executing the work; an estimate of the cost of the work, and a recommendation as to the methods of apportioning such cost; *provided*, that the whole amount expended under the provisions of the act shall not exceed \$10,000.”

Mr. M. N. Baker, one of the editors of the *Engineering News*, spoke as follows :

“I am very glad the committee made a report of this character, as I think it is an admirable way of getting at the question before us. Everybody, with any knowledge whatever, will have to admit that the problem is difficult and intricate. It is one that involves the doing away of a nuisance that is increasing at a rapid and alarming rate. Many municipalities located in different counties are interested, and as the problem is new to this State it can only be solved after a long and careful consideration by those familiar with that kind of work.

"While I cannot say how many municipalities have contributed to the pollution—there are many, I believe—we hear of Paterson the most, because that is the first large place; then comes Passaic city and other towns along the river, until you get further down, when the sewage of Orange, Bloomfield and Montclair pour into the water. East Orange is about to dispense with its chemical disposal plant and empty its sewage, with that of Newark, also, into the Passaic. Each of these places contribute to the inconvenience of many people, and add to the dangers to health in numerous municipalities. Then there is the question as to what to do with this matter. There has been some talk of a trunk sewer, to intercept the several local sewers, and an intercepting sewer might solve the problem, though I am not advocating a trunk sewer, nor could any person advocate any specific plan until the question has been thoroughly studied.

"Where, also, would this large volume of sewage be carried? How far would it be necessary to carry the output into Newark bay? These are questions that need solving before a trunk sewer plan could be perfected. This makes it obvious that these questions should be referred to a body of men interested in looking after the health of the State, but who are not interested in any particular municipality. Such gentlemen are able to handle the problem, in my judgment, with great thoughtfulness and care, and view the projected improvement with broad minds.

"True, there is no precedent in New Jersey for such an undertaking, but in the State of Massachusetts the State Board of Health, back in 1889, took up the question of the pollution of the rivers and tidal waters about Boston and its vicinity. This included seventeen or eighteen cities and towns. A careful study was made with the assistance of the best engineers in Massachusetts, and plans were perfected for sewerage of the district by means of trunk sewers. Then the Legislature appointed a commission of three men to construct all work mapped out to save pollution of the rivers and beaches. The State of Massachusetts also did what New Jersey could not do; it issued bonds to run fifty years, and the people of municipalities were taxed to pay the interest and create a sinking fund to redeem the issue at maturity. A third commission was appointed by the courts to apportion the cost of the work according to the benefits derived by the various cities and towns.

"One section of this work was put in operation in 1892, and the second section is just about being put in operation now. The plans involved some very intricate engineering problems, and was far more difficult than any work here could possibly be. I believe action on the part of the State Board of Health would receive more attention than from any other source; still I feel no plan can be carried out without immense opposition in nearly every municipality that has got to spend a dollar. Other ways might also be found of approaching the subject, but under the circumstances I think the plan suggested is the best."

THE REGISTRATION OF VITAL STATISTICS.

The total number of births, marriages and deaths recorded during the past year was 82,569.

The average number of inquiries at the office of the State Board of Health concerning the date of the birth, marriage and death of individuals has been 118 per month, or a total of 1,415 for the year. The purpose of these inquiries may be to establish a right to vote; to sustain a claim in a pension case; to prove a right of succession to a property, or to show eligibility for appointment as a member of the police, fire or other public service. But more important than these considerations is the measure afforded by these facts concerning the relative strength and vigor of the population. By these records we learn the average duration of the life of our citizens, and what influence upon health and strength is exerted by various trades, occupation and dwelling-places. In these records is found justification for the application of the laws of hygiene, for it is seen that high death rates uniformly attend certain conditions which are universally known to be unhealthful. Almost all of these unhealthful influences are preventable, and they may be averted by the exercise of the precautions which prevent needless pollution of the air, soil and water.

Accuracy is of first importance in making these records, and in this State we have little to desire in this direction so far as the returns of marriages and deaths are concerned, but births are not all reported.

This is due (1) to the fact that many births occur without the attendance of a physician, midwife or any other person who has knowledge of the law requiring reports of births, and (2) in some cases the

professional attendant neglects to make the return. The enforcement of the law requiring reports of marriages, births and deaths is placed in the hands of local boards of health. Section 15 of the act approved February 15th, 1888, reads as follows :

15. *And be it enacted*, That any penalty incurred under any of the provisions of this act, which shall relate to any particular marriage, birth or death, may be recovered with costs in an action upon contract in the name of the local board of health of the township, city, borough, town or other local municipal government, within whose limits such particular marriage, birth or death shall have occurred; and any penalty incurred which shall relate to any particular burial, if the death occur in this state, may be recovered in like manner in the name of the local board of health of the township, city, borough, town or other local municipal government, within whose limits the death shall have occurred, but if the death occur without this state, then such penalty shall be recovered with costs, in an action upon contract in the name of the local board of health of the township, city, borough, town or other local municipal government within whose limits such burial may have been made; it shall be the duty of any health inspector, registrar of vital statistics or member of any local board of health, who shall know or be informed of any violation of this act, whereby any penalty may have been incurred, to make, under oath or affirmation, a complaint against the person incurring such violation, setting forth the facts of such violation, and to file such complaint with the clerk of any district court or any justice of the peace, police justice or recorder of the township, city or municipality within which the local board in whose name the suit may be brought shall have jurisdiction, and the clerk of the district court, the justice of the peace, police justice or recorder with whom any complaint shall be filed as aforesaid, setting forth facts sufficient to show that any penalty prescribed by this act has been incurred, is hereby authorized and required to issue process, either in the nature of a summons or warrant, which process, when in the nature of a warrant, shall be returnable forthwith, and when in the nature of a summons shall be returnable in not less than five nor more than fifteen days; on the return of such process, or at any time to which the trial shall have been adjourned, the said court, justice of the peace, police justice or recorder shall proceed to hear the testimony and to determine and give judgment in the matter without the filing of any pleadings, and if judgment shall be given in favor of the plaintiff, execution shall be forthwith issued against the goods and chattels and person of the defendant for the amount of the penalty with costs; the officers to serve and execute any process of execution issued as aforesaid, shall be the constables of the county, which service and execution shall be made in the same manner and under the same liabilities as prescribed in cases of the service and execution of process and executions by the act entitled "An act constituting courts for the trial of small causes" and the supplements thereto; all moneys recovered in any such action shall be paid to the local board of health in whose name the suit may have been brought, for the uses of such board.

PUBLIC WATER-SUPPLIES.

The board has heretofore called attention to the necessity for legislation which will prevent the further pollution of the streams and watersheds which must be depended upon to supply the dense population which will before many years occupy the eastern and central portions of the State. It is no less important that the State shall allow no diversion of these water resources from the uses of our own citizens.

In previous reports this board has very fully presented the sanitary value of these resources for obtaining an abundance of pure water. It has also been shown that public ownership of water-works is desirable and economical.

VACCINATION.

Inquiry into the vaccinal status of the inhabitants of the State shows that there are many unprotected persons. One report says "the apathy shown in this matter is surprising when the large mortality from small-pox is considered, as well as the simple manner by which protection can be afforded." Another local health officer states that no vaccinations have been performed in his district during the past six years.

The general health law, approved March 31st, 1887, authorizes boards of education, school trustees, or other bodies having control of the public schools to prohibit the school attendance of any unvaccinated child, and to decide how far re-vaccination shall be required. The framers of the law apparently believed that school officers would secure general vaccination, but in practice the subject has not received much attention at the hands of these officials.

If the following rules were invariably applied, small-pox would cease to be a pestilence :

1. Every child should be vaccinated soon after birth, certainly before reaching the sixth month.
2. All children should be re-vaccinated before attaining the age of six years.
3. Every person should be re-vaccinated upon the appearance of small-pox or varioloid in the neighborhood, and under no circumstances should the interval be longer than six years.

The following record, if kept in every school district, would be useful:

NAME OF PUPIL.	Date of Vaccination.	Result of Vaccination.	Dates of Re-vaccination.	If not Vaccinated give Reason.

INSPECTION OF HOTELS AT RESORTS.

The board has continued to give attention to the condition of those localities which are largely frequented by visitors seeking recreation or benefit to health. This is no less a public policy than a sanitary interest. The relative position of the State, and its wonderful adaptation for health resorts, point to this as a source of revenue and as a means of social and industrial development of the highest importance. The whole line of sea coast from Cape May to Sandy Hook, and many inland places, together with the elevated ranges in the north-western portion of the State, furnish an unlimited supply of available locations for these purposes.

Because of these natural advantages, our attention has been turned to the need of supplementing nature by intelligent sanitary art, instead of, as too often happens, thwarting nature by artificial additions. Hence the questions of water-supply and drainage have all along received attention. But each year has more and more revealed the fact that the chief dangers to health are to be found within buildings, or in their close surroundings.

The changing character of occupancy; the rapid filling and emptying; the imperfect house-keeping, and the large accumulation of waste products and foul liquids, cause pollution of the soil and multiply the gases of decay, and so imperil health. To this is added bad plumbing and the other evils which result from hasty construction. We could cite instance after instance where, despite a fairly good condition of

the town, the condition of single houses or hotels has been the cause of individual cases of serious sickness, or of general outbreaks.

For the public safety and the welfare of the State this must not be. We cannot be satisfied with as good a condition as the resorts of other States, but must be able to claim special sanitary security. Already at two of our resorts the visitor can find, at the health office, a true record of the sanitary condition of each house.

The inspections, conducted by the State Board, are designed for the protection of the public, but they also benefit the owner of the premises. If defects are found, they are reported to him, and he then is able to apply a remedy before an outbreak of disease brings to him financial disaster. The inspections which have been made during the past year show that owners of these properties will, upon notice, almost invariably make the required alterations and improvements which may be necessary to remove unhealthful conditions, without waiting to be compelled to do so by process of law.

THE DEATH RATE OF HEALTH RESORTS.

The statement of death rates, based on the total number of persons dying in summer resorts, is misleading when comparison is made with other communities where there is no great change in the population.

In the report of the Bureau of Vital Statistics for 1894, the following plan was proposed as a method of showing the true death rate in such communities:

1. Show number of deaths among permanent population.
2. Show number of deaths among non-resident population.
3. Show total number of deaths.
4. Show number of resident population by last census.
5. Show estimated number of resident population, based on ratio of increase during period between the two last census years.
6. Show death rate among resident population.
7. Show death rate among non-resident population.
8. Show death rate if whole number of deaths is charged to resident population.
9. Show number of deaths caused by the ten chief preventable diseases, viz., tuberculosis, diarrhoeal diseases of children, erysipelas, diphtheria and croup, whooping-cough, measles, scarlet fever, small-pox, typhoid fever, malarial fever.

In the tables prepared by the Bureau of Vital Statistics it will be impracticable to use estimates as to the number of the non-resident population, for there would be no agreement as to the correctness of

the estimates which might be used, and the only course left open is to base the death rate uniformly, in all localities, upon the population as stated by the last preceding census. Hereafter the death rate of health and pleasure resorts will be published as a part of the report of the local health board when it is forwarded for that purpose with the regular September annual report.

In the statement made by local boards in such reports, an opportunity will exist for such analyses and explanations as may be desirable to fully show the reasons for any apparent excess of mortality.

CONTAGIOUS DISEASES OF ANIMALS.

An extensive outbreak of anthrax occurred during the summer of 1895 in Cumberland county.

The first case appeared near Newport, in Downe township, on the 21st of June, and from this point the disease spread rapidly, causing a loss of 222 animals.

The infection is believed to have been brought to this locality by the floating carcasses of diseased animals which found their way into the river during an epidemic of the disease in the State of Delaware in 1893.

After unsuccessful efforts to check the spread of the disease by attempted isolation of the infected herds, inoculation by the Pasteur method was employed.

About 1,600 animals were thus treated, all at the owners' risk.

The serum employed was obtained from the Pasteur Anthrax Vaccine (United States and Canada) Co., Limited, 369 Broadway, New York City, and it was injected hypodermically, generally at a point behind the right shoulder in cattle and in draught animals on the neck.

Two injections were given to each animal, with an interval of twelve days between the first and second.

At each injection one-quarter of a cubic centimeter of lymph was used.

Only twenty-seven animals were attacked with anthrax and died after receiving the treatment.

Of this twenty-seven nineteen had received only the first injection.

Of the remaining eight, four died over twelve days after the second injection.

In tracing the course of the epidemic, it was found that when the disease invaded a locality away from the infected meadows there was evidence that the disease germs had been carried in the hay which was cut on these meadows and carried to upland farms.

The report of this epidemic has been transmitted to the Board of Agriculture, as the law requires.

Twenty-two cases of glanders have been reported to this board during the year.

In each case the horse has been destroyed.

Hog cholera has appeared in epidemic form in several localities.

Under the provisions of Section 10, Chapter LXXIV., of laws of 1887, the Tuberculosis Commission have authority to examine into outbreaks of diseases among animals, and they are investigating the reported cases of this disease.

CIRCULARS.

Since the last annual report was published two new circulars, Nos. 84 and 85, have been issued by the board.

OFFICE METHODS.

The following records are in use in the office of the State Board of Health:

1. Minute Book.
2. Expense Account.
3. Mailing List—The names of all persons to whom the annual report and the circulars of the board are regularly sent, are arranged by use of the card index. The list is classified as follows: 1. Physicians. 2. Assessors. 3. Asylums. 4. Hospitals. 5. Libraries. 6. Local boards of health. 7. Newspapers. 8. Prisons. 9. Members of sanitary associations. 10. State officers. 11. State and foreign boards of health. 12. School superintendents. 13. Additional list for current year.
4. Issue Book—This shows to which classes of the mailing list, and upon what dates printed matter has been sent.
5. Samples of blanks—A collection of samples of all blank forms used by the board.
6. Letter-copying books.
7. Library accession list.

8. Library loan list—The library is placed at the disposal of all persons in the State who are studying sanitary subjects. Those who desire to take out books, are required to pay the postage or express charges. A list is kept of all books loaned, together with the dates of delivery and return.

9. Library want list.

10. Subscription list—This is a record of the name of each periodical subscribed for by the board, with date when subscription began; date when subscription was paid; date when subscription expires, and amount of subscription.

11. Record of reports of communicable diseases.

The facts stated on the following report cards are entered in a record book weekly :

5, 25, '95, 113.

REPORT OF PREVENTABLE DISEASES FOR WEEK ENDING SATURDAY 189

[Name of Place].....

To the BOARD OF HEALTH OF THE STATE OF NEW JERSEY :

Following is a report in accordance with the provisions of Chapter 260, Laws of 1895, showing the number of cases of communicable diseases which occurred in this Sanitary District during the period above named :

DISEASES.	New Cases.	Existing Cases Previously Reported.	Deaths from Preventable Diseases.	PRECAUTIONS TAKEN.
Diphtheria.....				
Membraneous } Croup.....				
Scarlet Fever.....				
Typhoid Fever...				
Small Pox.....				

NOTE.—When no communicable diseases occur, no report will be expected from local boards to the State Board of Health.

Total Deaths from all causes..... Signature of Clerk or other designated officer..... P. O. Address.....

On the back of these cards the following is printed :

These cards are for the use of local boards of health in making the weekly reports to the State Board.

Blanks for the use of physicians are not supplied by the State. All such blanks, and also any books needed for recording the reports of communicable diseases should be furnished by local boards.

12. Map record of cases of communicable diseases—

On a map of the State of New Jersey, four feet wide and six feet long, mounted on a thin backing of soft wood, celluloid pin-tags are used to indicate the localities in the State where infectious diseases are prevailing. The tags are colored and figures are stamped upon them. Each disease is known by the color, and the number of cases is indicated by the figures.

13. Current complaints and questions under consideration—

All matters brought to the attention of the board, and which require future action, are entered in a separate card index, and arranged under the names of the various sanitary districts.

EPIDEMIC OUTBREAKS DURING THE YEAR ENDING OCTOBER
31ST, 1895.

Previous to the last session of the Legislature the local boards of health were able to enforce the reporting of cases of contagious diseases, and, especially in the cities, such returns were promptly made, but there was no provision in the law by which the State Board was informed as to the number of cases reported to the local boards.

By the provisions of Chapter 260, laws of 1895, the local boards are now obliged to report each week, and oftener if required, all cases of contagious diseases.

Under this system, the information concerning epidemics in various localities is at once received, and we are able to render valuable assistance.

The reports which are being received are not as complete and general as we desire, but each week there is evidence of a more ready compliance with the law and a tendency to ask for aid when it is needed.

In our last report upon epidemics we gave the history of several outbreaks in various portions of the State.

Since October, 1894, we have had no epidemics which assumed large proportions or were not readily controlled, except within the last three months.

Measles.

An extensive outbreak of this disease was reported during the summer from Bridgeton, Cumberland county. There were 796 cases and 8 deaths.

At the present time there is a large number of cases at New Brunswick, Middlesex county.

Diphtheria.

The places in which this disease has appeared in epidemic form are Newark, Hoboken, Jersey City, Paterson, Trenton and Burlington.

In each of these localities at the present time there are numerous cases, and every effort is being made to limit and control the disease.

Enteric Fever.

There have been no reported epidemics of this disease, but scattering cases have occurred in numerous localities. Each year throughout the southern portion of the State isolated cases are reported, and investigation has usually pointed to polluted wells as the source of contagion.

Small-Pox.

The largest number of cases reported from any one locality was eight.

These were in Paterson, and were traced to a case at Lyndhurst, Bergen county.

There were two cases at Carlstadt, and a single case was reported from Burlington.

Prompt isolation and general vaccination in each of these localities has limited any tendency of the disease to spread, except in the case at Lyndhurst, where visitors to the infected house were permitted to carry the infection to the city of Paterson.

In our larger cities the local boards of health are planning and constructing disinfecting stations and will be better prepared to deal with epidemics in the future.

HENRY MITCHELL,
Secretary.

SUMMARY OF REPORTS FROM LOCAL BOARDS.

SUBJECTS SUGGESTED FOR REPORTS.

- | | |
|--|---|
| A. Location and population. | N. Almshouses, hospitals and other charities. |
| B. Geology, topography and contour. | O. Police and prisons. |
| C. Water-supply. | P. Fire-guards or escapes. |
| D. Drainage and sewerage. | Q. Cemeteries and burial. |
| E. Streets and public grounds. | R. Public health laws and regulations. |
| F. Houses and their tenancy. | S. Registration and vital statistics. |
| G. Modes of lighting. | T. Quarantine or care over contagious diseases and vaccination. |
| H. Refuse and excreta (how managed). | U. Sanitary expenses. |
| I. Markets. | V. Heat and ventilation for dwellings. |
| J. Diseases of animals. | W. Prevalent diseases of the year. |
| K. Slaughter-houses and abattoirs. | |
| L. Manufactories and trades. | |
| M. School-houses and other public buildings. | |

Other subjects may be named under X, Y, Z. The subjects may thus be referred to by the letters.

If the sheet provided is not sufficient, add others, marked with the letters which designate the topics treated.

Some of these subjects have been fully treated in former reports and do not need repetition. This report should state facts and conditions, and it should especially state what has been done the last year as to the prevention and abatement of nuisances, house-to-house inspection, water-supply, cesspool management, garbage collection, plumbing oversight, examination of stations, schools, public buildings, separation of sick in health board hospitals, reports of diseases and various other items.

The faithful inspector or member of a health board, if he will read this or the record of former years, will not fail to see the kind of work that active health boards attempt and secure, and the failure of some others.

The township boards may not be so conspicuous as city boards, but in dealing with special outbreaks of disease, with the houses and

yards of village streets and with various other items, often have much to do or much to neglect. Instances are often before us of valuable service by these boards.

While selecting with care from the large material furnished us, lack of space or the substance of former reports leads us often to publish only brief abstracts and place the rest on file for reference.

We urge upon all local boards promptness and care in these yearly returns.

We send with these blanks a circular of directions, and from the returns received often can judge still more than before what is being done. We generally send the blank to the city clerk or assessor, because these are most in correspondence with the State Board. We are glad also to send a blank to the secretary or other member, where this is requested. We at least wish it to reach the one who will report to us the fullest statement and the real truth. We have passed the period of mere talk about the importance of hygiene.

It is now the period for definite and advanced methods of local sanitary administration. We earnestly urge upon our boards an early spring meeting, a year of exact plans and executions and an annual report of just what has been done, of failures and of the most pressing needs. While the great work is thus local, we are ever ready, by correspondence and by the visits of inspectors, to assist in this important work of preventing preventable disease and of restricting or checking its effects when it occurs.

The following memorandum for September 1st, 1895, was sent to all local boards:

NEW JERSEY STATE BOARD OF HEALTH.

TO LOCAL BOARDS OF HEALTH.

Memorandum for September 1st, 1895.

And be it enacted, That the local board of health of every township, city, borough, town and other municipality, shall, on or before the first day of October in each year, in addition to other reports required, prepare an annual report of the condition of the public health within the limits of its jurisdiction, stating therein any special cause for the deterioration of health or of hazard thereto, and shall therein answer any inquiries which may have been addressed to such local board by the state board of health, and such local board shall forward a copy of such report to the state board of health on or before the fifteenth day of October in each year.

(Section 37 of Chapter 68 of laws of 1887.)

An act approved June 15th, 1895, requires that the annual report of the State Board of Health shall be presented one month earlier than heretofore. Local boards are therefore urgently requested to place their reports in our hands as early in October as possible, and in every case to forward them not later than October 15th.

In addition to the usual schedule of subjects for report, a copy of which is sent herewith, the following inquiries are presented, and each local board is requested to include replies to these questions in the annual report to be prepared in accordance with the provisions of the law above quoted:

SPECIAL INQUIRIES FOR 1895.

1. Have all cases of the dangerous communicable diseases been reported to your board, as required by Section 1 of Chapter 260, laws of 1895?
2. Does your board furnish to physicians printed blanks for reporting communicable diseases?
3. Has a record been kept by your board of all cases of communicable diseases, as required by Section 2 of Chapter 260, laws of 1895?
4. Has a weekly statement of all reports of communicable diseases been faithfully transmitted to the State Board of Health, as provided for in Section 2 of the act referred to?
5. Has gratuitous vaccination been offered to the public by your board during the past year? What proportion of the population has been vaccinated within five years, according to your best knowledge?
6. Is house-to-house sanitary inspection regularly performed? Is a record kept of such inspections?
7. Is there any serious defect in the water-supply or sewer system of your district?
8. Give name, official title and salary of all persons regularly employed by your board.
9. What was the amount appropriated or allowed for the uses of your board during the past year?

Local boards are requested to transmit, when forwarding the annual report, a copy of all ordinances, rules, regulations and by-laws which have been adopted during the past year.

Under the law every municipality and every township must have its board of health. (See Circular 60.)

The board in townships consists of the township committee, the assessor and the medical member of the board.

I. The board should have accurate organization, so as to meet at a stated time, having its chairman and secretary, and keeping a record of its proceedings. Its rules of order are the same as other boards met for the transaction of public business.

II. It is not merely a board to hear complaints, but to get an accurate idea of evils which cause, or are known to prepare the way for, sickness and death. In one place it may be undrained land, so saturated with water and vegetable matter as by changes in temperature and moisture to give rise to fevers; in another locality it may be poor water-supply or defective sewers, or the want of a sewer system; in another, the careless disposal of garbage; in another, too near proximity of wells and outhouses; in another, cesspools which soak the ground with filth. But in any case, such a board should be one of inquiry, to collect accurate facts and deal with real evidence. In most boards will be found some one who knows how to collect and study facts, or keep them on hand for study until enough are gathered.

III. Such a board needs to keep a record from year to year of the localities where sickness and death have occurred, and the causes thereof; to know the number of children born and living in each district, so as to know the age of the material subject to disease, and various other facts which, when observed with care, over a sufficient period, lead to conclusions as definite as those derived from a study of any other of the courses of nature.

Such a board has great value as an educator of the public in the avoidance of the causes of ill health. It is in a position to advise and to acquaint the public with the various laws as to the prevention and abatement of evils prejudicial to health. Many bad household and town arrangements are those of ignorance, and are easily corrected when a better way is shown. The board can also, by its circulars, ordinances and instructions, deter many from the infringements which would otherwise occur and thus prevent disease. All boards need to have a sanitary inspector, upon whose good judgment and knowledge they can rely, for the correction of many evils as well as for the enforcement of the law when necessary.

IV. It is not necessary, under the general laws of the State, always to prove disobedience of an ordinance, but only that the thing complained of is contrary to the law. Ordinances are valuable as warnings or as defining more closely the scope of the law. It has been a mistake of many cities to promulgate too many ordinances and to enforce too few. A waste of dead letter makes administration less perfect. Neither do health laws or health codes supersede common law. They provide speedy modes of riddance, leaving any question of trespass to be decided afterwards. Every board should pass ordinances.

It is important that summary legal powers should be exercised in all that class of cases in which the usual process of courts would be too tardy, and that by inquiries and investigations and recommendations, boards of health should further all efforts made under common law or under statutory provisions for promoting the public health, so far as its protection falls under such jurisdiction.

The duty of discovering and exposing evils, of suggesting relief, of making recommendations, and of giving information is a great one. Boards of cities and townships do very much to prevent and abate evils, by the very facts which are brought out in their discussions, and by turning public attention to existing evils.

In repeated experiences with small-pox and other diseases, new evidence has been furnished showing how necessary it is to have sanitary authorities in all localities, so that when any case of contagious disease, or any nuisance hazardous to health occurs, there may be no delay. The citizens of each precinct have the right to be able at once to find some authority charged with the duties specified in the law. Forethought is better than afterthought.

The law makes full provision for all necessary expenses. (See Chapter 68, laws of 1887, sections 34 and 35. See Circular 60, page 34.)

There must be a report made in October of each year to the State Board, as required by law. Be accurate and prompt.

Health boards have an important duty in co-operating with the city clerks or assessors in securing complete returns of marriages, births and deaths. With these properly returned, we are able to state from year to year, or through longer periods, the health of any locality. Thus any hearsay as to healthfulness or sickness can be corrected, and if any disease is found to prevail above a general average we detect

causes and correct them. The progress of population and the causes affecting the growth of sections can be studied, not merely for curiosity, but in the interests of political economy and social advancement. It is thus that whole communities have their health interest under supervision. As health is capital and wages, we thus look after a great condition of success. There is no more important census of population. It can only be secured at the time the events it records are occurring. If left to the end of the year or for semi-decennial record, experience shows that the results are too imperfect for study.

It is important that records of meetings and a copy of reports be kept in the local health books. This aids in future study. The State index and transcriptions of marriages, births and deaths which is kept in full at our office, furnishes data for comparison, and enables localities to know their condition and what evils they need to guard. Cities only need to transcribe the age, sex, date, number of street and cause of death, and to see that the blanks sent for record are promptly filled. City clerks and boards of health should be able to tell each death that has occurred in any house through a series of years, and thus find out local causes of disease.

The several reports of this board clearly indicate the work to be done. Local boards must see to it that all circulars, reports, &c., sent are not carelessly retained by assessors or others, but passed over to each successive board. We send such reports, as also all circulars and blanks, to any citizen on receipt of postal.

In addition to the duties indicated, local boards should notify us of any contagious diseases among animals, with the names and post-office address of owners. The laws against adulteration of foods and drugs, against poor kerosene and many others, come under the care of these boards.

There is now enough law for most cases. What is most desirable is a comprehension of what is needed and proper to be done, and the doing of it by right methods. Those who have power to enforce a law, because of that power, have far greater chances for persuasion in securing right action without legal process. But this must not mean delay or tampering with dangers to the public health. We ask all boards to become informed as to their duties and then to perform them with that prudence, energy and determination which the circumstances of each case may require.

Any letters of inquiry may be addressed to the Secretary of the State Board of Health, Trenton.

We add a number of suggestive questions indicating what boards of health should know or inquire about. Some of these apply only to cities and some only to townships, but are worthy of thought according to the needs of each locality :

- What is the area of the city or township?
- What is the density of population?
- What is the character of geological structure and soil?
- What is the natural drainage?
- What the needs of additional drainage arising from structural alterations?
- Are there ponds or stagnant pools or any other interferences with proper drainage?
- Is there a sanitary map, so that the location of all underground pipes or the plan of all underground work and the contour of surface can be easily known?
- Are plans devised or executed for proper drainage?
- In cities is foresight had as to public parks?
- Are there any free baths?
- Are there careful arrangements to prevent nuisances, as well as for their abatement?
- Are cases of contagious disease reported to you either by the head of the family or by the physician?
- Have you plans and provision for dealing with any case of contagion, such as small-pox, typhus fever, &c.?
- Is there any sanitary inspection of school-houses or other public buildings?
- What trades or occupations are injuring the health of operatives?
- Have factories any system of ventilation?
- Are there factories of which the odor or refuse is a nuisance?
- Are there slaughter-houses which are a nuisance?
- Is there any inspection of city stables or cow-pens or hog-pens?
- Is there any inquiry into the adulteration of milk, of food, or of drugs?
- Is kerosene ever tested, or are there accidents therefrom?
- Is a record kept of diseases, or of deaths and their causes?
- Do you aid the assessor or city clerk in securing the returns of marriages, births and deaths?
- Is vaccination systematically secured?
- Does the assessor or city health inspector regularly report to you any condition which he regards as hazardous to the public health?

HOUSES.

- What is the condition of cellars and basements?
- How are the walls as to dryness and dampness?
- What fire-escapes or provisions for fire?
- What the condition of tenement-houses, railroad stations, assembly-rooms, school-houses, &c.?
- What is the water-supply of each house?
- Is there a well or cistern supply? How many use wells instead of the public supply?

- Are there any cesspools which have been once used and then filled up?
 How near are cesspool, well and outhouse?
 Is there outside ventilation between the house-pipe system and the cesspool or sewer?
 Is there a trap between it and the cesspool or sewer? Any grease trap?
 Does the board of health know the sanitary condition of each house in those matters which most concern the health of the community?
 If there are sewers, is their condition thoroughly known? Are they ventilated?
 Are house connections watched and carefully superintended when new buildings are erected or when changes are made?
 How is storm water disposed of?
 Give size, location and construction of present cesspool, and how emptied?
 How are ashes, garbage, &c., disposed of?
 Are there house or outdoor water-closets? If so, how are they constructed, cared for or emptied?

It is both a privilege and a responsibility to be a member of a local board of health; a privilege because it enables you to do much to prevent disease, and a responsibility because we have the evidence that neglect on the part of local boards has often caused a greater prevalence of sickness and the spread of epidemics. We find now and then a board that sees nothing to do, and then, again, a board, in a locality very similar, that does much in removing the causes of disease or in diminishing the number of cases that occur.

This State has plain, excellent and ample laws, giving large powers to local boards of health for preventing or abating nuisances, and in other ways guarding and promoting the health of the people.

In Circular 39 we have indicated the many ways in which these boards can be useful.

City, township and borough boards are formed in accord with the methods prescribed in the law as to such boards. Township boards consist of the township committee, the assessor and such physician as may have been selected. While the township board can act without a medical member, it is always important to have one. If no one is chosen by the local authority, the State Board generally exercises its right to place one upon it.

While the law by its terms forms the local board, it is best that it should organize as such and keep some record of its work. In Circular 60 is to be found a code of ordinances, which will serve as a model for these boards.

It is always best for townships to pass ordinances as to health, since then the people understand what is required, and it is easier at once to collect a fine for disobedience of an ordinance than it is to abate a nuisance and then collect the expense from the offending party.

The townships, as well as the cities, need a health inspector, care being taken that he not only helps to abate evils to health, but to prevent them. In all villages there should be inspection of premises. An inspector should always give for a record, a brief, written report of the visits he has made and of the work he has done. It is rarely necessary for an entire board to view a nuisance. (As to appointment, payment, &c., see Chapter 68, laws of 1887, sections 31-35, and Chapter 213, laws of 1892, section 2. Also, Circular 60, pp. 21 and 34.)

Experience is constantly illustrating how necessary sanitary authorities are and how their importance is recognized, especially in times of epidemic.

Each spring the health board should carefully consider any conditions injurious or hazardous to health, and the need of examination of houses or neighborhoods. We have cases where assessors, interested in the public health and having informed themselves as to sanitary matters, have been of great service by their inquiries and advice as they visit for assessment.

In cities the boards need to be fully informed as to the existing evils, and to apply the law as to the inspection and plumbing of buildings.

Great attention should be given to cases of diphtheria. Prompt isolation of cases of diphtheria and intelligent inspection will do much to prevent the spread of this disease in schools and families.

We always send our reports to the assessor for the use of the board, and are glad to send circulars or reports as far as we can to other members of the board. They should be carefully kept.

ATLANTIC COUNTY.

TOWN OF ABSECON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Clayton L. Higbee, Elmer C. Bates, John W. Cordery, Daniel Walters, Jr., Japhet Adams, John S. Hackett.

JOHN R. STEELMAN,
Secretary.

BOROUGH OF ANGLESEA.

No report received.

ATLANTIC CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William G. Hoopes, President; Jacob H. Leedom, Treasurer; William B. Loudenslager, Joseph H. Borton, M. D. Youngman, M.D., Julius Coty, Henry S. Scull, Secretary; Alfred T. Glenn, Health Inspector. Post-office address of all, Atlantic City.

Population, about 18,000.

Water-supply is now owned by the city, and \$225,000 has been appropriated by council to increase the capacity of the plant. The supply is obtained from two sources, viz., artesian wells and springs on the mainland.

Drainage is provided for by a system of pipes draining to a well, and the sewage is pumped from the well to filtering beds on the meadows.

Sewer connections continue at the average rate of one hundred and fifty per year.

Streets, with but few exceptions, are built of gravel, but other material is to be tried on those upon which the traffic is heavy.

Houses are constructed, with but very few exceptions, of wood, and are provided with basements above ground, and usually occupied by one family, and are inspected once each year.

Two electric-light plants and a gas company provide the city with light.

ATLANTIC COUNTY—Continued.

Garbage is collected daily throughout the summer and tri-weekly the balance of the year. All waste so collected is taken to the crematory and burned. Cesspool and out-house collection is made by the odorless excavator system and is composted outside of the city limits.

Markets are looked after by the inspector, and the food-supply is rarely found unwholesome.

Schools are overcrowded, but a new high school building now being erected will give ample accommodations to the higher grades, leaving sufficient room for the lower grades. All school buildings are well heated either by steam or hot air, and well ventilated.

All hotels are provided with fire-escapes.

A new code of ordinances has been adopted during the year, and is designed to cover all contingencies.

A complete record of births, deaths and marriages is kept in a book provided for that purpose. Ministers, physicians and undertakers have been very prompt in making their returns.

No cases of contagious diseases have required control beyond the isolation of patients, ordered by the inspector in cases of diphtheria, scarlet fever and kindred diseases.

City council has approved the annual budget of the board of health and have appropriated \$22,000 for their use during the present fiscal year, out of which is paid the cost of collecting and disposing of garbage, maintenance of hospital for contagious diseases, abating of nuisances, officers' salaries, &c.

No prevalent diseases to report during the year.

No sanitary improvements since last report.

All cases of the dangerous communicable diseases have been reported to our board.

Physicians are furnished with printed blanks for reporting communicable diseases.

A record has been kept of all communicable diseases.

A weekly statement of all reports of communicable diseases has been reported to the State Board of Health.

Gratuitous vaccination has not been offered to the public by the board of health this year. We cannot state the proportion of the population that has been vaccinated within five years.

ATLANTIC COUNTY—Continued.

House-to-house inspection is regularly performed, usually during the months of March, April and May.

No serious defect in the water-supply. The treatment of the sewage at the filtering beds has not been satisfactory, but the plans of the sewerage company, as outlined to the board of health, will remedy the defect.

H. S. SCULL,
Secretary.

TOWNSHIP OF BUENA VISTA.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William S. Chew, Cedar Lake; Dominick Corsiglia, Landisville; Charles Kohler, Buena Vista; Douglas Reed, Landisville; John Faux, Vineland.

BOROUGH OF BRIGANTINE.

No report received.

EGG HARBOR CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George F. Breder, President; Henry G. Regensburg, Lawrence Berchtold, Valentine P. Hofmann, Secretary. Post-office address of all, Egg Harbor City.

The matter of the construction of a public drain, which has been in controversy and litigation for some years, has been finally consummated during the past summer. This much-needed improvement will prove to be of great permanent value.

During the past season there were only a few cases of contagious or infectious diseases reported, which were promptly quarantined by the committee. The general health of the inhabitants of the city has been excellent. No diseases of animals were reported, and the ordinance for registration of cattle and proper surveillance has been strictly enforced.

The stated meetings were held regularly, besides a number of special meetings.

V. P. HOFMANN,
Secretary.

ATLANTIC COUNTY—Continued.

EGG HARBOR TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel A. Smith, President, English Creek; John I. Corson, Bargaintown; Walter C. Fifield, Bakersville; Samuel C. Edmunds, M.D., Linwood; Abraham R. Vickers, Bakersville, Assessor.

HAMILTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Daniel E. Iszard, Daniel McClure, Lucian Corsen, Dr. W. R. Wales, Health Inspector. Post-office address of all, Mays Landing.

Hamilton township is located along the Great Egg Harbor river. Its population is about 2,000 and its post-office villages are Weymouth, Mays Landing and McKees City.

The township is quite heavily wooded with pine and oak, with a vast amount of swamps which yield a large amount of cedar. The township is well drained by the Great Egg Harbor river.

The supply of water is furnished from private wells.

In Mays Landing there is a drain through Main street to carry off rain water.

The streets are kept in a cleanly condition, all being made of gravel.

The houses are occupied by cleanly people as a rule.

All houses are lighted by lamps.

The garbage is deposited in barrels and carted away, and the out-houses are cleaned two or three times yearly.

We have had no disease among animals.

The water power company have closed their slaughter-house. There is none now open.

The cotton mill and shoe factory are well drained.

The school-houses are well situated, supplied by good wells and heated by stoves. The out-houses are separated from the main buildings by at least fifty yards.

The county jail is drained into the river by a six-inch pipe; is heated by steam and lighted by oil. The sanitary conditions are first-class.

ATLANTIC COUNTY—*Continued.*

The cemeteries are situated about a mile from town and are in a very good condition.

The board meets every month and then acts on any complaints made.

The township assessor receives the reports of vital statistics.

All cases of contagious diseases are quarantined.

The prevalent diseases have been measles, grippe, typhoid fever, malaria, pneumonia, whooping cough, diarrhœa, dysentery.

The sanitary improvements made have been the moving and improving of several out-houses, filling in low land and filling up several old wells.

 HAMMONTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Elias Joslyn, President; J. Louis O'Donnall, Secretary; James Potten, Harry McK. Little, Edward North, M.D., Health Inspector.

The year ending October 1st, 1895, has been an unusually healthy one for Hammonton. There has been no epidemic during the year, and but very few cases of contagious disease. Reports of all dangerous communicable diseases are made to the board, and are reported to the State Board.

EDWARD NORTH, M.D.,
Secretary.

 BOROUGH OF LINWOOD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph Steelman, Chairman; Joseph T. Haines, James B. Steelman, Benjamin I. Cramer, Reuben L. Somers. Post-office address of all, Linwood.

 MULLICA TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Reuben Brooker, Elwood; Charles Taalman, Egg Harbor City; George W. Huntsman, Nesco; W. W. Phillips, Elwood.

JOHN T. IRVING,
Secretary.

ATLANTIC COUNTY—*Continued.*

PLEASANTVILLE BOROUGH.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Lewis H. Barrett, President; Samuel Bartlett, Secretary; Samuel B. Jones, James Lafferty, Frank Reinart, post-office address of all, Pleasantville; Isaac Collins, Smith's Landing; Dr. Richard M. Sooy, Health Inspector.

Our board is fully organized, holds regular stated meetings and attempts to perform the regular duties promptly.

Council appropriates \$150 for the use of the board. The secretary and inspector each receive \$50 per year, and this year \$10 will cover all additional expense.

We are called on no longer to help dispose of the garbage of Atlantic City.

Only one complaint, that of allowing refuse water from a pump used in a private dwelling to flow into the street, was made to the board this year. This the owner cheerfully, upon notice, corrected.

R. M. Sooy, M.D.,
Inspector.

 BOROUGH OF SOMERS POINT.

No board organized.

 SOUTH ATLANTIC CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

P. J. Gilligan, Wm. J. Tate, James A. Rider, A. Gertzen, Sr., W. H. Schurr. Post-office address of all, South Atlantic City.

Our borough is a half mile wide and two miles long, and we have about seventy houses. Most of them are empty eight months in the year. Our ordinance provides that all cesspools shall be made water-tight.

CHARLES HART,
Borough Clerk.

ATLANTIC COUNTY—*Continued.*

WEYMOUTH TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William Hoffman, Tuckahoe; Anderson Campbell, Tuckahoe; Merrick Steelman, Estelville; W. H. Campbell, Scullville.

W. H. CAMPBELL,
Health Inspector.

BERGEN COUNTY.

BOROUGH OF ALLENDALE.

We have no health board organized, but will have one at once. The sanitary condition of the borough is excellent. One case of typhoid has occurred.

PETER D. RAPELYE,
Mayor.
ROBERT L. NIMMO,
Clerk.

BOROUGH OF BERGENFIELD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. D. Westervelt, President and Treasurer; Jas. Murray, J. W. Ferdon, S. E. Demarest, J. Z. Demarest, Secretary and Registrar. Post office address of all, Bergenfield.

Location—the south central portion of Palisade township. Population about 500.

Pipe water-supply from Hackensack river, wells and cisterns. Do not know how many wells there are.

Drainage to cesspools, the contents of which is used for fertilization.

The streets have been improved by macadam. We have no public grounds.

Very few tenement houses. Nearly all houses are owned by occupants.

BERGEN COUNTY—*Continued.*

No diseases of animals reported.
No slaughter-houses.
No manufactories.
One public school in good condition.
The expenses of this board have been nominal.

BERGEN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Wm. Foose, Chairman; Adolph Kruger, Secretary; John H. Outwater, Wm. Fleischmann, Dr. A. Richter, Health Inspector.

We have nothing special to report for this year. Board of health is properly organized, and holds monthly meetings.

ADOLPH KRUGER,
Secretary.

BOROUGH OF BOGOTA.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter F. Hopper, A. Godwin Munn, Jr., Edward B. Duvall, Peter Bogert, Jr., F. E. Walter, R. C. Lydecker, Health Inspector. Post-office address of all, Bogota.

On the west bank of the Hackensack river, opposite the town of Hackensack.

Three hundred population.

Rolling country of hills and valleys. Excellent drainage and surface conditions.

Pure spring water is pumped in a reservoir and borough, in part, supplied from same. About twenty wells still in use.

Drainage and plumbing of the best.

Streets macadamized and kept in good repair. The health board having been but lately organized, the systematic house-to-house inspection will not be completed in time for this report. It is the intention of the board to have every house thoroughly inspected.

Garbage mostly burned. Out-houses and cesspools regularly looked after and collections made by the odorless system.

BERGEN COUNTY—*Continued.*

Sanitary code passed June 21st, 1895, as embodied in Circular 60. Particular attention is paid to the collection of vital statistics, and all concerned held to their duty.

No contagious diseases have occurred and the board has taken no action in reference to vaccination.

Salary of inspector (\$50 per year) is all the expense to the present time.

The dwellings are mostly furnace heated.

The board was duly organized June 21st, 1895; a sanitary code passed and an inspector appointed; a general inspection of the borough made, and, as a rule, houses and yards were found to be in exceptionally good sanitary condition. This being a town of residences only, occupied by the better class of people, the general sanitary condition is much better than in a mixed community, and when the inspector has pointed out where improvement could be made the suggestions have been immediately and cheerfully complied with. The present state of the borough is excellent, there having been little sickness during the past year.

SPECIAL INQUIRIES FOR 1895.

House-to-house inspection has been commenced and record kept.

No stated sum was appropriated this year for the board of health, the borough council furnishing any funds required.

BOROUGH OF CARLSTADT.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Martin J. Schmitt, Henry Kreiling, Sr., Theodore Bloecher, President; Herman Foth, Secretary; Charles Ziegler, Dr. Aug. Richter, Inspector. Post-office address of all, Carlstadt.

The borough of Carlstadt was formerly a part of the township of Bergen; in June, 1894, a borough government was formed. Our community has a population of nearly 2,000 inhabitants.

Our board of health has stated meetings, on the fourth Thursday of each month. In general the health was good during the last year.

BERGEN COUNTY—*Continued.*

The sanitary condition is also good. Small complaints and nuisances are speedily remedied.

As far as we know, all contagious diseases have been duly reported to the secretary by the physicians practicing in the borough and vicinity. Last November and December two cases of small-pox and one case of diphtheria were reported; in February one case of diphtheria, and in September one case of diphtheria. In each instance proper measures were taken to prevent spreading of the diseases.

We have not yet printed report blanks for communicable diseases, but they have been ordered. The secretary preserves the slips sent by the physicians. One family requested gratuitous vaccination, which was duly granted.

No house-to-house sanitary inspection has yet been made, but the board is well acquainted with the houses, it being a small community.

Sewerage—we have none in the borough, and know of no serious defect in the water-supply, which is received from the Hackensack Water Company. Six public wells are still in use and some cisterns.

The inspector of the board receives a compensation of \$30 per annum. The mayor and council have appropriated the sum of \$50 for health purposes, but any deficiency will be met by the borough authorities.

We enclose a copy of our by-laws and the sanitary code. The latter has been delivered to each family by one of the borough marshals.

HERMAN FOTH,
Secretary.

BOROUGH OF CRESSKILL.

No report received.

BOROUGH OF DELFORD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Frank T. Barnes, President, River Edge; C. H. Stormes, Secretary, Oradell; H. S. Jones, M. D., Oradell; Jacob M. Hill, Health Inspector, New Milford.

BERGEN COUNTY—*Continued.*

Location of Delford borough is seventeen miles north of Jersey City. It lies on both sides of the Hackensack river. It contains about 850 acres, and has a population of 600 persons.

There is almost a continuous upward grade west from the river, and through road ditches and natural ditches the water very readily finds its way to the river. A part of the soil is sandy but the greater part is a heavy loam, more particularly on the elevations.

The Hackensack Water Company have their plant in our borough. Very few, however, have the water in their houses, perhaps not more than twenty-five families; the others use well water.

There are about one and a half miles of sewers in the borough. The houses are in good condition.

Streets are in fair condition, partly macadamized. We have no public ground. Nearly every one owns his own house in Delford.

Streets are not lighted.

Garbage is generally put on the manure pile, or it is thrown in the back yard. Some persons cover it with ashes, some with lime, others with chloride of lime, and it is carted away when convenient.

The large majority of cesspools have open bottoms. Our code requires all new cesspools to be plastered with cement, both sides and bottom. The privy vaults are generally excavated at night, and the contents used for fertilizing.

No diseases among animals.

No slaughter-houses in the borough.

One school, one church, one public hall.

No station-house, jail or prison.

No almshouse.

No cemeteries in the borough.

We have issued a code of ordinances.

There has been but one case of contagious disease during the year; that was diphtheria.

No money has been voted for board of health expenses, and the council have refused thus far to pay any bill, either to the members of the board or the inspector.

Our board organized in June, 1894. We had several meetings before we felt prepared to act. We issued a code, the printing of

BERGEN COUNTY—*Continued.*

which, at first, the council refused to pay for, but finally did settle the bill.

September 25th, 1894, a pond of dead water was declared a nuisance. The pond lies adjacent to Linden avenue, the main thoroughfare. The water was drawn off and the hollow will be filled with earth.

J. M. HILL,
Health Inspector.

BOROUGH OF EASTWOOD.

No report received.

BOROUGH OF ENGLEWOOD CLIFF.

No report received.

BOROUGH OF EAST RUTHERFORD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Paul Jeanerette, President, Rutherford; C. H. Vernoye, Rutherford; Aaron Devries, Carlton Hill; Geo. Hagelweide, Secretary, Rutherford; Dr. C. Brooks, Health Inspector, Rutherford.

We have been free from contagious or infectious diseases during the past year, and our death rate has been comparatively low, there being only 32 deaths out of a population of 2,240, or 14.28 per 1,000.

Meetings of the board are held regularly every fourth Wednesday of each month.

Gratuitous vaccination has not been offered to the public this year, the board having given free vaccination the year previous. Seventy-five per cent. of our inhabitants have been vaccinated within the last five years.

Our borough council appropriated \$250 for the use of this board during the year. One hundred dollars per annum is paid to the inspector, Dr. C. Brooks; \$50 to the secretary.

GEO. HAGELWEIDE,
Secretary.

BERGEN COUNTY—Continued.

BOROUGH OF EDGEWATER.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Edward Fischer, President, Edgewater; E. Grant White, Secretary and Registrar, Edgewater; Wm. H. Eickhoff, Treasurer, 130th street and North river, New York City; Frederick W. Winterburn, Edgewater; James Whalen, Edgewater.

We are about to adopt a sanitary code.

Our place of meeting is at the borough building, Edgewater, and our regular meeting night is the second Friday in each month.

E. GRANT WHITE,
Secretary.

ENGLEWOOD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

O. D. Smith, President; James Harris, Joseph Thomson, Hugh Smith, Inspector; Hezekiah Birtwhistle, Secretary; Hardy M. Banks, M.D., Health Physician. Post-office address of all, Englewood.

Englewood is situated partly on the western slope of the Palisades and the ridge on the west side of the Northern Valley; contains a population of 5,500. The surface is rolling and all surface water is carried off rapidly to tide-water in the Overpeek creek.

The drinking water is supplied by the Hackensack Water Company, and is the same as that used by Hoboken. A few wells are still used. The drainage is unexcelled.

There are no regulations in regard to plumbing, except the licensing of plumbers by the water company.

Our streets, in width range from 40 to 100 feet, the average being 50 feet. No public grounds. There are but few tenement houses. All inspections are made by the health inspector, who reports monthly to the board of health. The street lighting is by gas and gasolene (principally the former), supplied by the Bergen County Gas Light Company.

The board of health has recently passed an ordinance regulating the removal of garbage, and issuing licenses to cesspool and privy

BERGEN COUNTY—Continued.

vault cleaners. No public markets, slaughter-houses or manufactories. Three public and three private schools. One police station. Two cemeteries, not including poorhouse burying-ground. The board has a full code of ordinances. Vital statistics are collected monthly by the assessor and forwarded to the State Board of Health. Contagious diseases are reported to the board, and the inspector is ordered to examine the premises and take all possible precautions.

There have been a few light cases of diphtheria during the year, none resulting fatally.

H. BIRTWHISTLE,
Assessor.

BOROUGH OF FAIRVIEW.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

F. W. Schneider, President; Chas. Christiansen, Henry Beerman, Malcolm Long, Gerard Fahrenholz, Secretary and Inspector. Post-office address of all, Fairview.

We have nothing to report at this time, having only formed a week or two ago. Sanitary code not yet adopted.

FRANKLIN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Wm. J. Packer, Wyckoff; Albert Lozier, Wyckoff; Jacob A. Terhune, Oakland; E. W. Hamilton, M.D., Health Inspector, Oakland; Jno. W. Ackerman, Secretary and Assessor, Oakland.

E. W. HAMILTON,
Health Inspector.

BOROUGH OF GLEN ROCK.

NAME OF MAYOR AND COUNCILMEN.

Richard T. Snyder, Mayor; Councilmen—Alfred De Baun, John A. Ackerman, Henry Demarest, Garret T. Hopper, John J. Terhune, David J. Marinus, John J. Storms, Borough Clerk. Post-office address of all, Glen Rock.

BERGEN COUNTY—*Continued.*

We have not formed a board of health as yet, but expect to in the near future. Our borough is a farming district and is in a very healthy location.

JOHN J. STORMS,
Borough Clerk.

HACKENSACK.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. S. C. Wells, President; Chas. F. Adams, M.D., Secretary; Chas. Conklin, Treasurer; Wm. H. Harrison, Louis Perrot, Jas MacAllister, F. H. White, M.D.; Herman Baar, Sanitary Inspector; Robt. Ballagh, Plumbing Inspector. Post-office address of all, Hackensack.

The location of the county seat of Bergen county is upon the Hackensack river. Our population, by the last census, is 7,282. The contiguity of the Hackensack river is of great sanitary importance. It affords a convenient and satisfactory outlet to our excellent sewer system, which latter, with the light character of our soil, assures a prompt and thorough surface drainage; while its upper waters (above tide-water) afford us, through the plant of the Hackensack Water Company, an abundant supply of excellent water. We are informed that the sources of supply are patrolled to avoid contamination. Almost the whole of the town proper is supplied with this water, and the few private wells are, fortunately, decreasing.

There is no ground drainage apart from the sewer system, nor is any needed. All plumbing is very thoroughly done in accordance with the provisions of our plumbing ordinance. Plans are first submitted for approval, and the work is done and suitable tests made under the supervision of our plumbing inspector. Almost all the streets are macadamized and generally well drained. Dwelling-houses almost universally stand apart instead of in blocks, affording abundant opportunity for light and ventilation. The town is supplied with both gas and electric light. Ashes and garbage are regularly collected by a private company and dumped within the town limits, but where they do not create a nuisance or a menace to health. The growth of the town will soon demand regulation of this point.

BERGEN COUNTY—*Continued.*

The great majority of houses are connected with sewers. No cess-pools are allowed to be built on streets contiguous to sewers. Cesspools are built and cleansed in accordance with our ordinance governing these points. There are no general markets and no slaughter-houses within the town. No manufactories have been built within the year. The two small factories existing within our jurisdiction are well lighted and ventilated.

The county jail, located in the town, is in fair sanitary condition, the plumbing having recently been improved. Interments are still occasionally made in the single cemetery within the town limits. Our ordinances are on "The Construction of Cesspools," "Nuisances," "Plumbing," "Contagious Diseases," and "The Cleansing of Cesspools." Contagious diseases are required to be promptly reported. Houses containing cases of such diseases are placarded, and the most careful isolation possible is enforced. There have been no unusual or prevalent diseases, and only sporadic cases of contagious diseases.

During the year the board has held regular monthly meetings and transacted the usual routine business promptly. In addition, plumbing plans of 116 buildings have been passed upon and the work carefully supervised. Our ordinances have gone through a careful revision and have been published and gratuitously distributed to all the householders in the town.

Our regular expenses are necessarily kept within \$400, as that is the limit of the appropriation which we are able to obtain from the Hackensack Commission. Although this amount is far from sufficient, the town generally is in remarkably good sanitary condition.

Very recently, at the request of our board, the milk supplied to our town was examined by the officials of the Dairy Commission. The fourteen samples inspected were found to be up to the required standard.

The Hackensack creek, running through the lower part of the town, continues to be, as for many years past, practically an open sewer. Our board has made every effort to mitigate this evil without avail, and we are obliged to await the action of the Hackensack Commission to rid our town of its only objectionable feature.

C. F. ADAMS, M.D.,
Secretary.

BERGEN COUNTY—*Continued.*

HARRINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John H. DeWolf, Chairman, Tappan, N. Y.; John C. Holdron, Norwood; Joseph F. Mount, Closter; R. Newton Sneden, Northvale; L. B. Parsell, Closter, Health Inspector.

Have little to add to last year's report. There were a few cases of scarlet fever last spring. The Closter school was closed a short time to prevent the spreading of the disease and precautionary measures were taken.

There has been one case and death from diphtheria reported.

But one case of a nuisance was reported to the board. The parties complained of were notified and the nuisance abated.

R. NEWTON SNEDEN,
Assessor.

BOROUGH OF HASBROUCK HEIGHTS.

No report received.

HOHOKUS TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Jacob J. Young, Chairman, Ramseys; Wm. Van Horn, Mahwah; Charles P. Deyoe, M.D., Ramseys; John Ackerman, Secretary, Wyckoff; David F. Smith, Inspector, Ramseys.

All cases of dangerous communicable diseases have been reported to the board as required by Section 1 of Chapter 260 of laws of 1895.

Board does furnish to physicians printed blanks for reporting communicable diseases.

A record has been kept of all communicable diseases.

A weekly statement of all reports of communicable diseases have been faithfully transmitted to the State Board of Health.

No gratuitous vaccinations has been offered to the public the past year. I do not think that more than one-half of school children are vaccinated.

BERGEN COUNTY—*Continued.*

No house-to-house sanitary inspection, or no record kept of such inspection.

Water-supply mostly from wells and cisterns.

No sewerage system in the township.

It has been customary to charge \$2 for each member for every meeting of the board; \$100 was appropriated or allowed for the use of board during the past year.

No ordinances, rules or regulations have been adopted during the past year.

JOHN ACKERMAN,
Secretary.

BOROUGH OF LEONIA.

No report received.

BOROUGH OF LITTLE FERRY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Nicholas J. Schopp, President; Elmore N. Mehrhof, Secretary; John A. Dare, George Soll, Silas Gardner, Health Inspector. Post-office address of all, Little Ferry.

Located on West bank of Hackensack river. The ground is low and marshy; has a population of 1,100, and a generally moist climate. The soil has an immense clay deposit. The buildings consist of dwellings and brick manufactories. The drainage runs direct to the river.

The water-supply is principally from artesian wells, and a few surface wells.

Drainage—surface; no sewers.

Streets and public grounds are generally in a clean condition.

Modes of lighting—kerosene.

SPECIAL INQUIRIES FOR 1895.

We have been entirely free from dangerous or contagious diseases during the year.

All school children have been vaccinated.

BERGEN COUNTY—*Continued.*

No sewer system. Water-supply good and abundant from artesian and surface wells.

No one employed by the board in any official capacity.

Ten dollars is allowed each member of the board for his year's services.

BOROUGH OF LODI.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Hagerty, Lodi; Joseph Pallette, Lodi; James J. Mason, Lodi; Daniel De Block, Lodi; Jacob Van Hook, Lodi; George S. Davenport, Garfield, Health Inspector.

The borough has no water-supply and the inhabitants depend on wells and cisterns.

There is no general drainage. Cellars are usually dry.

There is no yearly house to-house inspection.

There is no general sewerage. All out-houses have vaults built with open bottoms; contents used to fertilize the soil.

There has been no disease prevalent among animals.

There are no slaughter-houses or abattoirs.

There are no new manufactories.

There are six churches and one school and two halls in the borough.

There are four cemeteries.

The board of health has made every effort to do its duty faithfully.

Vital statistics have been carefully collected and returned.

Last winter there was one family stricken with diphtheria; the members were closely quarantined.

The older buildings are generally heated by stoves and ventilated in a primitive manner; the newer ones are supplied with furnaces, steam heat and hot water, and ventilated by modern methods.

The board has kept a general supervision over the health of the borough, trying to remove all known causes of disease and to prevent contagion when single cases of that character have occurred.

JACOB VAN HOOK,
Secretary.

BERGEN COUNTY—*Continued.*

LODI TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

M. Helbig, Woodridge; P. Koster, Woodridge; I. Puddy, Little Ferry; I. Pries, Woodridge.

BOROUGH OF MAYWOOD.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Philip Thoma, President; F. T. May, Secretary, Treasurer and Registrar of Vital Statistics; D. S. Price, G. L. Jaeger, G. R. Brown. Post-office address of all, Maywood.

Population about 300.

Water supplied by Hackensack Water Company, but not introduced in all houses; about fifteen wells used.

No sewers; cesspools used altogether.

Streets lighted by electricity; no gas or electricity in houses.

No slaughter-houses.

One factory, for manufacture of tiles.

New public school, with latest system of heating and ventilating

Public health laws, code and regulations have been published and distributed.

Board organized July 16th, 1895, and has not been called on to make any sanitary improvements or abate any nuisances.

MIDLAND TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

David H. Hopper, Chairman, Hackensack; John G. Zabriskie, Rochelle Park; Peter Ackerman, Ridgewood; Nicholas G. Hopper, Assessor and Secretary, Ridgewood; Wm. L. Vroom, M.D., Medical Inspector, Ridgewood.

The Midland township board of health was organized last March, and due notice of a meeting for the hearing of complaints was given.

One complaint was made of a stagnant pool of water near the school-house, District No. 26, which received prompt attention.

BERGEN COUNTY—*Continued.*

The health of the community has been very good and there seems to be no occasion for a house-to-house inspection in this township.

NICHOLAS G. HOPPER,
Secretary.

BOROUGH OF MIDLAND PARK.

No report received.

BOROUGH OF MONTVALE.

No report received.

NEW BARBADOES TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John McD. Gamewell, Robt. Amos, Edwin Schmults, Andrew Dederick, G. Howard McFadden, M.D., Health Inspector. Post-office address of all, Hackensack.

We have not had any epidemics, and but few complaints as to nuisances and those were soon abated.

The general health of our township has been exceptionally good during the past year. The two school-houses in our district are in perfect sanitary condition.

BOROUGH OF OLD TAPPAN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. B. Eckerson, River Vale; Wm. H. Mence, River Vale; G. F. Haring, River Vale; A. T. Herrick, Westwood; John Maurer, Jr., Tappan.

The borough of Old Tappan is situated in the northern border of the State, and about five miles from the Hudson river. Its population, according to census of May, 1895, was 261. Its area, 2,314 acres.

BERGEN COUNTY—*Continued.*

The surface is generally high and rolling, with but little low land. Naturally well drained.

Water-supply procured from wells and cisterns.

Drainage and plumbing is such as found in farming districts.

Kerosene is used for lighting.

Garbage, &c., is disposed of by ploughing it under ground on farm lands.

Have heard of no contagious diseases among animals.

One school-house and a chapel. School-house is well lighted and ventilated.

Have heard of no cases of contagious diseases for a number of years. Children are generally vaccinated.

ORVIL TOWNSHIP.

No report received.

PALISADE TOWNSHIP.

No report received.

BOROUGH OF PARK RIDGE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Eugene Jehl, President; C. H. Wardell, F. Wheaton, Mr. Maire, W. D. Woodley, Secretary and Registrar of Vital Statistics. Post-office address of all, Park Ridge.

WM. E. NOBLE,
Health Inspector.

BOROUGH OF RIDGEFIELD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Alexander Shaler, (President; A. Ertle, E. Robinson, Samuel E. Stohr, Secretary; M. S. Ayers, Health Inspector. Post-office address of all, Ridgefield.

BERGEN COUNTY—*Continued.*

Located on a spur of the Palisades. Population about 500.

Surface drainage good.

Hackensack water mainly used.

Cesspools and public sewer.

Streets mainly macadamized, others dirt roads; one public park.

Two tenement-houses, remainder private; no inspection during past year.

Garbage generally burned, or buried by tenants; no provision for the public care or disposal thereof. Cesspools and outhouses cleansed when necessary by tenants, and contents buried in the numerous fields in the vicinity.

No diseases of animals during past year.

One public school; two churches.

One cemetery, not incorporated.

Sanitary code adopted.

A system of collection and the recording of reports from local physicians and the regular reporting thereof to the State Board of Health is carried out.

No arrangement for quarantine or care of contagious diseases.

Expenses of the board average about \$25 per year, and paid by the borough.

Only two cases of diphtheria reported during the past year.

The community is singularly free from contagious diseases, and since the formation of the board, about four years since, scarcely half a dozen cases of contagious disease have been reported, and those were diphtheria and scarlet fever. Citizens have been generally prompt to carry out any suggestions of the board for the improvement of sanitary conditions.

BOROUGH OF RIDGEFIELD PARK.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

C. M. Mergler, President; Dr. H. C. Elsing, F. H. Friend, F. M. Foote, A. Dexheimer, Secretary. Post office address of all, Ridgefield Park.

BERGEN COUNTY—*Continued.*

Our board came into existence but two months ago, and during this short period we have not collected any facts which would be of interest to you save the occurrence of two cases of diphtheria, which have recovered, and the disease, thanks to the care of our local physician who rigidly isolated the patients and disinfected the premises occupied by the patients by the most approved methods, was prevented from spreading.

I would also state that a number of cases of malarial fever have received the attention of our physician, with what result we are not officially apprised, as the doctor reports his fatal cases to the township board of health.

We have adopted a sanitary code, observing closely the legal requirements as to its passage and publication.

A. DEXHEIMER,
Secretary.

RIDGEFIELD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter Spindler, Chairman, Nordhoff; Albert Ravekes, Ridgefield Park; Joseph Schlosser, Fort Lee; Henry Benecke, Secretary, Fort Lee; Joseph Hüger, M.D., Health Inspector, Fort Lee.

The township has a population of 4,080, according to census taken this year. The sanitary conditions, I am sorry to say, are very imperfect, particularly in the eastern district. Notwithstanding this the health has been very good during the past year. A few cases of scarlet fever and diphtheria have occurred.

HENRY BENECKE,
Assessor.

BERGEN COUNTY—*Continued.*

RIDGEWOOD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry W. Hales, President, Ridgewood; Wm. J. Fulerton, Treasurer, Ridgewood; Hudson Campbell, Health Inspector, Ridgewood; Dr. John T. DeMund, Medical Inspector, Ridgewood; Thomas Terhenn, Secretary, Hohokus P. O.

We have no report to make.

VILLAGE OF RIDGEWOOD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph W. Edwards, President; George E. Knowlton, Secretary; George M. Ockford, M.D., Health Inspector; William J. Fullerton, Abraham G. Hopper, Thomas Terheun, Recorder of Vital Statistics (not a member).

Organized August 28th, 1895.

There has been no epidemic or sporadic occurrences of contagious diseases since the board was organized. In fact, the village has been in a good condition from a health standpoint all through the summer. There have been but three cases of typhoid fever during the year, one of which was imported from Jersey City, and the other two were apparently caused by leakage from a cesspool into the drinking water. This was remedied by closing up the well and obtaining a supply elsewhere.

There is urgent need of water and sewers in the village. The supply of water is mainly from artesian wells, although many surface wells are still in service. The soil is sandy, which permits percolation of deleterious matter even to the deep wells. A good public water-supply that could have constant observation would be an improvement on the well system.

GEO. M. OCKFORD,
Health Inspector.

BERGEN COUNTY—*Continued.*

BOROUGH OF RIVERSIDE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Nicholas R. Voorhis, River Edge; John R. Voorhis, Cherry Hill; David A. Zabriskie, Cherry Hill; Joseph H. Weston, Cherry Hill; Dr. I. W. Simpson, Advisory Physician, Schraalenburgh; Frederick H. Crum, Health Inspector, River Edge.

Situated on the west bank of the Hackensack river, adjoining the town of Hackensack, on a ridge, running north and south, 125 to 150 feet above the Hackensack river. Population 569, including the villages of River Edge and Cherry Hill, with a post-office at each place.

The borough of Riverside is one mile wide and two miles in length.

The soil is clay, underlaid with red rock, at twenty to thirty-five feet below the surface.

Drainage is as nearly perfect as can be. Land falls to the east and to the west—to the east to the Hackensack river, to the west to a brook which forms the western and southern boundary line of the borough. Said brook drains into the Hackensack river below Cherry Hill.

Water-supply—principally wells.

About one-half of the streets are macadam; remaining portion, dirt roads.

Garbage and outhouse collections used to fertilize the land.

No markets.

No diseases that the board of health have any notice of.

No slaughter-houses.

No cemeteries.

State model code referred to in Circular No. 60 has been adopted.

No contagious disease since the formation of the board.

No expense has been incurred, with the exception of the publication of the sanitary code, as required by law.

There have been three cases brought before the board of a trifling nature, and in each case the nuisance has been abated.

BERGEN COUNTY—*Continued.*

RUTHERFORD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Chas. Van Winkle, President; J. C. Sares, Treasurer; Dr. H. H. Hollister, F. E. Milner, Dr. Henry D. White, Jas. W. Burgess, Secretary; C. Collins, Health Inspector. Post-office address of all, Rutherford.

Water-supply is by the Hackensack Water Company. Very few wells are used.

A system of sewers is gradually being built and their use is being enforced wherever any complaint is heard. Most of the houses contain plumbing, and a new plumbing code has been adopted to regulate the construction of all new buildings.

Streets are mostly macadamized.

Inspection of houses is being practiced in a more thorough manner, and where nuisances are found to exist they are promptly remedied.

Oil, gas and electricity are used for lighting purposes; the streets being lighted by electricity exclusively.

Garbage and refuse are collected regularly and disposed of in a harmless manner, but some improvement in the disposal of same is under consideration.

Rutherford has three schools and a few public buildings. Sanitary conditions of all are fairly good.

Has one cemetery, and mode of burial is regulated by ordinance.

A new health code has just gone into effect.

Collection of vital statistics is thoroughly done and a record is kept of same.

All cases of contagious disease are promptly quarantined, and vaccination is very generally practiced.

Scarlet fever was prevalent during the winter months with an occasional case of diphtheria. A number of cases of measles were reported. Had two cases of small-pox and two of varioloid, with no deaths from that disease.

During the past year there has not been as much done by the board as should have been owing to a number of changes taking place in its membership. There has been a new sanitary code adopted which embraces a large number of sections in plumbing. In the future, all plans for plumbing will have to be submitted for approval.

BERGEN COUNTY—*Continued.*

In regard to the special inquiries for this year, I would state that all cases of contagious diseases have been reported so far as is known. The board furnishes blanks to physicians for reporting same, and keeps a permanent record of such reports. I think a weekly statement has been transmitted to your board. There has not been any gratuitous vaccination offered to the public. About 90 per cent. of the population has been vaccinated within five years. No house-to-house sanitary inspection is practiced, but such work is contemplated. There is no defect in the water-supply or sewer system that is at present known.

C. Collins, Health Inspector, \$100 per annum.

Henry D. White, Plumbing Inspector (temporary), no regular salary.

The amount appropriated for the uses of this board during the past year was \$250.

HENRY D. WHITE, M.D.

BOROUGH OF SADDLE RIVER.

We have no health board organized here as yet. Following is a list of the borough council:

B. Obleins, Mayor; A. Z. Winter, Chairman; J. G. Esler, W. W. Packer, G. A. Ackerman, F. L. Blackledge, Frederick Demarest; T. Nel. Woodruff, Borough Clerk.

SADDLE RIVER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

W. H. A. Maynard, Chairman, Garfield; Peter Alyea, Dundee Lake; C. E. Martin, Garfield; Peter J. Smith, Secretary, Rochelle Park; S. R. Moak, Health Inspector, Garfield.

There have been no prevalent diseases during the year except during August and September. During these months there were several cases of malarial fever, attributable to exposure of the surfaces of the bed of the Passaic river.

BERGEN COUNTY—*Continued.*

A few sporadic cases of scarlatina have occurred, but of a mild type.

Two applications for locating cemeteries in this township have been received by this board during the year, both of which were refused.

S. R. MOAK,
Health Inspector.

BOROUGH OF SCHRALENBURG.

No report received.

BOROUGH OF TEANECK.

No report received.

BOROUGH OF TENAFLY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. J. Haring, M.D., President; S. G. Clark, J. E. Butler, Jas. Delahanty, J. B. W. Lansing, M.D., Secretary, Treasurer and Registrar. Post-office address of all, Tenafly.

On Northern Railroad of New Jersey. Post-office, Tenafly. Population, about 1,800.

Country undulating, on western slope of Palisades; natural drainage.

Hackensack Water Company furnishes the water-supply.

Cesspools are used extensively and they are regularly emptied.

No diseases of horses, except two cases of glanders. Horses killed and buried; premises thoroughly disinfected.

Police station; two cells.

Vital statistics are regularly returned and forwarded.

About \$100 is appropriated for health purposes.

No epidemic. Two or three isolated cases of typhoid and remittent fevers.

BERGEN COUNTY—*Continued.*

We hold regular monthly meetings on the second Tuesday in each month.

No special emergency has arisen to demand action of the board.

J. B. W. LANSING, M.D.,
Secretary.

BOROUGH OF UNDERCLIFF.

No report received.

UNION TOWNSHIP.

No report received.

BOROUGH OF UPPER SADDLE RIVER.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter P. Bush, Chairman, Ramsey; Herman T. Hopper, Secretary, Saddle River; Jacob Zabriskie, Jacob Snyder, Charles P. De Yoe, M.D., Health Inspector.

The board of health of this borough was organized February 16th, 1895.

BOROUGH OF WALLINGTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter J. Krug, President; Robert Cook; Cornelius Vandervleet, James Brennan, Conrad Kreger, Secretary; Jno. J. Sullivan, M.D., Health Inspector. Post-office address of all, Passaic.

As a borough, Wallington is yet in its infancy, and it is our privilege to make the first annual report. The incorporation took place during the present year. It contains four square miles and about 1,200 inhabitants. The climate is about the same as that of Paterson. It has a sandy soil, with here and there a bed of gravel. The surface is very level, with a gentle slope to the Passaic river.

BERGEN COUNTY—*Continued.*

Our water-supply is very efficient, being derived from the Hackensack river, and is first-class in quality. There is no system of sewerage or drainage, except that afforded by nature. We have no public parks or grounds.

We have but few tenement-houses, and those are small and adapted to but one or two families each.

Our schools are well looked after, and in point of light, heat and sanitation are far above the average.

We have no miasmatic diseases or contagions or infections, except those common to childhood. We have had a few cases of typhoid, which were imported. The new code which has been framed and passed by the board deals with all the questions of quarantine, vital statistics, &c., and each member has done all in his power to enforce the requirements.

We have made no provisions for the care of cholera or small-pox patients, and if we were to have an epidemic of either of these diseases it would fall upon us heavily.

The polluted condition of the Passaic river with its poisonous vapors is beginning to arouse the public mind. The borough has put itself on record as being among those endeavoring to prevent this pollution.

 WASHINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John B. Lozier, Chairman, Oradell; Sanford Bogert, Hillsdale; David Lockwood, Park Ridge; William W. Banta, Secretary, Hillsdale; Dr. T. W. Townsend, Inspector, Hillsdale.

 BOROUGH OF WESTWOOD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

S. J. Zabriskie, M.D., Chairman; James S. Newbern, John J. Blauvelt, Genest M. Ottignon, Lewis M. Planck, Clerk and Registrar of Vital Statistics. Post-office address of all, Westwood.

BERGEN COUNTY—*Continued.*

Our board of health meets in regular session on the third Wednesday of each month and hold special meetings when circumstances require. The health of the borough has been usually good. A few cases of scarlet fever have been reported, but none very serious and all were easily controlled. The board received several complaints of nuisances which were promptly abated, also one relating to the unloading of manure from railroad cars. The board took action and passed an ordinance forbidding such unloading within certain limits within the borough, and subsequently passed a resolution granting permits from November 15th to April 15th, inclusive, subject to such rules and regulations as may be prescribed at time of granting the same.

This board also had a code of ordinances printed and distributed to the families of the borough in accordance with act of Legislature. We would also state that the borough has a partial water-supply from artesian wells, but not in general use as yet. Wells are in general use and the water seems to be all right. Number of inhabitants, 650.

SPECIAL INQUIRIES FOR 1895.

Contagious diseases are reported.
 No blanks are furnished physicians.
 A record is kept of communicable diseases.
 No house-to-house inspection.
 No free vaccination.
 No employees.
 No definite amount appropriated to board.

L. M. PLANCK,
 Clerk.

 BOROUGH OF WOODCLIFF.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. H. Ackerman, Chairman, Woodcliff; C. E. Felter, Hillsdale; J. H. Wortendyke, Woodcliff; Wm. English, Woodcliff; Richard Storms, Woodcliff; G. J. Wortendyke, Secretary, Woodcliff.

Water-supply from wells.
 No prevalent diseases of the year.

BERGEN COUNTY—*Continued.*

BOROUGH OF WOODRIDGE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry W. Ostrowskie, Inspector; William H. White, Secretary; Joseph H. Schmitt, Chairman; Charles McQueed, William Koegel. Post-office address of all, Woodridge.

The borough of Woodridge was formerly part of the township of Bergen, and was created by an election held December 5th, 1894, under the borough law of April 5th, 1878. Area, about two and one-half square miles; population, 550. The borough has about 180 feet elevation on the ridge, running west of and parallel with the Palisades. The natural drainage is good, with the exception of a small part, lying east of the New Jersey and New York railroad. Sand and brown-stone predominates in the borough. About fifty acres of salt meadow are in the borough.

The water-supply is furnished partially by the Hackensack Water Company, but 60 per cent. of the inhabitants depend on cisterns and wells. There are no sewers, and all foul water, &c., is conducted into cesspools. An ordinance of the board of health requires proper trapping of the cesspools.

The general health of the borough is good. Have only one factory, manufacturing surgical and other instruments. Most of the houses are occupied by one family, and there are very few tenement-houses. Have no house-to-house inspection.

The lighting of streets is by electricity. Houses are lighted by gas and kerosene lamps. The board of health adopted a code of ordinances on April 6th, 1895. Four cases of diphtheria were reported this summer, and the board immediately quarantined the infected houses. The disease was confined to the two houses by the prompt action of the board of health, and after twenty days the danger was over. No diseases of animals were reported.

Returns of births, marriages and deaths are received fairly regularly. The expenses of the board have been about \$120 during the last year. The record of vital statistics is regularly kept. There has been no prevalent disease.

The salaries paid by this board are: to the secretary \$10, to the inspector \$12 per year, the members of the board drawing only pay for the annual meeting, holding monthly meetings gratis.

BERGEN COUNTY—*Continued.*

A weekly statement of reports of communicable diseases has been regularly transmitted to the State Board. No vaccination has been offered to the public, as this board has been only organized about six months.

WILLIAM H. WHITE,
Secretary.

BURLINGTON COUNTY.

BASS RIVER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

C. S. Cramer, R. H. Mathis, Wm. C. Irons, Amasa Mathis, C. Garrabrant, M.D.
Post-office address of all, New Gretna.

The board of health of this township has never been organized. The health of the township has been good. We use driven wells for drinking water. There has been no epidemic in the township the past year. The public buildings are in good condition. There have been a few vaccinations within the past five years. A large majority of children have not been vaccinated.

C. GARRABRANT, M.D.,
Health Inspector.

CITY OF BEVERLY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph J. Currie, M.D., President; Dr. B. F. Soby, Secretary and Recorder of Vital Statistics; William K. Van Sciver, George A. Smith, Charles H. Peart, C. F. Richardson, Health Inspector. Post-office address of all, Beverly.

The board has held nineteen meetings, at eleven of which a quorum was present, the other eight being devoted to conferences without official acts.

Fortunately but one occasion has made it necessary to enforce the quarantine ordinance during the year—a slight case of scarlet fever

BURLINGTON COUNTY—*Continued.*

in a child who had an attack a year or more ago. Never has the city been so free from contagious troubles in the history of the board.

The forgetfulness on the part of some of the physicians as to reporting births has resulted in the passage of an ordinance with a penalty of from \$10 to \$50 for failure to report within thirty days any birth, death or marriage. This has secured more promptness in reporting, but we have reason to believe that several births are still unreported.

Where a disposition exists to fail to realize the lawful authority of the board, the tendency seems to be to designate cases by names which are apt to mislead, yet a physician's regular certificate must be accepted as the cause of sickness or death. One case in point seems to be liable to question as to the certificate, but it must be accepted, as those most interested have not raised any question and the deceased was not a resident of the city. No other case of sickness has resulted therefrom.

Several minor complaints as to nuisances have been investigated. An improved odorless excavating apparatus has been introduced, and it has been found to work without any inconvenience to anyone even in the daytime.

SPECIAL INQUIRIES FOR 1895.

1. So far as known, yes.
2. No.
3. Yes.
4. Yes, so far as known.
7. Water-supply ample from Delaware river. Sewer system needed. Expense seems to prohibit any serious consideration by our governing body.
8. Secretary, Dr. B. F. Soby; \$1 per night. Inspector, C. F. Richardson; \$24 per year.
9. Seventy-five dollars.

C. F. RICHARDSON,
Inspector.

BURLINGTON COUNTY—*Continued.*

BEVERLY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Robert Stuart, Beverly; Thomas W. Hood, Beverly; W. W. Weiler, Delanco; Dr. H. K. Weiler, Delanco; Joseph B. Carter, Secretary, Delanco.

But few complaints have been made to the board during the past year of violations of the health ordinances, and these of but a trivial nature and remedied upon notice. No prevalent or contagious diseases have been reported; the general health has been good.

JOS. B. CARTER,
ASSESSOR.

CITY OF BORDENTOWN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

D. R. Brown, President; William H. Shipps, Secretary; I. D. Young, L. D. Tebo, Edwin L. Thompson, Frederick G. Wiese, Robert L. Bantle, H. N. Jobs, Inspector. Post-office address of all, Bordentown.

The year past has been one of activity and progress in the experience of the board of health of this city. Problems, the solution of which have seriously embarrassed the board for years, now promise early and satisfactory settlement. It is with pleasure I report the year past as being an exceedingly healthy one, with a mortality rate less than for several previous years.

Early in the winter of 1895 the attention of the board was directed to a few isolated, but well marked, cases of diphtheria. At this time the serum treatment of the disease was enthusiastically advocated by certain well-known medical authorities. The board determined to at once avail itself of any advantage to be derived from the employment of the remedy. Accordingly, two physicians were appointed with authority to use the remedy both as a curative and preventive agent in all cases of diphtheria where the subjects of the disease were unable to purchase the antitoxine. Eight persons availed themselves of the offer, three as subjects of the disease and five for its protective influence. The results in all cases were satisfactory.

BURLINGTON COUNTY—*Continued.*

Later in the year the board was successful in arousing public sentiment upon the question of an "improved sanitary condition of the public school building." As a result, the sum of \$8,000 was voted to make the necessary alterations, which are now rapidly nearing completion. The most difficult of all problems confronting the board has been that of the water-supply of the city. This subject at the present time is receiving such attention as to warrant the belief that soon the city will be supplied with an abundance of wholesome water, freed from the impurities that have so long polluted the existing source of supply.

During the present month, through the efforts of the board, ably assisted by the common council of this city, the services of the Messrs. Waring, Chapman & Co., civil engineers, of Newport, Rhode Island, have been secured for the purpose of perfecting a plan or system of sewerage for the city, in order that any sewers hereafter constructed shall be in conformity with the plan agreed upon by the sanitary experts. Other matters of lesser significance have come before the board at various times and have received due consideration. The board of health of this city, always awake to whatever concerns the health of the community, is more active to-day than at any previous period of its existence. Best of all, the citizens appreciate what has been done by the board and are willing to co-operate with us in a work in which all have a common interest.

WILLIAM H. SHIPPS,
Secretary.

BORDENTOWN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. H. Longstreet, Chairman, Bordentown; Wm. Warrack, Secretary, Bordentown; H. B. Ferd, Assessor, Bordentown; Frederick Schaffer, Fieldsboro; B. W. Macfarland, M.D., Bordentown.

By commencing suit in chancery, the board caused O. F. Neidt & Company to stop running the refuse of their bone-boiling and fat-rendering establishment into Crosswicks creek, the source of the city of Bordentown's water-supply. He now pumps his waste fluids into a

BURLINGTON COUNTY—*Continued.*

reservoir, mixes them with earth and converts the mass into a fertilizer. He also stopped rendering the fat in open kettles, which had caused a very disagreeable and offensive odor. They now treat it in closed boilers, catch the gases in pipes and burn them in the steam boiler furnaces, thereby making as little nuisance as possible.

WM. WARRACK,
Secretary.

CITY OF BURLINGTON.

No report received.

BURLINGTON TOWNSHIP.

No report received.

CHESTER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John B. Warrick, Chairman, Hartford; Levi L. Lippincott, Maple Shade; Charles F. Hugg, Moorestown; Benj. Rogers, Secretary, Moorestown; F. G. Stroud, M.D., Inspector, Moorestown.

We have nothing new to report from last year.

We have had a few cases of contagious diseases, such as scarlet fever, measles and diphtheria, which were all isolated and disinfectants were used. During the past year there have been some complaints of nuisance. Stagnant water, cesspools and pigeries have been promptly abated.

The board held its last meeting September 30th, 1895. The board meets the last Monday evening of each month.

BENJ. ROGERS,
Secretary.

CHESTERFIELD TOWNSHIP.

No report received.

BURLINGTON COUNTY—*Continued.*

CINNAMINSON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Clayton Conrow, Chairman, Cinnaminson; Isaac Eraul, Palmyra; Howard Taylor, Riverton; Dr. Alex. Marcy, Jr., Riverton; Timothy Morton, Assessor and Secretary, Parry; Dr. Alex. Marcy, Jr., Health Inspector.

The health of the township during the past year has been unusually good. No epidemics of contagious diseases.

A part of the township is supplied with most excellent water from the works at Riverton. The remainder depends on wells.

TIMOTHY MORTON, Secretary,
Perry P. O., N. J.

DELRAN TOWNSHIP.

No board organized. In making the assessment I found no sickness.

ROB'T W. BABINGTON, Assessor,
Bridgeton.

EASTAMPTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Edwards, Jackson L. Nippins, Caleb L. Hubb, Joseph Powell. Post-office address of all, Smithville.

EVESHAM TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John S. Mitchell, President; B. S. Lippincott, John M. Devitt, R. H. Leeds, Assessor; P. V. B. Stroud, M.D., Secretary. Post-office address of all, Marlton.

BURLINGTON COUNTY—*Continued.*

The report of the board of health in Evesham township is about the same as in former years. Families are supplied with water by wells and cisterns. The water is generally good.

There are no public markets.

There are no contagious diseases among cattle. The village contains two slaughter-houses which have been inspected.

There are six public schools in the township, all in very good sanitary condition. The majority of the children have been vaccinated.

There are three cemeteries in the township.

With the exception of a few cases of typhoid fever, the general health of the township has been good.

P. V. B. STROUD, M.D.,
Secretary.

BOROUGH OF FIELDSBORO.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph V. Carter, President; William Leatherbury, Secretary; John Mealy, Samuel Kelly. Post-office address of all, Fieldsboro.

The borough of Fieldsboro is located along the Delaware river, about eight miles below Trenton, in the township of Bordentown.

It is situated on a bluff from sixty to eighty feet above the level of the river, and has a natural surface drainage.

The water-supply is by wells and cisterns.

The garbage is burned or buried, and cesspools are cleaned and contents carried away or buried.

A code has been adopted.

We have had one case of small-pox during the year; otherwise our borough has been healthy. This case was reported to the board by the physician in charge. The house was quarantined; no one allowed to go in except the physician and no one allowed to come out. The inmates of the house were vaccinated, and general vaccination was advised. After the death of the patient the house was properly cleansed and fumigated. The furniture in the room was taken out and burned. The inside of the room was properly scrubbed.

BURLINGTON COUNTY—*Continued.*

Sulphur was burned in the room for a length of time. The fumigation of the place was certainly complete, as there was no further spread of the disease.

WILLIAM LEATHERBURY,
Secretary.

FLORENCE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles Bowne, President, Burlington; John Peacock, Secretary, Florence; David Baird, Jr., M.D., Physician, Florence; John Kale, Florence; Ellis Rodman, Florence.

Located along the Delaware river.

Population about 1,500.

Sandy soil; drainage good to Delaware; surface condition fair.

Water-supply by wells.

Drainage poor; easily could be made good.

Garbage is collected about once a week. Cesspools are in bad condition.

Quarantine of contagious diseases fairly good. Children have not been vaccinated in several years.

There have been two epidemics of diphtheria, but at present none exists. Consumption has been prevalent.

There has been nothing done by the board except to make some complaints to the Florence Iron Works as to the condition of their drainage, which has not been improved. They took action during an epidemic of diphtheria, and closed the schools and churches until the disease was controlled.

LUMBERTON TOWNSHIP.

No report received.

BURLINGTON COUNTY—*Continued.*

MANSFIELD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George Black, President, Columbus; John B. Burtis, Columbus; W. Howard Shreve, Kinkora; Thomas A. Keeler, Clerk, Columbus; Joseph E. Dubell, M.D., Health Inspector, Columbus.

Population 1,612.

General conditions good.

Water-supply by wells exclusively.

Surface drainage.

Burials are made mostly without permit, and not all deaths are reported here; in fact, a great many are not.

Have had but two cases reported of contagious disease.

We have corrected one nuisance, which was the only complaint made to the board.

SPECIAL INQUIRIES FOR 1895.

Communicable diseases are reported.

Blanks are furnished physicians.

Records of communicable diseases are kept.

Records of communicable diseases have been forwarded to the State Board.

No house-to-house inspection.

No defect in our water-supply.

No salaried officers.

No definite amount appropriated.

MEDFORD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

E. H. Kirkbride, Charles H. Kirby, J. Reeve, William M. Potts. Post-office address of all, Medford.

The work done during the year has consisted in adopting a code regulating the reporting of contagious diseases and preventing the accumulation of garbage; also the introduction of a water-supply.

BURLINGTON COUNTY—*Continued.*

SPECIAL INQUIRIES FOR 1895.

All cases of communicable disease are reported.

Blanks for such returns are furnished by our board.

A record is kept of all such cases and the report sent to the State Board each week.

We have had no gratuitous vaccination.

We have no house-to-house inspection.

J. REEVE,
Secretary.

MOORESTOWN AND CHESTER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John B. Worrick, Chairman; Benjamin Rogers, Secretary and Assessor; Levi P. Lippincott, Charles F. Hugg; Dr. F. G. Stroud, Health Inspector. Post-office address of all, Moorestown.

We have not very much to report this year, as the report was full last year.

There were several cases of contagious disease reported; also, overflowing cesspools, stagnated water in gutters, pig-stys, &c. These were all attended to by the inspector.

MOUNT LAUREL TOWNSHIP.

No report received.

NEW HANOVER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Benjamin Remine, Wrightstown; George C. Davis, Wrightstown; M. V. Pullen, Cookstown; James Murphy, Jacobstown; Amous Shaw, M D., Health Inspector, Jacobstown.

Hog cholera has prevailed in the upper part of the township, and the farmers in some instances have lost all their swine.

BENJAMIN REMINE,
Secretary.

BURLINGTON COUNTY—*Continued.*

NORTHAMPTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel T. Engle, Chairman; Charles C. Cowperthwait, T. Lacy Akins; M. H. Given, Secretary; Dr. Richard Parsons, Health Inspector. Post-office address of all, Mount Holly.

The public water-supply is obtained from Upper creek, and has been taken from this, its present source, about four years. It has a cedar flavor, is very dark and translucent. The pipes are flushed once a week during the summer season. Nearly all of the houses are connected with the water-supply. The board has no record of those premises which are not connected to the water mains.

The surface drainage, with the exception of one end of the town, is good. On the south and east are lowlands, and at certain seasons these localities are very wet. There does not seem to be much malaria.

As to sewers, we have about three miles. They are equipped with Waring's siphon flush-tanks, which have been in operation about five years.

Nearly all houses have cellars; very few basements in the township.

We have no record to show how many houses are connected with the sewer. Cesspools are built with cement bottoms and sides, and when they are emptied the material is carted away and sold to farmers in the surrounding country.

The board has dealt with and corrected twenty-five cases of violation of sanitary law during the past year. Outhouses were neglected and there were defects in house-drainage which required the attention of the board.

The town is lighted with electricity.

We have two public school-houses and two private schools, and one military academy.

The board in cases of contagious disease has a card placed on the house or houses, stating the nature of the disease.

The disinfection of houses and clothing in cases where diphtheria occurs is done under the immediate supervision of the inspector.

M. H. GIVEN,
Secretary.

BURLINGTON COUNTY—*Continued.*

PALMYRA.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

K. Lowber Temple, President; Henry Kerswell, James Russell, Lewis L. Sharp, M.D.; Frederick Blackburn, Secretary and Health Inspector. Post-office address of all, Palmyra.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Have not as yet, but will in a few days.
3. Yes.
4. Yes.
5. No.
6. No.
7. No.

8. F. Blackburn, Secretary and Health Inspector; salary \$35 per year.

9. No amount appropriated.

Excepting a few cases of measles, we have had but two cases of contagious diseases this past year—one of typhoid and one of scarlet fever. Our township has been exceptionally healthy.

F. BLACKBURN,
Health Inspector.

BOROUGH OF PEMBERTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Job N. Clevenger, Chief Burgess; Frank Earl, J. G. Montgomery, H. C. Budd, John B. Nutt, John S. Clevenger, William H. Smith. Post-office address of all, Pemberton.

Nothing has been done by the board during the past year. There have been no cases of contagious disease. The general health of the town has been good. There are a few cesspools or outhouses which are not in good condition.

JAMES B. HANKINS,
Borough Clerk.

BURLINGTON COUNTY—*Continued.*

PEMBERTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Franklin Keeler, William Smith, Barclay Seeds. Post-office address of all, Pemberton.

There have been no meetings of the board this year.

B. W. HAMPTON,
Assessor.

BOROUGH OF RIVERTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John C. S. Davis, President; Walter G. Hilson, Treasurer; A. J. Briggs, Charles A. Wright; Alex. Marcy, Jr., Secretary and Inspector. Post-office address of all, Riverton.

Sanitary matters in the borough have been carefully looked after during the past year, and the people have been singularly free from contagious diseases. We have had no epidemics, only a few cases of typhoid fever, an isolated case of diphtheria, and no scarlet fever.

The water-supply continues most excellent in quality and quantity.

A survey is now being made of the borough and a system of sewerage is in contemplation.

SPECIAL INQUIRIES FOR 1895.

Communicable diseases are reported.

No blanks are furnished to physicians.

A record is kept of all such cases and report is forwarded to the State Board.

No vaccination has been offered gratuitously.

No house-to-house inspection is made.

No defect in water-supply. Sewer system not yet undertaken, but survey being made with that end in view.

Alex. Marcy, Jr., Secretary and Health Inspector, receives \$50 per year.

Two hundred dollars has been expended so far this year.

BURLINGTON COUNTY—*Continued.*

Have adopted ordinance regulating plumbing and drainage of buildings.

ALEX. MARCY, JR.,
Secretary.

SHAMONG TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Winfield S. Haines, Assessor, Tabernacle; Dilwynn Lippincott, Oriental; Edward B. Stokes, Oriental; Geo. W. Haines, Tabernacle.

SPECIAL INQUIRIES FOR 1895.

1. There has been but one disease reported to me, and that was dysentery.
2. No.
3. All that has been reported.
4. I reported the one that was reported to me.
5. No. I was appointed by the State to take the census in this township this year, and one of the questions given me to ask every man, woman and child living in this township was if they had been vaccinated, and I found that not more than one person out of ten had ever been vaccinated, and did not find any who had been vaccinated within five years.
6. No.
7. No.
8. We have none.
9. There was none made.

WINFIELD S. HAINES,
Assessor.

BURLINGTON COUNTY—*Continued.*

SOUTHAMPTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Amos L. Middleton, President; Granville S. Woolman, Assessor and Secretary; William H. Branin, Allen Fenimore, Dr. J. C. Brown, Health Inspector. Post-office address of all, Vincentown.

This board was organized on the sixth day of the sixth month, 1895.

There has been a number of cases of contagious disease during the last year. The board took action at once to try and prevent an epidemic. The board had special notices sent to every householder to cleanse and disinfect their privies, cesspools, gutters, pig-stys, and any stagnant pools of water that should be on their premises, and that they should have them cleansed and disinfected each month from April until November. The cases of contagious disease reported during the last year were: Typhoid fever, 26; diphtheria, 1.

GRANVILLE S. WOOLMAN,
Secretary.

SPRINGFIELD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George M. Kimble, Chairman, Jacksonville; Orrie H. Allinson, Jobstown; John A. Hancock, Columbus; Aaron H. Burtis, Assessor, Mount Holly.

Water-supply is from wells, and is generally pure.

No stagnant pools or swamps. Most houses have cellars, which are dry, with the exception of a few during a very rainy time.

Privies are cleaned out when necessary, and the contents mixed with earth or other deodorizer and used for fertilizer. Very few houses are occupied by more than one family.

No house-to-house inspection. There have been no prevalent diseases this year. The general health has been very good.

No contagious diseases among animals have been reported.

Slaughter-houses are kept in good condition.

There are seven school-houses, all kept in good sanitary condition.

BURLINGTON COUNTY—*Continued.*

Cemeteries are generally well cared for and are far enough from nearest dwellings.

Vital statistics are collected by me, excepting where they are given to other assessors. There has been but one birth returned to me in nearly two years.

We have held no regular meeting since April. Received no complaints.

AARON H. BURTIS,
Assessor.

WASHINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Thomas K. Sooy, Green Bank; Wm. Taylor, Batsto; C. T. Allen, Lower Bank; John E. Carey, M.D., Lower Bank; A. E. Koster, Green Bank.

Our board of health met for organization, and elected T. K. Sooy, President, and A. E. Koster, Secretary, and Dr. Carey, Health Inspector. No contagious diseases and no complaints received.

A. E. KOSTER,
Assessor.

WESTAMPTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Firman Dubell, Mount Holly; C. Frank Gaskill, Rancocas; Japhet B. Deacon, Mount Holly; Wm. L. Martin, M.D., Inspector, Rancocas; J. Barclay Hilyard, Assessor, Rancocas.

The area of our township is from 5,500 to 6,000 acres. Probably five-sixths of this is cleared land. The remainder woodland. Farms varying in size from 10 to 300 acres, 100 acres being not far from average size. Population, about 600. Of this number, 70 live in the village of Rancocas and nearly 100 in the village of Timbucto.

BURLINGTON COUNTY—*Continued.*

The soil varies from a clayey to sandy loam, a medium between the two being a near average. The land is slightly rolling, varying in altitude from twelve to eighty feet. The natural drainage is through the porous soil to the streams that flow to the Rancocas.

Water is supplied by wells or springs.

No case of contagious disease has been reported. We have no plans for dealing with the same, but should the occasion arise they would be promptly dealt with. There is no inspection of school-houses. As most of the other questions are only applicable to more closely-settled localities I have omitted them. We have no organization as a board of health. I have sent the names of those legally constituting such "board."

J. BARCLAY HILYARD,
Assessor.

WILLINGBORO TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel E. Stokes, Beverly; Jacob H. Leeda, Rancocas; Joseph Wills, Rancocas; J. M. Stokes, Assessor, Rancocas.

WOODLAND TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Geo. Bozarth, Buchanan; Walter Sloan, Chalsworth; J. W. Thompson, South Park; C. L. Adams, Woodmansie.

Population, 385. Healthful climate.

Drainage very good.

Water-supply is from public wells.

We have eighty-six houses and ninety families. Have had no inspection.

BURLINGTON COUNTY—*Continued.*

No code adopted.

Collection of vital statistics is looked after carefully.

We have had no contagious disease during the year, except a few cases of measles.

As a general thing it is very healthy in this township.

CAMDEN COUNTY.

CITY OF CAMDEN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William S. Moslander, M.D.; M. F. Middleton, M.D.; Benjamin S. Lewis, M.D.; S. G. Bushey, M.D.; George F. Hammond, Charles Watson, Allen C. Wood; John D. Leckner, M.D., Health Inspector. Post-office address of all, Camden.

The present water-supply is taken from the Delaware river. The water committee of city council are advertising for proposals for giving the city a better supply of good water. Numerous propositions have been made, but as yet no agreement has been reached as to which would be the best plan to adopt. Some advocate the artesian-well system, others that of getting the supply about ten miles from the city and using subsiding reservoirs, and again others advise the method of filtration. There is no doubt that one of the plans suggested will be adopted within a short time. All houses use the present supply, with very few exceptions, which is not deemed sufficient during the summer months to meet the demand.

We have an aggregate length of forty miles of sewers. Upon completion of sewer all owners of property abutting are compelled to connect their drainage. For year ending October 15th, 1895, 850 houses have been separately connected, our records so showing.

Through the efforts of the board of health, which body has advocated the measure for four years, the city erected a crematory, completing same in June of present year, for the disposal of garbage.

CAMDEN COUNTY—*Continued.*

The plant is giving excellent satisfaction, consuming as much as thirty tons of garbage daily during the months of July and August without any annoyance or bad odor to the people of our city, the plant being erected in the outskirts of the city, on the banks of Cooper's creek. Heretofore all garbage was used to fill up low grounds or placed upon the dumping-ground, which was continually causing trouble.

All slaughter-houses are regularly inspected; also all meats, by a regular inspector appointed for that purpose.

All contagious diseases are reported to the board within twenty-four hours after a physician has been called in. The board furnishes printed blanks and stamped envelopes for that purpose. A record is kept of all diseases so reported. During the year there were 682 cases of contagious diseases reported; 376 of typhoid fever, 52 of scarlet fever, 249 of diphtheria, and 5 of small-pox. Of the above number there were 45 deaths from typhoid fever, 2 from scarlet fever and 48 from diphtheria, making a total of 95 deaths from contagious diseases.

There has been an increase in typhoid fever of over one hundred cases over preceding year, the excess occurring during the months of February and March, being credited to the condition of the water at that time on account of the heavy ice in the river breaking up, the heavy tides causing the ice to stir up the sediments from the bottom or river bed, causing discoloration and filling the water with minute particles of vegetable matter.

During the month of May we had five cases of small-pox break out very suddenly. The cause the board was unable to trace. Immediate action was taken. A hospital was erected on the outskirts of the city and patients removed there at once. Complete isolation was secured and all infected clothing was destroyed, thus stamping out the disease at once.

The number of nuisances reported during the year was 1,583.

The board held regular monthly meetings during the year and called special meetings when it was deemed necessary.

There have been no ordinances or rules adopted during the year.

EUGENE B. ROBERTS,
Assistant Secretary.

CAMDEN COUNTY—Continued.

CENTRE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Abram E. Rowand, Chew's Landing; Howard M. Haines, Haddonfield; Samuel Brown, Snow Hill; John H. Jackson, Magnolia; Wm. B. Jennings, M.D., Health Inspector, Haddonfield.

Typhoid fever has been very prevalent during the past three months.

We know of twelve cases and three deaths therefrom. The springs being low, the hot, dry weather has made this disease more prevalent than it would otherwise have been.

No disease among cattle or other animals has been reported.

We have been called on twice during the year for the abatement of nuisances.

All cases of communicable disease have been reported promptly to the board.

We have not furnished physicians with printed blanks for reporting communicable diseases.

We have not kept any record of communicable diseases as required by Section 2 of Chapter 260, laws of 1895, therefore no weekly statement of report has been transmitted to the State Board of Health.

We have not offered gratuitous vaccination to the inhabitants of our township. We estimate about one-half to two-thirds to have been vaccinated within five years.

No house-to-house sanitary inspection has been made by our board.

We have no regularly employed officials. The expenses of the board are paid from the appropriation for the township.

The date of our last meeting was August 19th.

J. H. JACKSON,
Secretary.

BOROUGH OF CHISELHURST.

No report received.

BOROUGH OF COLLINGSWOOD.

No report received.

CAMDEN COUNTY—Continued.

DELAWARE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John A. Meredith, Haddonfield; Sam'l T. Matlack, Haddonfield; Wm. T. Lippincott, Haddonfield; Wm. Graff, Assessor, Ellisburg; W. B. Jennings, M.D., Health Inspector, Haddonfield.

As this is entirely a farming township there is very little claiming the attention of the board. We have had two meetings during the year. No complaints have been made, nor any diseases reported.

W. B. JENNINGS,
Secretary.

GLOUCESTER CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John W. Warner, President; J. J. Halsey, Inspector; H. M. Hawley, Dr. D. W. Blake, E. J. Stur, J. C. Stinson, Daniel A. Lane, Secretary.

One case of small-pox has occurred since our last report. We immediately removed the same to small-pox hospital on outskirts of city. Our city physician was in attendance and patient recovered.

GLOUCESTER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles Jenkins, Kirkwood; Albert J. Driver, Kirkwood; Edgar J. Coles, Blackwood; Joseph E. Hurff, M.D., Blackwood; William J. Brown, Assessor, Kirkwood.

Gloucester township is located in the southern part of Camden county. Population over 3,000. It is mostly level, is partially wooded and interspersed with many running streams. Water-supply is almost entirely from wells, excepting for the county almshouse and hospital and insane asylum, which are provided with a large stand-pipe and steam pumping plant, insuring an ample supply of pure water for daily consumption, as well as a perfect equipment in case of fire. Good natural drainage, on account of the numerous streams

CAMDEN COUNTY—*Continued.*

and undulating surface. Houses are mostly frame and are occupied principally by owners. The new residences have cemented cesspools. Township contains but one slaughter-house. The agricultural works of the Bateman Manufacturing Company are located at Grenlock, and the Purvis factory at Overbrook.

There are thirteen schools, all in good sanitary condition.

The county almshouse, with a separate hospital, and the county insane asylum are furnished with good sanitary appliances.

The public health has been generally good. There has been no epidemic disease.

WM. J. BROWN,
Assessor.

HADDON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Stoy, Haddonfield; Samuel Wood, Haddonfield; Wm. H. Harrison, Secretary, Haddonfield; Richard T. Collings, West Collingswood; W. B. Jennings, M.D., Health Inspector, Haddonfield.

All cases of dangerous communicable diseases have been reported so far as we have been able to learn. An ordinance has been introduced, and passed its second reading, requiring physicians to report cases of contagious or communicable diseases. Printed blanks have been ordered and will be furnished to physicians. Gratuitous vaccination has not been offered. To the best of our knowledge, three-fourths of the population have been vaccinated. There is no house-to-house inspection. Our water-supply is from wells, except in Collingswood, where the Haddonfield Water Company supplies residents, and the water is excellent. The health inspector is the only official who receives a salary, which is \$50 per year. Among complaints received was one concerning a piggery, containing about five hundred pigs, in the lower end of our township, owned by a Camden butcher. To secure abatement of the nuisance we employed counsel, who took the case before the grand jury, who found a bill, and we gained the suit. Another case was the contamination of a water-course with the refuse of the manufacture of Paris green at Westmont, which was

CAMDEN COUNTY—*Continued.*

promptly abated and the stream flushed. Five cases of communicable diseases have been reported, with no deaths. No diseases among animals have been reported.

BOROUGH OF HADDONFIELD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William J. Boning, President; John R. Stevenson, M.D., Secretary; J. Morris Roberts, William H. Harrison, Charles H. Hillman; William B. Jennings, M.D., Health Inspector; William H. Harrison, Registrar of Vital Statistics. Post-office address of all, Haddonfield.

During the past year there has been no change in the sanitary condition of this town. No factories or public institutions have been built.

In the past year the health of the town has been good. There were no prevalent diseases and but seven cases of contagious disease, with two deaths therefrom. Four of these were diphtheria, two typhoid fever and one dysentery. All of them were isolated. After a careful investigation there was no evidence that these diseases were contracted within the borough.

In February last the board ordered some antitoxin of the New York Biological and Vaccinal Institute for the use of physicians in an emergency, there being none nearer than that city. This was successfully made use of by one of our doctors.

During the past year thirteen complaints of nuisances have been made to the board. Eight of these were waste water running in the streets. All have been abated except two of the latter, which are soon to be removed.

In compliance with the new law and recommendations of the State Board of Health, a new ordinance was passed in regard to the reporting of contagious diseases by physicians. A copy of the ordinance is forwarded, and also a sample of the blank reports which have been supplied to our physicians in bound books.

Copies of Circular No. 83 issued by the State Board of Health were distributed to each member of the board and to the physicians in the borough.

JNO. R. STEVENSON,
Secretary.

CAMDEN COUNTY—*Continued.*

BOROUGH OF MERCHANTVILLE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. D. H. Bartine, President; Dr. J. W. Marcy, Medical Inspector; A. H. Moses, Plumbing Inspector; H. S. Abel, Health Inspector; F. W. Kleinz, Health Inspector; W. B. Stewart, Secretary and Treasurer.

The public health of the borough has been exceptionally good during the past summer, but last December and January an epidemic of "bilious remittent fever" existed here, as it also did in the whole surrounding country; there were also a few cases of typhoid fever and a slight tendency toward diphtheria, which were all met promptly by our board issuing a notice of precaution to the citizens, besides giving close attention to any indications of an unsanitary nature.

The sanitary code of the borough, which was sent to families and attending physicians, presents in a very comprehensive form the best possible measures to pursue in times of threatened epidemic. There occurred during the summer a good many cases of whooping cough, which also extended throughout the entire section surrounding us.

At present there are comparatively few cases of sickness of any kind.

The board, as has been its custom for the past few years, had the annual house-to-house inspection made, carefully noting every change in the condition of sanitary arrangements that takes place from year to year, and making notations on our records for future use. This is done by the most intelligent and careful person that can be secured, one with special fitness for the important service required of him, and the board believes it money well and judiciously expended, as by this means our records will at all times show the exact sanitary condition of every dwelling, out-house and stable in the town, and in event of contagion we are better prepared to cope with it successfully.

D. H. BARTINE, M.D.,
President.

W. B. STEWART,
Secretary.

CAMDEN COUNTY—*Continued.*

PENSAUKEN TOWNSHIP.

No report received.

STOCKTON TOWNSHIP.

Population 8,600.

Post-offices, two in number, North Cramer Hill and Cramer Hill.

Water-supply—artesian wells; water of very fine quality. Supply furnished the town by Stockton Water Company.

Drainage is poor; no sewerage. Streets are in fair condition. No public grounds.

There has been no house-to-house inspection.

No provisions made for the disposal of garbage.

Cesspools are cleaned, after taking out permits, by regularly licensed cesspool cleaners, by odorless excavators.

No slaughter-houses or abattoirs.

No manufactories. One ship-building firm.

One jail, three cells; jailer, ten police and one chief; no prisoners in jail at present.

No code or regulations for public health except ordinance requiring reports of infectious diseases.

Quarantine and care of contagious diseases carried on as advised by the State Board of Health.

There have been very few cases of contagious disease here. All contagious diseases are reported to health inspector, as provided by town ordinance. I have received but two reports of contagious disease during the past year.

OSCAR L. GRUMBRECHT, M.D., Health Inspector,
Cramer Hill.

WATERFORD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Robert H. Hamilton, Gibbsboro; Samuel P. Mitten, Berlin; Edgar B. Sharp, M.D., Berlin; Marmaduke D. Beckley, Assessor, Berlin.

CAMDEN COUNTY—Continued.

WINSLOW TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph G. Strock, Cedar Brook; Enoch Cordrey, Elm; Charles Albright, Elm;
Michael G. Burdsall, Assessor, Wilton.

The health of the township has been good. There have been no prevalent diseases during the past year.

There was no appropriation made this year, as there was a balance of sufficient amount from last year.

JOSEPH G. STROCK,
Chairman.

CAPE MAY COUNTY.

CAPE MAY CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Alonzo L. Leach, M.D., President; Lewis T. Stevens, Secretary; J. Stratton Ware, Thomas W. Millett, Charles P. Foster; George Young, Health Inspector. Post-office address of all, Cape May City.

The board of health of the city of Cape May has nothing further to report in addition to former reports.

SPECIAL INQUIRIES FOR 1895.

There have been no communicable diseases to report.

Blanks are furnished physicians for reporting.

We report communicable diseases to the State Board.

Vaccination has been offered free, but no one applied, although all persons unvaccinated were requested to be.

A new code is being prepared.

House-to-house inspections will be made.

George Young, Health Inspector, receives \$75 per year; no others now paid.

Two hundred dollars is appropriated for the use of the board.

LEWIS T. STEVENS,
Secretary.

CAPE MAY COUNTY—Continued.

BOROUGH OF CAPE MAY POINT.

No report received.

DENNIS TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John F. Goff, President, East Creek; L. M. Rice, Jr., Secretary, Dennisville; Eugene Way, M.D., Inspector, Dennisville; E. W. James, Dennisville; Charles E. Foster, South Seaville.

The past year has been the best in our history, only one complaint having been made to our inspector, which required no official action by our board.

EUGENE WAY, M.D.,
Inspector.

HOLLY BEACH CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Wm. Paul, President; Chas Bridges, Secretary; Wm. T. Garrison, Inspector; L. F. Butts, Wm. Ober. Post-office address of all, Holly Beach.

Population, 300. Climate, mild.

Garbage is carted away twice per week in summer, once in two weeks in winter and oftener if necessary. No cesspools allowed.

No diseases of animals. No slaughter-houses.

School and other public buildings in good condition.

No cemeteries.

A code of laws and ordinances for board of health is being prepared by solicitor.

The vital statistics have been reported to the proper officer in Trenton by the borough clerk, who says he does not keep an official list of them.

One hundred dollars was appropriated by council for use of board of health.

There have been no diseases prevalent during the year.

CAPE MAY COUNTY—*Continued.*

Quite a number of low lots have been filled up and the sanitary condition thereby materially improved.

On account of the old board and its ordinances being declared illegal, the present board was appointed by council, and organized on August 27th.

CHAS. BRIDGES,
Secretary.

 LOWER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George Dickinson, Erma; William L. Cummings, Fishing Creek; Amasa B. Walters, Cold Spring; William C. Rutherford, Cold Spring; Dr. Wilson R. Lake, Green Creek.

The board had ordinances passed and published to regulate garbage hauled from the city of Cape May to feed swine during the summer months, and also to protect our inhabitants from other nuisances that might need to be abated by the board.

The board was called on to abate a nuisance in the keeping of a hog pen. Hog cholera was affecting the hogs, and the board ordered the sick hogs killed and well buried. This was done.

There have been no contagious diseases the past year, and it has been a healthful year throughout our township.

WM. C. RUTHERFORD,
Secretary.

 MIDDLE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Andrew J. Tomlin, Goshen; Virgil N. Erricson, Dias Creek; Townsend W. Garretson, Cape May Court House; Julius Way, M.D., Cape May Court House; Stillwell H. Townsend, Health Inspector, Cape May Court House.

The health of the people of this township for the past year has been remarkably good.

CAPE MAY COUNTY—*Continued.*

No serious communicable diseases have occurred. Most of the deaths have been from old age and its diseases. The board is ever on the lookout for nuisances.

In June some residents of Green Creek made a complaint against a party who was boiling oil from sturgeon refuse. The board made an investigation, and, while the odor was very unpleasant, they failed to find anything detrimental to health.

In July some of the residents of Cape May Court House became alarmed over the use of milk from cows that drank water from Crooked creek, into which the sewage from the county jail empties. A representative of the State Board made an examination of the creek, but failed to find any cause for alarm.

SPECIAL INQUIRIES FOR 1895.

All cases of communicable diseases have been reported.

We furnish blanks to physicians for this purpose and keep record of cases reported.

All reports of communicable disease are forwarded.

No gratuitous vaccination.

No house-to-house inspection.

Our water-supply is defective.

Physician receives \$2 per day when in service; inspector \$5 per year.

No stated sum is appropriated to the board.

STILLWELL H. TOWNSEND,
Health Inspector.

 OCEAN CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. S. Waggoner, M.D., President; W. Lake, Secretary; E. B. English, George O. Adams; Jesse Conver, Health Inspector. Post-office address of all, Ocean City.

Water-supply is from cisterns and two artesian wells. One 620 feet and the second 722 feet. Good, pure water.

Nearly all of the houses are connecting with the sewer where it can be done.

CAPE MAY COUNTY—*Continued.*

Our streets are in good condition.

All of our streets are lighted with electricity.

All garbage is carted away daily in the summer months and deposited one mile from our town. All cesspools are kept in a good and clean condition.

We have no diseased animals or slaughter-houses in our district.

We have one good public school with four teachers. In a year or two we will have to build an addition or build a new school-house.

Some of our largest hotels have fire-escapes.

WM. LAKE,
Secretary.

SEA ISLE CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. S. Steelman, C. H. Clouting; Dr. L. Cauffman, Health Inspector; E. J. Reem, J. D. Norcom. Post-office address of all, Sea Isle City.

Every dwelling has a cistern.

We have no drainage system, and no swamps.

Houses have no cellars. We have no inspection of houses.

Every privy has a water-tight box above ground, which is emptied each week, and contents removed in a tight wagon and dumped in a stream leading to the ocean.

We have had no contagious diseases this year.

We have filled up most of the low lots and holes. Our town is in a good sanitary condition.

Gratuitous vaccination has not been offered by this board.

J. D. NORCOM,
Secretary.

UPPER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Josiah W. Baker, Tuckahoe; Reuben S. Robinson, Tuckahoe; James Smith, Petersburg; Albert Corson, Palermo; Theophilus Corson, Petersburg; Randolph Marshall, M.D., Health Inspector, Tuckahoe.

CAPE MAY COUNTY—*Continued.*

The health of this community has been exceptionally good since our last report.

Nothing of interest has come before the board.

RANDOLPH MARSHALL, M.D.,
Health Inspector.

BOROUGH OF WEST CAPE MAY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Thomas H. Hughes, President; Henry H. Eldredge, Livingston Eldredge, Joseph Ware; John Reeves, Secretary; James Mecray, M.D., Medical Inspector. Post-office address of all, Cape May City.

Garbage is fed to hogs and causes the board more trouble than any other matter we have to deal with, and we have been obliged to make one or two arrests during the past summer.

Our sanitary expenses for the past year amounted to about forty dollars.

Our borough has been unusually healthy for the past year.

JOHN REEVES,
Secretary.

BOROUGH OF WILDWOOD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry W. Marts, William D. Cowan, David L. Smith. Post-office address of all, Wildwood.

(NOTE.—This is a committee of the council, and not an appointed board.)

The permanent population is about one hundred; the summer population impossible to state. Climate is mild.

Water works are in course of erection. One artesian well, now flowing, from which water has been used the past summer.

CAPE MAY COUNTY—*Continued.*

Garbage collected by wagons, also night-soil. Composted and sold to farmers. Controlled by sanitary committee.

Three hundred dollars are expended for sanitary purposes.

The committee have kept a watchful eye on the collecting of garbage and night-soil, also on sink-drains, &c. A sewerage system is expected to be in operation next season, also water-works.

SPECIAL INQUIRIES FOR 1895.

1. We have had none.
2. No.
3. We have had none.
4. We have had none to transmit.
5. No. Do not know.
6. Neither.
7. No.
8. None employed.
9. None, except \$300 to pay for removal of garbage and night-soil.

WM. R. PRENTISS, Borough Clerk,
Wildwood, N. J.

CUMBERLAND COUNTY.

CITY OF BRIDGETON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph H. Powell, President; Theodore B. Woodruff, Secretary; Alfred S. Sharp, Treasurer; James S. Ware, Solicitor; Jesse C. Davis, Health Inspector; Charles F. Reeves, Plumbing Inspector; M. K. Elmer, M.D., Physician. Post-office address of all, Bridgeton.

CUMBERLAND COUNTY—*Continued.*

The health of the city still continues good and the death rate low. The members of the board take an active interest in the work and are doing all in their power to keep the health standard at the highest attainable point. During the last year, ending June 30th, 1895, we have had an epidemic of measles, which, while it has been quite extensive, has not been very fatal; 796 cases of measles during the last twelve months, with only 8 deaths, or about 1 per cent. Other contagious diseases have been 71 cases of scarlet fever, with 3 deaths; 7 cases of diphtheria, 1 death; 44 cases of typhoid fever, with 3 deaths. The total deaths during the past year have been 250; 60 of these are due to consumption and lung diseases. Consumption is the most prevalent and fatal disease we have, and the board have frequently discussed means of prevention, without as yet arriving at any definite conclusions. We think that when the people have become educated to the fact that it is a preventable disease more care will be taken by the patients and their friends.

We regret the fact that the system of sewerage which was presented to our city council failed to be accepted and was deferred for some length of time. Some private sewers have since been constructed that empty into the river in the central part of the city. These sewers reach a large portion of our citizens. We regret the fact that it is necessary for the construction of small private sewers, for in time it will become a nuisance and detrimental to the public health, but in the absence of a complete system this will answer as a temporary relief from so many abominable cesspools.

The ordinance requiring the inspection and registration of cattle is meeting with very little opposition by our citizens. In fact, dairymen and dealers in milk from the surrounding townships are realizing the necessity of having their cattle inspected and registered in the health office by our veterinary inspector.

Our plan of isolation in contagious diseases is by placarding the houses. It is not as efficient as we desire, for in light cases of diseases the people are careless and allow the patient to run the streets and in some instances play and mingle with others, while at the same time placards are on the houses requiring isolation, but with our small appropriation it is our only remedy.

CUMBERLAND COUNTY—*Continued.*

City council are contemplating paving some of our business streets, which will improve the city not only in appearance but will be a decided improvement from a sanitary point of view.

We have issued our annual spring circular requesting our people to clean up before the inspector makes his annual rounds, and it has generally been complied with.

The plumbing inspector reports that the plumbers are complying with our laws and rules and that our citizens are satisfied and congratulate the board for its oversight in this very important matter of obtaining first-class sanitary plumbing and drainage.

The physicians comply with our laws and rules and report cases of contagious diseases as required.

JOSEPH H. POWELL,
President.

COMMERCIAL TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. Milton Compton, E. J. Cook, H. C. Mayhew, N. P. Love, D. McElwee; S. B. Butcher, Health Inspector. Post-office address of all, Mauricetown.

There has been no case of communicable disease.

Our board does not furnish blanks to physicians.

We have no house-to-house inspection.

We have no one regularly employed on a salary.

Ten dollars is the amount allowed per year for the uses of the board.

The board of health meets once a year, and is ready at any time to hear complaints. There has been no contagious disease this year, and the general condition has been good.

D. McELWEE,
Secretary.

CUMBERLAND COUNTY—*Continued.*

DEERFIELD TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Elijah R. Parven, Deerfield; Pierce A. Krespack, Rosenhayn, Health Inspectors; William S. Garrison, Finley; James Hand, Seeley; Dr. Charles C. Phillips, Deerfield.

The health of the township has been remarkably good. No epidemics except early in the year a slight visitation of roseola, which did not amount to much. The sanitary condition of the dwellings is excellent. The slaughter-houses are kept clean, and the one canning factory is as good as can be regarding cleanliness, chloride of lime and other disinfectants being used to keep things sweet and clean.

The Jewish colonies being constantly kept under the supervision of Inspector Krespack, are kept in good condition. These colonies have given the board much trouble, but by continued watching they are kept clean.

The board holds meetings every two months in different places in the township to hear complaints and to make an official visit to almost all the dwellings, especially in the Jewish colonies.

At its meeting in September, the board instructed the two health inspectors to visit every school-house in their district and examine into the sanitary conditions as regards heating, ventilation, water-supply, out-houses, &c., and report at the next meeting of the board.

One great difficulty the board finds is with the old residents of the township, who think that in country places a health board is an unnecessary expense; that dead animals dragged into the woods and left unburied as formerly was as good as now, and although we endeavor to show them their error we are convinced that time only can bring about a better knowledge by educating the coming generation in those laws which are conducive to public health.

Dr. CHARLES C. PHILLIPS,
Secretary.

CUMBERLAND COUNTY—*Continued.*

DOWNE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter C. Henderson, Newport; Reuben H. Leaming, Newport; Dr. A. P. Glanden, Newport; Nathaniel Lore, Dividing Creek; George E. Butcher, Clerk, Dividing Creek.

During June last an unusual epidemic broke out in the western section of Downe township among the cattle, horses, mules and hogs, proving generally fatal. Its effects were first seen among the cattle, proving fatal in a short time, the animal dying without any local manifestation of the disease.

Horses lived for a short time after the attack, a few surviving. The disease (anthrax), commencing with swelling of the glands of the neck, some fever, chilliness, temperature 105°, slight cough, drowsiness, stiffness of the lower extremities, prostration, and finally death. Good appetite to the last. In mules always fatal; nearly always fatal in hogs. Post-mortem appearances: Pleuritic effusion and general engorgement of the internal organs.

The board of health took charge of the infected district and issued a proclamation requiring all animals to be kept on the owner's premises; when sick to be isolated from all other animals; when dead to be buried three feet deep, using lime freely on the carcass.

The board also employed an agent to examine into all cases occurring in the township, to require complete isolation of all diseased animals and to enforce the perfect burial of all dead animals.

GEO. E. BUTCHER,
Clerk.

FAIRFIELD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

James Elmer, Chairman; R. M. Elmer, George Munyan; H. B. Bamford, Clerk. Post-office address of all, Fairton.

CUMBERLAND COUNTY—*Continued.*

GREENWICH TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William S. Bacon; William P. Test, Health Inspector; George S. Watson; S. M. Snyder, Medical Member; William H. French, Assessor. Post-office address of all, Greenwich.

No contagious diseases have been reported, and the health of the district is good.

WILLIAM H. FRENCH,
Assessor.

HOPEWELL TOWNSHIP.

No report received.

LANDIS TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Orange H. Adams, M.D., President, Vineland; Geo. W. Lewis, Vineland; Wm. E. Bigelow, Vineland; Richard Hewitt, Jr., South Vineland; Eben H. Foote, Assessor, Secretary and Health Inspector, South Vineland.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Yes.
3. Yes.
4. No.
5. No.
7. No.
8. The inspector receives \$50.
9. Township committee pays necessary bills without any regular appropriation.

EBEN H. FOOTE,
Secretary.

CUMBERLAND COUNTY—*Continued.*

LAWRENCE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Jacob D. Mulford, Charles G. Diamant, H. O. Newcomb, C. C. Foster, H. S. Long,
F. M. Bateman, M.D., Inspector. Post-office address of all, Cedarville.

BOROUGH OF LEESBURG.

No report received.

MAURICE RIVER TOWNSHIP.

No report received.

CITY OF MILEVILLE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Edwin Conover, President; Silas C. Smith, John W. Simmons, Richard Radcliffe;
L. H. Hogate, Secretary; John W. Wade, Physician; Frank Bullock, Health In-
spector. Post-office address of all, Millville.

Drainage and general surface conditions improving rapidly.

Public water-supply perfect. A great number of wells still used.

Many avail themselves of the privileges of the new Union Lake Park during the warm weather and spend much of their time there. The park grounds are kept in a good sanitary condition, and being situated upon high ground, frequent visits to the resort serve as pleasant changes and are conducive to general good health.

Sanitary expenses increasing yearly, so that all of the appropriation of \$200 is expended.

Following the grip came the measles, and the visitation proved to be one of the most violently active epidemics in history of the city. The contagion seemed to come to us in a mighty wave and after halting long enough to poison every breath swept on to Bridgeton,

CUMBERLAND COUNTY—*Continued.*

ten miles to the west. In general the cases were light, and but very few, comparatively, were attended by complications. Percentage of deaths was very small. The number of cases reported to the inspector was 1,170. It is estimated that several hundreds more were not reported for the reason that many families did not call medical aid. The board did not consider it proper to attempt to placard houses for measles.

A large number of our citizens became ill with symptoms resembling acute gastritis. The attack was ushered in by a chill, violent headache, fever, pains of indigestion, complete loss of appetite and aversion to food, vomiting, vertigo, coated tongue, constipation, sometimes followed by diarrhoea. The acute symptoms lasted thirty-six to seventy-two hours; in some cases a week.

It has been noticed that these symptoms appear in the late spring-time and become more marked each year, requiring increased attention from our physicians. The number of other contagious diseases reported is as follows: Typhoid, 4; scarlatina, 26; diphtheria, 5.

In investigating the anthrax outbreak our inspector made ninety-nine visits to as many farms and stables where cattle were kept.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
 2. Yes.
 3. Yes.
 4. Yes.
 5. Under consideration. Not more than one per cent.
 6. Yes.
 7. No.
 8. Frank Bullock. Inspector, \$125. L. H. Hogate, Secretary, \$25.
 9. Two hundred dollars.
- No record kept of house inspections.
Births, 219; deaths, 171; marriages, 75.

JOHN W. WADE,
Health Physician.

CUMBERLAND COUNTY—*Continued.*

STOW CREEK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

E. H. Sheppard, Roadstown; L. D. Horner, Greenwich; J. R. Rainear, Shiloh; E. B. Sharp, M.D., Roadstown; Charles D. Fogg, Assessor and Health Inspector, Shiloh.

BOROUGH OF VINELAND.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. B. Lukens, President, Vineland; I. D. Eilenberg, William Porter, William Hislop, Geo. A. Cheever, Robert Pond; Jno. S. Halsey, M.D., Secretary; N. P. Marvel, Health Inspector. Post office address of all, Vineland.

Sandy soil; surface drainage.

Water-supply is from artesian wells, but there are about fifty surface wells still in use.

The streets are wide and kept fairly clean. The park is kept in good condition.

The houses as a rule are not very large, but with exception of one or two they are kept clean, and inspected once yearly and oftener if necessary.

The garbage during the hot months was removed from each house three times weekly. For privies, we use the bucket system and buckets are emptied each week. The matter is carried out of town in closely covered wagons.

We have had established this year a "Farmer's Market."

While the towns about us have had a number of cattle die of anthrax yet Vineland has escaped it.

There are no slaughter-houses within the borough limits.

There are many factories in the place, and all are kept in a sanitary condition.

There are two cemeteries, each outside the borough and a little over a mile distant.

We have a sanitary code for the borough and endeavor to have it observed by the people.

CUMBERLAND COUNTY—*Continued.*

Houses in which there are contagious diseases are visited constantly by the health inspector; are placarded, and all communication which is unnecessary is prohibited.

Our sanitary expenses are about \$1,500 annually.

The prevalent diseases of the year have been grip, measles and mumps. Two cases of diphtheria were reported, and at present we have several cases of typhoid in town.

During the year every house and premises was inspected and put in a good sanitary condition. The water from the various wells in the borough has been tested for vegetable and animal matter and those wells in which the water was found to be unfit for drinking purposes were ordered to be filled up at once.

During the heated term a garbage wagon was put on and the garbage removed out of the borough.

We have one case of nuisance now pending in the Court of Errors and Appeals.

The gutters have been cleansed frequently, and many nuisances abated.

JNO. S. HALSEY, M.D.,
Secretary.

ESSEX COUNTY.

BELLEVILLE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry W. Underwood, President; Percy Jackson, John Prout, Geo. W. Williamson, James Boylan; William Connolley, Assessor; D. M. Skinner, M.D.; J. J. Connell, Health Inspector. Post-office address of all, Belleville.

There is nothing new to report. The usual thorough inspection has been made and various nuisances abated. We have been unusually free from contagious diseases and no epidemics have occurred.

D. M. SKINNER.

ESSEX COUNTY—Continued.

ESSEX COUNTY—Continued.

BLOOMFIELD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

G. Lee Stout, President; John A. Lawrence, Frank Foster, Benjamin Haskell, Charles W. Powers, George Fisher, Seymour P. Gilbert, William W. Young, Samuel H. Baxter, Charles H. Bailey; William L. Johnson, Secretary. Address of all, Bloomfield.

Drainage of the township is easily disposed of through the water courses which empty into the Passaic river.

The streets are kept well cleaned. Garbage and refuse not allowed to be thrown in the highways. The public grounds are well taken care of.

Private houses are kept in good condition, and are inspected when any case of contagious disease is reported.

Garbage is collected by licensed scavengers, and buried in a location designated by the board. Cesspools and out-houses are cleaned by the odorless process.

We have thirty manufactories—silks, shades, brass, cloth, hats, &c.

We have five public school buildings; one at Brookdale, in farming district, the remaining four in town proper. These are being connected with sewer system.

We have a township almshouse, containing at present four paupers. We are interested equally with Montclair in supporting the Mountainside Hospital.

We have two cemeteries.

We have a regular appointed registrar of vital statistics.

Houses in which contagions exist are quarantined and placarded. Many school children in district are not vaccinated, as the same is not made compulsory, and not demanded by the board of education.

We have had a few cases of scarlet fever, typhoid and measles; all light and no deaths from same.

We have passed a new sanitary code, compelling quarantine of houses and isolation of patients. We compel reports of contagious diseases to be sent to the registrar by all physicians. We have licensed scavengers and compel them to obey our ordinances. We adopted a plumbing code to regulate sewer connections, and have

urged the completion of sewer system, especially in crowded districts, and the township committee have complied with our request in that respect. We have made proper report of contagious diseases to the State Board when necessary.

Gratuitous vaccination has not been offered to the public by this board. It is probable that three-quarters of the children born in the township are vaccinated within the first year after birth. House-to-house sanitary inspection has not been made except in crowded districts. Our water-supply and sewer system in this district are satisfactory. Our officers are composed of inspector, health physician and secretary. Our salaries, including health board, amount to about \$555. No stated amount is appropriated for health purposes. Expenses are provided for from the contingent account raised by the township. We have improved the sanitary condition of the public schools, and the board of education, on our recommendation, are putting in first-class plumbing in all the school buildings.

All cases of contagious disease have been reported to the board, as required by Section 1, Chapter 260, laws of 1895. We furnish all physicians with printed blanks for such reports, and a record of all such cases has been kept by the registrar.

WILLIAM W. YOUNG,
Health Inspector.

BOROUGH OF CALDWELL.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

James Best, President; C. E. Hedden, Secretary; Edwin Leskom, Chas. Hopwood, Halsey Budd, Dr. O. B. Dawson, Wilbur Gould. Address of all, Caldwell.

Location on the slope of Second mountain and overlooking the Passaic valley.

The general slope is towards the valley and the trend of land lies to the southwest. Drainage is good and the surface is an area of clay soils in the east with a prevalence of gravel in the west.

Geologically, Caldwell consists of an understratum of trap rock and

ESSEX COUNTY—*Continued.*

sandstone, covered with gravel beds, the probable result of erosion following the glacial period.

Wells are used and the water is excellent. Many people have drilled wells to depths varying from 35 to 115 feet.

The surface is such that there is good drainage for all surface water.

The houses are largely occupied by owners. No systematic inspection is attempted unless a complaint is made.

The houses and streets are lighted by oil. The Essex County Penitentiary, which is located just outside the borough lines, is lighted by gas manufactured on the premises, and the Caldwell board of health has complained because the county authorities allowed the sludge from the gas-house to pollute a brook running through the borough.

No nuisances are found in connection with any manufacturing process in the borough.

There is one public school, with an attendance of about 275 pupils.

One cemetery, remote from the village, and so placed that the entire drainage is away from the village.

The borough is asked to appropriate a sum of money for the current expenses of the board of health. All unusual expenses are met by a special appropriation by the council.

Among the children there was an outbreak of whooping cough in the early part of the year. There have been during the year six cases of typhoid, three of which were found in persons who had recently come to Caldwell, and who were staying here temporarily and who undoubtedly contracted the disease before coming here. The three other cases were traced by the board to local causes, which were immediately removed. All the cases were mild.

The board holds regular meetings the first Monday evening of each month. During the year the board has secured the abatement of a number of nuisances complained of, has carefully guarded the erection of a sewerage system in the new convent, and has secured the adoption of several changes in the original plans for the same.

ESSEX COUNTY—*Continued.*

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. No.
3. Yes.
4. Yes.
5. No. I cannot give an estimate.
6. No regular inspection is made.
7. No, except in the case of the sewerage from the county penitentiary referred to.
9. Fifty dollars.

CALDWELL TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Theodore Vincent, Caleb Crane, P. S. Johnson, Lewis Courter, Judson S. Vanness, Abm. Debaun; E. C. Peck, M.D., Health Inspector. Post-office address of all, Caldwell.

Located between a hill known as First mountain and Passaic river. Population, 1,650.

Geology—east side of township hilly, with much granite rock.

Topography—several thousand acres low, subject to overflow of Passaic. Large tracts of sandy loam, also of clay subsoil.

Water-supply—wells and springs.

No contagious diseases.

Cemeteries—two; Fairfield and Hill Side.

Quarantine for contagious diseases is properly looked after.

We have had some few cases of diphtheria and scarlet fever.

The board has had no occasion to do any business worth mentioning.

CLINTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William G. Ward, Irvington; Merton B. Owen, Irvington; Lewis Vorhees, Irvington; Matthias Dorer, Irvington; William R. Ward, Newark; James H. Martland, Irvington; James R. English, M.D.

ESSEX COUNTY—*Continued.*

Our local board of health was regularly organized and is ready for action at any time. The general health of the township is and has been very good. The knowledge that an efficient board of health exists produces good results, and the people are ready to take advantage of it at any time to remove any nuisance that may exist.

JAMES H. MARTLAND,
Assessor.

EAST ORANGE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

W. C. Schmidt, Geo. E. Adams, William Cardwell, E. P. Alling, E. H. Masters, E. E. Bruen, F. Coyne, Jr., Richard Berry, S. W. Ougheltree, Geo. Dorer, W. T. Bowman, D. C. Whitman, Jr., W. F. Poucher, G. DeL. Zimmermann, Philip Williams, I. L. Dodd, Henry Blaurock, Winthrop D. Mitchell, M.D. Post-office address of all, East Orange.

Located in the northeastern part of the State, about twelve miles west of New York City. Population, 17,893.

Water-supply from springs and driven wells. Very few wells now in use, possibly twenty. Plumbing and drainage in accordance with code.

Streets macadamized very largely. No public parks in the township.

Generally one family in each dwelling. A few two-family houses and very few tenement-houses. The last are visited very frequently by the health physician.

Gas generally. A small number of electric lights. Garbage spread out on poor farm dump, about eighteen inches deep, covered with lime and then with fresh earth (about four inches). Cesspool contents collected in tank wagons and perfectly tight barrels and taken to the agricultural works in Newark.

No markets except small shops and stores.

No disease among animals.

No slaughter-houses nor abattoirs.

No almshouse nor hospital. Sick poor attended by the township physician. If they are hospital cases they are sent to the Orange Memorial Hospital at the expense of East Orange (\$5 per week). Poor are taken care of by the poormaster.

ESSEX COUNTY—*Continued.*

One police station. No jail nor prison.

All tenement-houses provided with an outside stairway beside front stairway.

Two cemeteries in township.

Assessor I. L. Dodd receives reports of vital facts.

All cases of contagious diseases immediately quarantined and houses placarded for scarlet fever and diphtheria, also small-pox. Vaccination compulsory where there has been any chance of exposure. Vaccination free to all unable to pay for same.

We have had nineteen cases of diphtheria and fifty-seven cases of scarlet fever, about seven cases of typhoid fever, most of which have been imported. No small-pox in last year.

During the last year we have built a tide-water sewer and have put in a great many sewer connections. We are enforcing the ordinance regarding the maintaining of privy vaults and cesspools along the line of sewers.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Yes.
3. Yes.
4. No.
5. Yes. No record kept, but a great many were vaccinated two years ago when we had an epidemic of small-pox.
6. No; but any nuisance is reported and an inspection is immediately made.
7. No.
8. Health Inspector, Henry Blaurock, salary \$150 per annum; Health Physician, Secretary Board of Health, Winthrop D. Mitchell, salary \$200 per annum; Counsel, George E. Clymer, Esq., salary \$200 per annum.
9. Twelve hundred and fifty dollars.

ESSEX COUNTY—Continued.

FRANKLIN TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. George B. Philhower, Chairman; R. J. M. Chase, Wilson G. Kristead, Louis M. Thatcher, Joseph Leads; H. B. Duncan, Secretary and Inspector. Post-office address of all, Nutley.

Northwest portion of Essex county, adjoining Passaic county. Population, 3,100.

Rolling land from the Passaic river on the east to westerly line. Drainage natural; surface is well drained.

Nutley Water Company, now purchased by township, furnish water. But few wells used.

But few tenements. They are inspected and found in good condition.

Garbage gathered by scavengers, and destroyed or covered in low places in township.

Health code published by township. Health board organized as by law required.

Vaccination general last year.

Very little sickness.

General inspection of the township has been carried on. Swamp lands reclaimed, garbage removed and inspection by the health inspector of private houses and buildings, dairies inspected, tenements ordered cleaned and whatever could be done to promote the general health of the township attended to.

H. B. DUNCAN,
Health Inspector.

BOROUGH OF GLEN RIDGE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. H. C. Harris, President and Health Officer; J. Alexander Brown, Secretary; F. C. Osterhout, H. R. Metcalf, Henry K. Benson. Post-office address of all, Glen Ridge.

The board has been in existence six months; has a good code, which was adopted June 1st, 1895, and is in good working order. The general health of the borough has been good.

Reports of infectious diseases have been forwarded to the State Board of Health from time to time, as the law directs.

The board not having been in existence one year, I am unable to make you a full annual report, but hope that this will meet the requirements.

HENRY K. BENSON.

BOROUGH OF IRVINGTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

E. R. Adams, President; William Laird, Secretary; Mahlon Drake, Dr. James R. English; Ira Meeker, Acting Inspector. Post-office address of all, Irvington.

During the past year the health of the village has been good until within the last thirty days, when a slight epidemic of diphtheria broke out. There have been some twenty cases in a mild form, but only two deaths.

Every precaution is being taken to stop the spread of the disease. The physician, immediately on the development of a case, reports it to the inspector, who promptly quarantines and puts a card on the house, and also reports it to the superintendent of the schools. By this method we have stamped it out, not a case having been reported for the last ten days.

IRA MEEKER,
Inspector.

LIVINGSTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Isaac S. Crane, Chairman, Chatham; Daniel D. Grannis, Livingston; William H. Harrison, Roseland; William Deicks, Livingston; Joseph Bear, Livingston; George E. De Camp, Secretary, Roseland; Dr. E. E. Peck, Town Physician.

ESSEX COUNTY—*Continued.*

The board has had several meetings, but has had no complaints to consider.

The general health in the township has been good, there having been no prevalent diseases during the year. There have been some cases of malaria along the Passaic valley.

The only nuisance this board complains of is the overflow of the Passaic river, caused by Beattie's dam, at Little Falls. The people are waiting patiently for the completion of the drainage of the Passaic valley. Thus far the money expended has all been for the benefit of the Beattie company, unless the drainage is completed. While we expect our low lands to overflow in times of heavy rains and freshets, we are satisfied, with the drainage completed, that the water will not remain for weeks on our low lands during the summer months when vegetation is green, to decay in the hot sun, thereby causing a great nuisance that is detrimental to health, to say nothing of the stench arising therefrom. This board would earnestly solicit the aid of the State Board of Health to help us mitigate this nuisance.

GEORGE E. DE CAMP,
Secretary.

MILLBURN TOWNSHIP.

No report received.

TOWN OF MONTCLAIR.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

David D. Duncan, President, Montclair; Moses N. Baker, Vice President, Upper Montclair; Dr. Richard P. Francis, Secretary, Montclair; Dr. James S. Brown, Montclair; Charles D. Thompson, Montclair; William H. Ledger, Montclair, Health Inspector.

During the past twelve months the work of the health board has been mainly of routine character.

In January, 1895, the plumbing ordinance went into effect, and since then every new system of plumbing has been tested by the

ESSEX COUNTY—*Continued.*

plumbing inspector before use. The system of sewers through the town is being rapidly extended, and householders are, as a rule, willing, or even anxious, to make connection with the sewer. It is much to be regretted that as the law is now interpreted the connection of premises with the sewer can be made compulsory only when it can be proved that a nuisance is caused from lack of such connection.

Two assistant health inspectors were engaged for two months last summer for the express purpose of making house-to-house inspections. Their work was satisfactory, and at the end of their engagement there are on file 1,214 reports of inspections made by them—a little more than one-half of the houses in the town, but including those parts of the town that are most in need of sanitary supervision. The work will be continued by the inspector throughout the year, and it is probable that the plan of engaging an assistant inspector for a certain portion of each year will be repeated.

The introduction of sewers has, to a large extent, solved the problem of the disposal of cesspool matter, by causing the cesspools to be closed. The collection and disposal of garbage is still a vexed question, that is daily assuming more magnitude. The land rented by the board of health for the disposal of garbage by burial is fast being filled. Some energetic measures are needed before this question can be properly solved. One method that has been suggested is that several contiguous municipalities should erect a garbage crematory, to be used by them in common, but no steps have been taken in the matter.

Cases of communicable diseases are promptly reported to the secretary of the board on blanks provided for the purpose. They are recorded in a special book as soon as received. Weekly statements of all reports have been transmitted to the State Board of Health. Gratuitous vaccination has not been offered to the public during the past year. The board has no statistics of vaccination.

The town council appropriated \$2,000 for the use of the board of health during the fiscal year, the same amount that was appropriated last year. The health inspector receives \$900 per annum, the secretary, the attorney and the chemist of the board each \$200 per annum. Those are the only salaried officers connected with the board.

ESSEX COUNTY—Continued.

The present inspector was appointed on July 18th, 1895. Since his appointment the work has been carried on in substantially the same manner as reported last year by his predecessor.

The first plumbing application, in accordance with ordinance No. 4, entitled "An ordinance to regulate plumbing in the town of Montclair," passed on October 18th, 1894, was filed in the office of the board of health on January 18th of this year. Since that time one hundred and one applications have been received. Until recently permits were only required when an entirely new system of plumbing was being put into a house. An endeavor is now being made to secure the filing of applications for all alterations and additions to old systems. Plans of the intended alterations or additions are also required with the applications.

In the recent inspection of houses mentioned in the secretary's report it was found that sixty per cent. of the houses inspected were using city water, and fifty per cent. of those abutting on streets in which the sewer is laid have made connection. Minor nuisances, such as full privy vaults and cesspools, slight accumulations of garbage, drains leaking into brooks, &c., were reported in thirty per cent. of the houses visited. This high percentage is accounted for by the fact that the districts inspected included all the worst parts of the town. The work of abating these nuisances is now going on. The percentage of sewer connections is very good, considering the short time that most of the sewers have been laid. Maps of the town have been prepared, showing the houses and names of property-owners. One of these is to be used for plotting the sewer and city water connections, and the other for a record of infectious diseases.

Most of the public schools have had additions or improvements made in the plumbing during the last summer vacation. Forms are now in use for communicating to the public schools and the public library the names and residences of families in which any of the infectious diseases are known to exist.

An ordinance entitled "An ordinance to prevent the spread of infectious diseases" has passed its second reading.

A systematic inspection of the dairies supplying milk to the town is now made, the twenty or more dairies being visited about once in six weeks. The cleanliness of the employes, the condition of the

ESSEX COUNTY—Continued.

barn and utensils, the system of sterilizing the utensils, and the character of the feed used are noted, and when necessary improvements are suggested. The health of the cattle and men employed is also observed.

CITY OF NEWARK.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. H. C. H. Herold, President, No. 75 Congress street; Mr. M. Straus, No. 1085 Broad street; J. A. Furman, No. 65 South 10th street; W. B. Guild, No. 3 LeGrange place; Dr. R. J. Marshall, No. 82 Congress street; J. H. Hines, No. 53 North 7th street; R. B. Sutphen, No. 257 South 8th street; Dr. R. G. P. Dieffenbach, No. 222 South Orange avenue; Dr. D. L. Wallace, No. 192 Clinton avenue; Dr. C. M. Zeh, No. 481 Broad street; Dr. C. F. Lehlbach, Health Officer; D. D. Chandler, Superintendent.

BOROUGH OF NUTLEY.

No report received.

CITY OF ORANGE.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John T. Platt, President; Augustus Eichhorn, James H. Brown, John Burke, Stephen Collins, G. H. Richard, M.D., Patrick J. Hannagan; F. J. E. Tetreault, M.D., Chief Health Inspector; William Schluer, Secretary and Assistant Health Inspector; Thomas Shannon, Deputy Health Inspector; Samuel D. Philpot, Plumbing Inspector; Joseph W. Stickler, M.D., Pathologist. Post-office address of all, Orange.

The city of Orange is located at the the foot of the Orange mountains, contains a population of 22,732 people and covers an area of 1,300 acres. It has thirty-eight miles of streets, of which fifteen miles are macadamized. The others are dirt streets, kept in good order. The macadamized streets are scraped and cleaned at short intervals. The city has two lines of electric street railroads, one run-

ESSEX COUNTY—*Continued.*

ning through its entire length from east to west and the other through its entire breadth from north to south. There are two steam-railways traversing the city. All wagons in transit in which manure or other refuse matter is carried are required to be covered with a canvas covering.

The source of our water-supply is the same as previously reported. About thirty-two miles of water-main are distributed through our streets, not including six miles of supply-pipe from the reservoir to the city. At our urgent request, the reservoir was thoroughly cleansed during the summer; about 3,000 stumps of trees were removed, as well as the vegetable growths in the lake. This removed dangers that threatened the purity of our water-supply, although it has been at all times as pure as any of the supplies used by our neighboring cities and townships. The quantity has been adequate, notwithstanding the drought of last summer and the additional demand caused by the many house connections to our sewer system.

We have about twenty-seven miles of sewer in use; to this will be added six miles which are now in course of erection. Our system has proven to work very satisfactorily. It has been in use since June 1st, 1894. Five hundred and twenty-two house connections have been added to the 585 connections reported last year, amounting in all to 1,121, or equal to less than one-third of the total number of dwellings in the city. The plumbing and drainage work is under the supervision of a competent inspector, and all work is carefully inspected.

Our school buildings are inspected from time to time and if defects are found they are ordered to be remedied. In the past year a fine brick and stone school building, with a seating capacity of from four to five hundred has been constructed in the Fourth ward. The Smead and Wills system of heating and ventilating is in use. All waste fluids and excreta are discharged into the sewer by a well constructed plumbing system.

All garbage, ashes and other refuse matter is collected by the city scavenger. The garbage and dead animals are removed by a firm which manufactures fertilizing material. The ashes and rubbish are disinfected and used to fill low lands.

ESSEX COUNTY—*Continued.*

A house-to-house inspection was made in May last and a copy of the following circular was left with each householder:

"To the householders of Orange:

"The health authorities, in their efforts to place the city of Orange in the best sanitary condition, desire and solicit the assistance and co-operation of all classes of citizens, and recommend the following:

"First. Secure proper drainage, fresh air and sunlight.

"Second. Clean your cellars or basement, yards and premises thoroughly and keep them dry and clean.

"Third. Separate all ashes from vegetable and animal matter and place the same in different, tightly covered metallic receptacles, as ashes can be easily disposed of.

"Fourth. Burn everything combustible in the way of refuse matter.

"Fifth. Report to this department the name and address of your neighbor who violates sanitary regulations.

"Sixth. Have all garbage and refuse not easily burned removed by the scavenger, as decomposing heaps of animal or vegetable matter in or near the dwelling are dangerous.

"For the Board of Health,

"F. J. E. TETREAULT, M.D.,

"Chief Health Inspector.

"JOHN T. PLATT,
"President."

At that time 521 nuisances were reported and ordered abated. On October 1st we started to make the autumn house-to-house inspection.

The vital statistics are still in the hands of the city clerk. This certainly hampers this department, particularly in respect to deaths from contagious or infectious diseases, as we have no ready access to the records. Furthermore, a very large proportion of the births are not reported, while the deaths occurring at the Memorial Hospital of patients from neighboring municipalities are charged to the city, thus unjustly decreasing our birth rate and increasing the death rate.

There were reported during the year 110 cases of contagious or infectious disease, to wit, diphtheria, 73, of which 18 were fatal; scarlet fever, 27, of which 1 was fatal; typhoid fever, 9, none of which were fatal; varioloid, 1, not fatal.

ESSEX COUNTY—*Continued.*

Thorough fumigation follows in all cases after recovery or death. The physicians report more promptly than heretofore suspected cases as well as true ones. As no bacteriological examinations of suspected cases of diphtheria are made, all are regarded as true cases and treated as such, hence the slight increase over last year's report. The greatest obstacle in the way of successfully battling with the spread of contagious or infectious diseases is the difficulty of properly isolating patients among the working people. To do this an isolation hospital is necessary, and we hope that in the near future the common council will appropriate an amount sufficient to build and equip an institution of this kind. If agitation will help to accomplish this result we will do our share.

To guard as much as possible against the importation of contagious or infectious diseases we require all circuses or other shows, exhibiting under tents, to furnish a certificate of health from the authorities of the last place visited by them. We then carefully inspect employes and equipments, especially the placing of tents, seats for spectators, their stability, &c., and if all is right we allow them to perform and we issue a certificate of health.

Three cemeteries are within the city limits.

Our board meets regularly on the fourth Thursday of each month and as often as exigencies may require in addition thereto.

Our appropriation for this year is \$2,500.

F. J. E. TETREAULT, M. D.,
Chief Health Inspector.

W. SCHLUER,
Secretary.

VILLAGE OF SOUTH ORANGE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

E. V. Connett, President; Ira C. Kilburn, A. C. Babson, H. A. Pulsford, M. Runyon, P. Campbell; William J. Chandler, Health Inspector. Post-office address of all, South Orange.

Many wells still used. Two have been closed during the past year. An efficient means of disposing of garbage is urgently needed.

ESSEX COUNTY—*Continued.*

SPECIAL INQUIRIES FOR 1895.

1. In general, yes, though often quite tardily.
2. Yes.
3. Yes.
4. Yes.
5. No; 80 to 90 per cent.
6. No.
7. The usual water-supply (from wells located near Summit) for a time was inadequate, owing to the insufficient number of wells, probably. The number of water consumers is constantly increasing. The prolonged drought in September still further lowered the water level in the wells, so that the pumps were unable to keep the stand-pipe filled. In consequence a large number of consumers were without water for a portion of each day. An additional supply was obtained from the West Orange mains, and since then the pressure has been ample.
- The need of sewers is growing constantly. The hosts of privy vaults emit vile odors incessantly. Many cesspools are overtaxed, and surreptitious drains empty sewage through terraces and into gutters, and many nuisances exist that can be abated thoroughly by an efficient system of sewerage.
8. William J. Chandler, Inspector, \$150.
9. About \$300.

SOUTH ORANGE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel Tillou, Chairman, South Orange; F. A. Dalton, South Orange; L. Becker, Hilton; J. Osborn, Secretary, Hilton; J. Feyle, South Orange; Thos. C. Baker, Maplewood; W. Kemp, Maplewood; W. W. Heberton, M. D., Health Inspector, South Orange.

In Hilton four cases of diphtheria occurred in a family living close to the public school, two of which died within four days from commencement of the attack. The school was kept closed until September

ESSEX COUNTY—Continued.

30th, when the card was removed from the house, and no new cases have been reported in that section of the township.

Several nuisances have been reported during the year and immediately abated.

BOROUGH OF VAILSBURGH.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Alexander Maybaum, President; Henry Aschenbach, James B. Skelly, James Hampton; Ernest Nagel, Secretary. Post-office address of all, Vailsburgh.

Vailsburgh is located west of Newark and southwest from the Oranges. Population about 1,350.

Has no sewer system but excellent surface drainage.

Part (eastern half) of it has a supply of water from the Newark works (Peguannock). The other half is supplied by wells.

Streets are lighted by electric arc lights.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. No.
3. Yes.
4. Yes.
5. No.
6. No.
7. Have neither, excepting a private supply by West End Land Improvement Company.

ERNEST NAGEL,
Secretary.

VERONA TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

S. E. Williams, Chairman, Verona; C. S. Simonson, Secretary, Verona; Filmore Condit, Verona; W. L. Scott, Assessor, Verona; John Smith, Singac; William Bowden, Cedar Grove; H. B. Whitehorne, M.D., Health Inspector, Verona.

ESSEX COUNTY—Continued.

Situated in valley on western slope of First Orange mountain and between First and Second mountains. Population 1,631. Its peculiar situation protects it greatly from influences producing fog, the number of foggy days throughout the year being very few.

Triassic formation—underlying sandstone, with trap rock cropping out upon the surface of First and Second mountains. The soil clayey, as a rule, but frequent beds of gravel and sand are to be found—though much of the drift formation is in the nature of what is known as “hard pan.” The topography is varied, and through the valley runs the stream known as Peckman’s river, which empties into the Passaic near Little Falls. It has its water-shed in the hills on either side of the valley.

The water-supply is generally by wells. The tendency has been for some time to avoid the old-time surface well of but a few feet in depth, reliance being placed more and more upon driven tubed ones. In one instance a number of families are supplied from a reservoir fed by a deep flowing spring, pipes being laid to each house from the reservoir. In another, an institution, the Newark City Home, which has a population of about 270 persons, there is a water-supply of particular excellence. It is obtained from a system of wells situated upon the Second mountain, which are piped to a common reservoir. From this the water is delivered to the building by gravity. This system has been in use now about ten years and furnishes a supply of water singularly pure and soft. It is worthy of note that before beginning the use of this the supply of drinking water was by means of shallow surface wells and a reservoir supplied by surface drainage entirely. Cases of a malarial type of disease were frequent, and the consumption of quinine correspondingly large. Since, however, the present supply has been in use cases of malaria in children who have been inmates for any length of time have been almost unknown. This would appear to indicate that the ingestions of surface water, charged as it often is with organic matter in solution, is a potent factor in the creation of the various forms of so called malarial disease.

There is no system of inspection of house drainage and plumbing. There are but few houses occupied individually by more than one family, and there is not a system of house-to-house inspection.

ESSEX COUNTY—Continued.

Modes of lighting, generally lamps, but many houses are lighted by means of private gasoline plants.

In regard to disposal of garbage and cess-pool collection, this is in many cases composted, being mixed up on the heap of refuse from the stable. Many others are cared for by some one of the odorless excavating companies, who, as a rule, do their work carefully, and with regard to making it as little offensive as possible. Others again dispose of their refuse matter as easily as they can, but in all cases where complaint has been made to the board against a nuisance of this character it has been investigated and abated.

There has been no contagious disease among animals reported, nor are there any slaughter houses within the township limits. Of contagious diseases among children there have been a few, both of measles and varicella, with a number, during the winter months, of whooping cough. These appear not to have been attended with complications, and complete recovery occurred. On April 30th, at the Newark City Home, a case of diphtheria developed in a boy admitted to the institution four days previously, who stated that in his family there had been a case of sore throat. From this until June 16th fourteen more cases occurred. No more made their appearance until August 11th, when two children became ill, making seventeen in all. The diagnosis in each case was established by means of culture tests, made at the bacteriological station at the City Hospital, in Newark, in charge of Dr. R. N. Connolly, to whom cultures were submitted at varying intervals during the progress of the disease. The epidemic was confined entirely to the boys, and the date when each was pronounced germ free, was—in one instance, 13 days; in one, 14; in two, 15; in three, 17; in two, 18; in two, 19; in one, 21; in two, 27; in one, 52 days; making 15 cases. Of the two others the notes were unfortunately lost. In every case, save one, 15 cc. of Behring's Antitoxin No. 2 was used, representing 1,000 normal units, with the result of prompt amelioration of symptoms and ultimate recovery. Among the sick were some whose initial symptoms were so severe that it would not have been unsafe to have anticipated a fatal result. It is fair to state also that a uniformly supporting plan of treatment was also made use of, consisting of small doses of hyd. bichloride, in conjunction with tr. chloride of iron, frequent doses of whiskey and

ESSEX COUNTY—Continued.

the routine use of peroxide of hydrogen in gargle and spray. To this, however, cannot be ascribed the uniformly favorable course pursued in each case, but, in my judgment, to the early use of the anti-toxin. It is worthy of note that the boy in whom this remedy was not used, for the reason that his disease pursued a very mild course, was not found to be free from the bacillus until the fifty-second day.

While this state of things lasted the children were kept out of doors continually, when not prevented by bad weather, and a rigid system of quarantine and disinfection was followed. When the report of a culture test showed that recovery was complete the hair of the child was completely shorn by means of clippers. He was then given a full hot bath, being rubbed down with soap and water. Finally he was clothed in a complete set of new garments.

The board of health meets at the call of the president and investigates such matters as are brought before it.

The amount of funds set apart for ordinary purposes is \$50. A sanitary code is now under consideration, but has not yet been adopted.

H. B. WHITEHORNE.

Health Inspector.

WEST ORANGE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. Smith Pierson, President, West Orange; Simeon H. Rollinson, West Orange; Abram S. Overmiller, Orange Valley; Levi Van Buskirk, Treasurer, Orange Valley; George S. Dodd, West Orange; Frank A. O'Connor, West Orange; William M. Brien, M.D., Health Inspector, Orange Valley.

The township of West Orange is located in Essex county; the population is about 4,500, and the climate is variable.

Minerals of various kinds are to be found in small quantities, but granite and sandstone abound in large quantities.

Water is supplied to the residents of the township by the West Orange Water Company, who get their water from the Pequannock

ESSEX COUNTY—*Continued.*

watershed. As the water has lately been introduced, not more than fifty families are using it at present, but the number is increasing.

We have no drainage or sewerage system; each house owner provides for his drainage by cesspool or other ways.

The streets and roads are in good condition—a majority of them made with crushed stone.

There are few houses that have more than three families; most of them only one. As a rule they are well built and healthful.

The highways are lighted by electricity.

Refuse and excreta are provided for by vaults, and are removed when necessary.

There are no markets in the township.

We have had no epidemic among animals during the past year.

There is one slaughter-house, mostly for sheep and pigs, in proper sanitary condition.

Hatting is the principal industry. The improved ventilation in the factories, and the reduced amount of mercury under improved processes, has greatly increased the average life of men employed at this trade.

The school accommodations are ample and inferior to none of similar grade.

There is no hospital in the township.

One police station is located in the township.

Fire-guards and escapes are on some of the larger buildings.

There are two cemeteries, well and properly managed.

The ordinances recommended by the State Board for townships were adopted September 20th, 1892.

During the past year there have been eleven cases of diphtheria, of which two died; six cases of scarlet fever, all recovered, and two of typhoid fever, both recovering.

A house-to-house canvass is made by our health inspector in the thickly-settled portion of the township, and in the farming portion the milk dairies are visited every spring in company with a dairy inspector. All well water is tested for excess chlorides, and if they prove suspicious a sample is sent to the State chemist for analysis, and the owner is ordered to clean the well.

ESSEX COUNTY—*Continued.*

Gratuitous vaccination has not been offered to the public, and no record of those vaccinated is kept by this board.

Our health inspector is the only salaried officer, who receives \$450 a year, and who does all the routine work of the board. The appropriation for our board for the year was about \$600. All other questions of "Special Inquiries for 1895" are to be answered in the affirmative.

W. M. BRIEN, M.D.,
Health Inspector.

GLOUCESTER COUNTY.

BOROUGH OF CLAYTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

D. W. Moore, Jr., President; A. G. Silver; H. G. Buckingham, Secretary and Health Inspector. Post-office address of all, Clayton.

The health of the borough of Clayton has been exceptionally good during the year.

The water-supply is from wells, and no sickness has arisen that was traceable to contaminated water. A system of water works, at an expense of \$40,000, is being constructed, so that an abundance of water will be available for protection against fire and for household purposes.

The village is located on a very level area, yet the surface water runs off fairly well so that the streets and sidewalks are usually dry and in good condition.

No epidemics of contagious or infectious diseases have prevailed during the year.

The board of health makes progress each year in the prevention of diseases, the preservation of health and an improvement of the sanitary condition.

H. G. BUCKINGHAM, M.D.,
Secretary and Health Inspector.

GLOUCESTER COUNTY—*Continued.*

DEPTFORD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

B. F. Haines, President, Westville; Wm. C. Cattell, Secretary, Wenonah; Joseph Noblit, Wenonah; H. A. Stout, M.D., Inspector, Wenonah; A. W. Muller, Almonesson.

Six cases of typhoid fever have been reported to the board this year, two of which died in one family. The board made an inspection and had everything cleaned up and disinfectants used plentifully, and had an examination made of the water in the neighborhood where the disease seemed most prevalent, but have not yet received a report from the chemist.

WM. C. CATTELL,
Secretary.

EAST GREENWICH TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Rambo, Jr., Paulsboro; Edward Steward, Clarksboro; Chalkley Haines, Secretary, Mickleton; Charles Dorrman, Mickleton.

ELK TOWNSHIP.

No report received.

BOROUGH OF ELMER.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

C. F. Hitchner, M.D., President; Firman Wentzell, Secretary; A. B. Woodruff, M.D., Inspector; M. V. Hanes, Adam Kandle, James Creamer. Post-office address of all, Elmer.

Our board is in good working condition. Elmer borough has enjoyed a very healthy year, there being no epidemics of any kind. The water-supply is from wells and cisterns.

GLOUCESTER COUNTY—*Continued.*

All the stagnant water and refuse matter is carried away by the method in use generally in country places.

Our public school buildings are all new and well ventilated.

A. B. WOODRUFF, M.D.,
Inspector.

F. WENTZELL,
Secretary.

FRANKLIN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Jacob K. Richman, Malaga; Samuel Lowder, Newfield; Charles Smith, Franklinville; Dr. A. A. Smith, Malaga; Joshua C. Richman, Health Inspector, Malaga.

GLASSBORO TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Thomas C. Allen, Chairman; Ira Izard, David Paulin; M. J. Luffbary, M.D., Secretary; Edward Munyan, Health Inspector. Post-office address of all, Glassboro.

The township is situated in the central part of Gloucester county. We have no drainage system other than surface drainage, but have just completed a survey of town for purpose of grading streets, which will give us a more complete system of drainage for storm-water in future.

Our water-supply is derived from wells entirely, a large number of which are driven.

There have been no contagious diseases of animals during the past year.

There are no slaughter-houses within the township limits.

The manufacturing of glass is the principal industry.

No almshouse, hospital or charitable institution in the township.

Our cemeteries are five in number, and are kept in good condition.

Our expenses for past year amounted to \$69.

Cases of dangerous communicable diseases are reported to board.

The board furnishes no printed blanks for reporting.

GLOUCESTER COUNTY—*Continued.*

There has been no gratuitous vaccination offered to the public by the board during past year.

There is no regular yearly house-to-house inspection, but a record is kept of all inspections made by the inspector.

No appropriation is made, but expenses are paid out of the township treasury.

M. J. LUFFBARY,
Secretary.

GREENWICH TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles E. Paul, Chairman, Paulsboro; John Rambo, Paulsboro; Jacob Ballenger, Paulsboro; William H. Duncan, Gibbstown; Dr. George C. Laws, Health Inspector, Paulsboro.

As to the general report, there is no change from last year.

The board makes no appropriation, nor have they issued any ordinances.

We have received a few complaints, which have been caused by offensive pig-pens, and they have been remedied as far as possible.

There has been no systematized inspection.

JACOB BALLENGER,
Assessor.

HARRISON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. G. Foster, President, Jefferson; Ira Coles, Mullica Hill; W. N. Justice, Richwood; Eli Heritage, Secretary, Richwood.

The board has no sanitary inspector.

The board have had three meetings; no complaints.

ELI HERITAGE,
Secretary.

GLOUCESTER COUNTY—*Continued.*

LOGAN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Hance Helms, Bridgeport; Smith Shoemaker, Bridgeport; Hugh McGlinsky, Bridgeport; E. T. Oliphant, M.D., Health Inspector, Bridgeport; J. Clark Helms, Repanpo.

An unusual number of cases of dysentery and bowel trouble have occurred in consequence of the dry weather that prevailed with us.

J. CLARK HELMS,
Secretary.

MANTUA TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph Lodge, Pitman Grove; B. A. Carson, Mantua; George Morey, Barnsboro; D. S. Pancoast, Pitman Grove; E. Z. Hillegas, M.D., Health Inspector, Mantua.

There are three cemeteries and burial grounds in the township.

General health has been good. Little more typhoid fever than usual. No other disease noticeable or conspicuous.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. No.
3. Yes (typhoid fever only).
5. No.
6. No.
9. Nothing.

D. S. PANCOAST,
Secretary.

MONROE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Wm. F. Tweed, J. Jefferson Eldridge, James Tweed, Clayton D. Tice, L. M. Halsey, M.D. Post-office address of all, Williamstown.

GLOUCESTER COUNTY—*Continued.*

Monroe township has given more attention to drainage during the past year than ever before.

Gutters and drains have been kept in much better condition, and more attention has been paid to filling up low places to prevent stagnant water from accumulating.

In the spring we had an epidemic of scarlet fever. The fever was of a very light type and not followed by any sequelæ. We have also had an epidemic of measles and mumps. There were a great many cases of both. The former was followed in a great many instances with a troublesome bronchial catarrh which was very difficult to eradicate. There were a great many cases of mumps. We have had some typhoid fever, but all have been isolated cases and not of a severe type.

There was quite an epidemic of typhoid in September, which I attributed to the excessive dry and hot weather.

The board have had frequent meetings, investigated complaints and had their yearly house-to-house inspection.

L. M. HALSEY, M.D.

SOUTH HARRISON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles K. Horner, President; Alfred Lippincott, Joseph S. Cheesman, Amos T. Eastlack; Samuel F. Stanger, M.D., Secretary. Post-office address of all, Harrisonville.

The health of the township has been good during the past year, no epidemic prevailing.

The water-supply is obtained from dug and driven wells and from cisterns, and has been fairly good, considering the very dry summer.

The drainage is good, for the reason that a ravine skirts one edge of our town, and thus the surplus water is readily carried away.

There is but one slaughter-house in our town, which is kept in fairly good condition the most of the year.

Excreta is hauled out of the town by farmers, who remove it to their farms for use as a fertilizer, and it is generally done in the winter.

GLOUCESTER COUNTY—*Continued.*

But very little malaria has prevailed in the township during the past year.

There has been no hog cholera and no pleuro-pneumonia among cattle in this community that we have been informed of.

D. F. STANGER,
Secretary.

WASHINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Albert Kandle, Hurfville; B. Frank Allen, Hurfville; Albert Williams, Tunnisville; Charles D. Nicholson, Turnerville; C. B. Phillips, M.D., Health Inspector, Hurfville.

Water-supply of the township is from wells of an average depth of twenty-five feet, and it is generally good.

The only drainage is the natural slope of the land.

There has been no prevailing disease among animals during the past year.

We have only one slaughter-house and that is kept in good condition.

Vaccination of children is badly neglected.

We have not had any epidemics, but during the winter there were several mild cases of scarlet fever. During the midsummer there was an unusual amount of diarrhoeal disease, and in the latter part of the summer two cases of typhoid fever developed, which were duly reported to the State Board of Health.

C. B. PHILLIPS, M.D.

BOROUGH OF WENONAH.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William J. Lawson, President; Jesse W. English, Secretary; Dr. Harry A. Stout, Medical Inspector; Charles M. Wilkens.

Located eleven miles south of Philadelphia, six miles east of the Delaware river.

GLOUCESTER COUNTY—*Continued.*

High elevation ; soil sandy ; drainage good.

City water from spring lakes, is pumped into a stand pipe. Very few wells in borough that are used.

Garbage is carted away nearly each day. Cesspools are pumped and cleaned as necessity may require.

Board just organized, September 13th, consequently as yet have not had time to make any improvements. Our borough is kept very tidy. Property owners in general take great pride in their homes. Our streets are well cared for, and in fact our borough is and has been in a very healthful condition, but now that we have a health board we shall endeavor to look after the borough's health interests still more closely.

JESSE W. ENGLISH.

WEST DEPTFORD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph A. Moore, Woodbury ; James M. Wilkins, Woodbury ; Mark Clement, Woodbury ; Joseph Low, Shorofall ; James Hunter, M. D., Inspector, Westville.

There is very little to report. The health of the township has been very good. No contagious diseases.

MARK CLEMENT,
Secretary.

CITY OF WOODBURY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Warner Underwood, President ; William M. Carter, Secretary ; T. E. Parker, M. D., Inspector ; Arthur L. Terry, Treasurer ; William C. Williams, M. D., Charles Walton. Post-office address of all, Woodbury.

The rules of the board of health have been generally observed.

The careless dumping of garbage and the permitting of rank weeds and grass to grow, die, fall down and decay are nuisances which still exist.

GLOUCESTER COUNTY—*Continued.*

On account of a want of sewerage, considerable difficulty is found in getting rid of the contents of drains, gutters, &c.

The health of the city has been generally good. A few cases of diphtheria occurred among the colored people, with three deaths, due more to injudicious nursing than to the virulence of the type.

All communicable diseases are required to be reported at once on blanks furnished by the board, and these are recorded by the secretary in a regularly prepared book and the cases reported to the State Board of Health.

Small-pox appearing in near-by towns, vaccination was recommended, and a great many submitted.

An ordinance regulating the keeping of cows, geese and ducks was passed.

Notwithstanding the long drought, the city has been well supplied with good water, sufficient to permit a general sprinkling of the streets and lawns.

T. E. PARKER,
Health Inspector.

WOOLWICH TOWNSHIP.

No report received.

HUDSON COUNTY.

BOARD OF HEALTH AND VITAL STATISTICS OF HUDSON COUNTY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

W. W. Varick, M. D., President, Jersey City ; Charles B. Converse, M. D., Jersey City ; John Connell, M. D., Jersey City ; Michael Nevin, Inspector ; Dr. C. C. Hendrick, Medical Inspector, Bayonne ; Daniel Tierney, Inspector, Jersey City ; C. J. Rooney, Jr., Clerk, Jersey City.

HUDSON COUNTY—Continued.

Diphtheria was prevalent in the first six months of the year, and again in June, 1895, it began to extend, seeming to be more concentrated in the old Fourth district of Jersey City. At the present writing eighty-one cases of diphtheria have been reported from October 1st to date, October 22d. Fifty-eight of these occurred in the old Fourth district. School No. 25 has been closed for two weeks and all precautionary and remedial measures are being taken. This action was taken by the direction of the city board of health.

Typhoid fever cases were practically confined to Jersey City, according to the number of reports received. There were eighty cases in Kearney township in April, 1895, and four in Bayonne in February, March and May.

In August, 1894, one case of small-pox was reported from Jersey City and Harrison respectively.

In September and October there were fifteen cases in Bayonne. The disease obtained a foothold in the Bayonne Hospital. The most energetic and thorough measures of vaccination and fumigation were taken with the result of checking the disease at once.

This board keeps a constant supply of fresh bovine virus and when necessary vaccination is immediately carried on.

By June, 1895, small-pox had wholly disappeared.

This board has completed the new contagious disease hospital at Snake Hill for other than small-pox cases and is now prepared to take charge of such cases as the public safety may require.

A great number of complaints of nuisances, especially in the northern part of the county have been received, investigated and abated. There have been many arising from the obstruction of old water courses and drains, naturally resulting from changing conditions in that section due to street extension and general improvements by building of dwellings, &c. These have been difficult matters to equitably adjust and the aid of counsel of the board, Mr. H. W. Winfield, has usually been invoked.

Inspectors have investigated the cases of contagious diseases reported for their examination, and children liable to infect others have been excluded from the schools and disinfection looked after.

Statistical reports have been made monthly and special weekly

HUDSON COUNTY—Continued.

reports sent by request to the Chief of the Weather Service and to the Supervising Surgeon-General of the United States Marine Hospital Service.

Between fourteen and fifteen thousand births, deaths and marriages have been recorded and indexed.

La Grippe was present in January, February and March when it practically disappeared.

Of the deaths from typhoid fever, 181 in all, 160 took place in Jersey City, 9 in Bayonne and 12 in other sections. The disease was most fatal in October and March, measuring by the number of deaths.

C. J. ROONEY, JR.,

Clerk.

NOTE.—Tables of statistics were appended, but because of lack of space are omitted.—M.

CITY OF BAYONNE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry Meigs, Jr.; F. F. Martinez, Jr., Secretary; Vedder Van Dyck, James Brady, James Foerst; Egbert Seymour, President, Mayor *ex officio*; Charles M. Allen, President of Council *ex officio*; S. M. Morris, M.D., Health Inspector; A. T. Gill, Sanitary Inspector; J. H. Nevins, Deputy Health Inspector. Post-office address of all, Bayonne.

Population last census (1895), 19,920, but we have reason to believe that it is nearly 25,000, by the registration of legal voters and by the city directory, just published. Climate temperate, modified by salt air, due to its location. The city is built on a clay bank, the highest point being along Avenue C. The upper end of the city is trap-rock. The drainage is toward New York and Newark bays.

Public water-supply from Jersey City, taking its supply from the Passaic river. A new temporary supply is confidently looked for by January 15th, 1896. There are some two hundred wells in the city, some of which have been used for over a century.

The city is drained by a complete sewer system, which is gradually being extended as the several sections are built up. This board has a plumbing code in operation, and, with a competent inspector, all

HUDSON COUNTY—*Continued.*

precautions are being taken to prevent the introduction of noxious gases into dwellings. As the city grows, this department will eventually be self-sustaining.

Three streets are macadamized throughout their entire length, six are partly macadamized and partly paved with Belgian blocks, and many have had a top-dressing of cinders put on them. The probabilities are that next year will see a vast improvement in this respect.

This is almost entirely a city of frame houses, about one-third of which contain two or more families. Their sanitary condition is generally good, and they are in a cleanly condition. Every spring there is a general inspection made and owners and tenants notified to abate nuisances which may be found.

Avenue D being the principal commercial street, is lighted by arc lamps. The rest of the city is very well lighted with gas. The electric system will soon be extended.

Garbage collection is still conducted in a very primitive way. It is collected twice a week in each ward and dumped into vacant lots near the water front. An attempt was made a few years ago to erect a crematory, but nothing came of it. Cesspools and privy vaults are regularly cleaned and the contents carried away in closed carts. Through the courtesy of Jersey City, the scows belonging to its health department are used.

There are no general markets or slaughter-houses, all the meat being either "Western dressed" or purchased in New York City. There are very few cattle within the city limits. All dead animals are immediately removed by a firm having a yearly contract with the city.

Nearly all the factories are concentrated in the Fifth ward or "Hook" section, and are chiefly controlled by the Standard Oil Company, employing in the neighborhood of 10,000 persons. There are also two lumber-yards and mills and a silk factory. While the smoke from the oil refineries is a nuisance, it is not unhealthful.

The public buildings are the city hall, public library, nine engine-houses and seven public school buildings. The city hall and engine-houses are in good condition, being mostly new, but the school-houses, with one exception, are antiquated, and large sums are annually spent to keep them in repair and in any way suitable to house children. A

HUDSON COUNTY—*Continued.*

radical change is needed here before the city will have the school-houses it ought to have.

There is one hospital, privately endowed, for which the city makes an annual appropriation, which has a very able staff, and is doing excellent work. An addition is proposed in the near future. A charity organization society has been formed, which, with the overseer of the poor, has supervision over the needy.

Attached to the city hall and several engine-houses are lock-ups, which are kept in a cleanly condition. As no prisoner is kept over twenty-four hours, it is an easy matter to keep them clean and healthy.

All tenements over two stories high, and all public halls, &c., are provided with iron fire-escapes, according to a city ordinance passed last year.

There are two small cemeteries in the Fifth ward, situated on sandy soil. There are no dwellings near them.

We have a regular code of sanitary laws, which, with the laws enacted by the Legislature, we find are adequate for all our purposes, and have no trouble in enforcing them.

We hope by next year to be able to keep complete records of vital statistics. At present the physicians do not all report to this board, as they have always heretofore reported to the county board of health. On the refusal of one of them, we instituted proceedings against him, under the law of 1895, as a test case, and are awaiting the outcome. All cases reported to us have received immediate attention, and all precautions have been taken to prevent contagion or the spread of the disease by quarantine and fumigation.

The expenses last year amounted to fifteen cents per capita. We hope this year to largely reduce that figure.

The preventable diseases reported during the year were as follows: Typhoid fever, 32; scarlet fever, 35; diphtheria, 20; small-pox, 2; a total of 89.

There were 1,031 complaints of nuisances received, of which 770 were abated, 235 were found groundless and 26 are still pending. We are now working more systematically and all complaints are looked after and abated in very short time.

F. F. MARTINEZ, Jr.,
Secretary.

HUDSON COUNTY—*Continued.*

TOWN OF GUTTENBERG.

No report received.

TOWN OF HARRISON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. M. F. Squier, Dr. Henry Allers, Dr. M. O. F. Dolphin, Clarence T. Van Deren, Peter J. Goodman; John F. Callahan, Health Inspector. Post-office address of all, Harrison.

Water-supply from Passaic river at Belleville. It is frightfully contaminated by the debris from factories along the river as well as the sewage from all the cities and towns along the river. During the past summer at low water the stench was intolerable, and the residents of the town could not bear to go near the river, and still we are compelled to use this filthy sewerage for drinking and washing purposes. Several persons in the town were compelled to have the water turned off sooner than have the smell of it in their houses. It is the color of black mud. Efforts are now being made to get a new supply from another source, with good prospects that the new supply will be turned on in the town by February, 1896.

Several of the streets are sewerred, and plumbing work is carried on under an ordinance of the board.

Streets and public grounds are kept in good condition.

Houses are inspected by the health inspector regularly and kept in good sanitary condition.

Garbage is collected in wagons daily, placed at the public dumps and covered with dirt and ashes; cesspool and out-house collections are buried in a section of the town that is not populated.

There are several large factories in the town which are inspected regularly by the health inspector. They are all reported to be in first-class condition.

Schools and other public buildings are all in a good healthy condition.

HUDSON COUNTY—*Continued.*

The collection of vital statistics is attended to by the county registrar.

During the past year we have had only very few cases of contagious diseases and the town has been particularly free from all kinds of sickness, even malaria fever.

There has been no general vaccination and only two cases of small-pox. These were sent to the pest-house at Snake Hill.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Yes. Copy enclosed.
3. Yes.
4. Yes.
5. No; about one-fifth.
7. Yes; a very serious defect in water-supply.
8. Secretary and inspector. The sanitary inspector is also employed by police department, salary \$75 per month; secretary of health board, \$150 per year.
9. Three hundred dollars.

CITY OF HOBOKEN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Palmer Campbell, President; L. S. Fugazzi; S. A. Helfer, M.D.; E. T. Steadman M.D.; John Tallon; W. J. Arlitz, Health Warden; G. M. Sinclair, Plumbing Inspector; Alexander C. Young, Attorney; Antonio Granelli, Health Inspector. Post-office address of all, Hoboken.

Population, June, 1895, 54,083.

I have very little to add to my report of last year.

We have had quite a number of cases of diphtheria and scarlet fever, beginning in July, up to the present time. The very bad cases have been sent to St. Mary's Hospital, where they have been properly isolated and attended daily by the health warden. In other cases the majority of physicians have been using antitoxine with good results,

HUDSON COUNTY—Continued.

having decreased the death rate of diphtheria and membranous croup about fifty per cent. Otherwise the city is in good condition.

The following titles of ordinances have been added to the sanitary code:

Section 173. Notices, signs or placards not to be removed or taken down by any person without the authority of the board of health.

Section 174. Persons suffering with infectious or contagious disease in certain cases to be removed, and penalty for interfering with or obstructing such removal.

JAMES HAVRON,
Clerk.

JERSEY CITY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

H. H. Abernethy, President; John P. Feeney, P. W. M. West, D. W. Benjamin, Inspector; Dr. H. H. Brinkerhoff, Dr. F. D. Gray; G. P. Robinson, Clerk. Post-office address of all, Jersey City.

We herewith submit to you the following report of the work of this department for the year ending December 1st, 1895.

During the year we have visited 4,759 premises, finding 3,059 nuisances and have been successful in securing the abatement of 2,832. The receipts of the department were \$5,679.75 and the expenses \$5,445.09.

Number of persons vaccinated during the year was 442. I believe that there should be a house-to-house inspection by this department each year. It is the only reliable way of finding out where nuisances exist, and I deem it to be my first duty to give prompt attention to nuisances complained of by tenants and others. Scarcely secondary in importance, however, is the duty of a house-to-house inspection of the city so that the sanitary conditions and surroundings of every house may be known and a record kept and defects remedied. This duty is not altogether neglected, but it is not carried out as thoroughly as it should be. Such inspection is made when time permits.

It gives me much pleasure to report that we have a contagious hospital for the isolation of cases of diphtheria, scarlet fever, typhoid

HUDSON COUNTY—Continued.

and other contagious diseases outside of small-pox, at a very small expense, paid by fees collected by permits granted by city board of health.

D. W. BENJAMIN,
Health Inspector.

KEARNY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel Worthington, President, Kearney; Dr. J. A. Exton, Health Officer, Arlington; John Brown, Health Inspector, Kearny; James N. Mathews, Secretary, Arlington; L. D. C. Wood, James N. Loudon, Wm. Bardeley, Charles Englestadter.

Meetings.—First Wednesday evening in each month.

Sanitary Work.—The sanitary work done by the officers of the board, cannot well be excelled and our organization is efficient, progressive and thorough.

Nuisances.—Over 140 nuisances have been reported, investigated and abated during the year, including the horse slaughtering establishment on the meadows which early in the season created so much disturbance.

Milk Inspections.—Through the courtesy of the state dairy commissioner, inspectors were sent us who procured samples of milk from the different dairies supplying our 10,000 residents early in the spring for analysis, the result of which was that we found that all were supplying milk quite up to the standard.

Some months later a mild epidemic of typhoid fever visited us and the services of the State inspector and the laboratory were again brought into requisition, and pathogenic bacteria were found in the milk and also in the water used for washing the cans of one dairy. The place was at once quarantined and kept under surveillance until a subsequent examination gave negative results. Since then our board have made arrangements with the new bacteriological laboratory at the City Hospital, Newark, whereby work in this line is done for us

HUDSON COUNTY—*Continued.*

with rapidity and precision, and forms a most useful adjunct to our usefulness.

Water.—The water-supply continues to increase in filthiness, if that is possible, and during the summer those who depended upon the city water were obliged to wash in this liquid sewage. It is hoped that the next Legislature will come to the rescue of the thousands who live upon the line of the Passaic river and devise means to stop the pollution of that once beautiful stream.

Contagious Diseases.—Our township has been comparatively free from diseases of this nature. Only one case of small-pox, two of membranous croup, two of scarlet fever, two of diphtheria and nine of typhoid fever have been reported during the year.

Plumbing Inspection.—Our board recently passed an ordinance by which the plumbing in the town is in charge of its officers.

J. A. EXTON, M.D.,
Health Officer.

NORTH BERGEN TOWNSHIP.

No report received.

TOWN OF UNION.

No report received.

WEEHAWKEN TOWNSHIP.

No report received.

WEST HOBOKEN TOWNSHIP.

No report received.

HUNTERDON COUNTY.

ALEXANDRIA TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Jeremiah Reed, President, Little York; John C. Davis, Assessor, Little York; John C. Counce, Everittstown; Reuben A. Williamson, Mount Pleasant; M. D. Knight, M.D., Clinton.

BETHLEHEM TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. L. Shrope, Chairman, Junction; Stewart Rodenbaugh, Norton; J. V. Willever, Bloomsbury; William W. Swayze, Secretary, Glen Gardner; E. L. Reigle, M.D., Bloomsbury.

The health inspector of the board reports the public health good. No contagious disease during the year. Two complaints during the summer were looked after by members of the board and no meeting called. One meeting to organize the board only.

WM. W. SWAYZE,
Assessor and Health Inspector.

TOWN OF CLINTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William H. Johnson, President; Hon. William H. Baker; Dr. S. Van Syckel, Medical Examiner; Charles L. Crampton, Secretary; Joseph W. Berry, Health Inspector. Post-office address of all, Clinton.

Clinton is located in the central part of Hunterdon county, about ten miles north of Flemington, the county seat, and about fifty miles from New York city.

We have a very healthful and delightful climate.

The number of deaths during the year did not exceed ten in all.

The situation is particularly attractive, the ground forming a succession of elevations, separated by valleys.

The water-supply is chiefly obtained from driven wells and cisterns. The town has no system of sewerage. The drainage is excellent.

HUNTERDON COUNTY—*Continued.*

No public grounds are maintained, though the town is greatly in need of something of the sort.

Houses generally have cellars, and they are exclusively used for storage purposes. There was no house-to-house inspection this year.

Electric light is used for street lighting by means of the incandescent system. Nearly all business places use electric lights, also a number of private dwellings. Others use kerosene oil.

Refuse is collected by the street commissioners by the direction of the common council.

We have no slaughter-houses within the town limits.

There are two cemeteries within the corporate limits, and they are kept in good condition.

Have had no cases of contagious disease reported either by physicians or heads of families during the year.

The regular meetings of the board are held on the second Wednesday of each month.

CHAS. L. CRAMPTON,
Secretary.

CLINTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George Cregar, Annandale; David Rinehart, Lebanon; George W. Kinney, Sunnyside; Austin Cramer, Annandale; W. E. Berkaw, M.D., Health Inspector, Annandale.

Collection of vital statistics.—Owing to irregularity and delay on the part of the clergymen, physicians and undertakers in forwarding records to the secretary of the board, a very sharp circular was issued to each one by our board at its organization for the year 1895. However, the results of this circular are so far unsatisfactory.

Quarantine of contagious diseases.—Our board have arrangements by which the health inspector, upon the report of any contagious disease, at once places the case and all attendants and members of the family in quarantine, and every care is taken to prevent the spread of the contagion. This work was done in two cases, one of

HUNTERDON COUNTY—*Continued.*

diphtheria and one of scarlet fever, and these were the only two cases that occurred.

Vaccination.—Our board must report that the subject of vaccination needs attention and especially concerning children who have not been vaccinated and who are attending schools. We would suggest that the State Board of Health call the attention of the secretary of the various township school boards to the requirements of the law and direct them to secure the vaccination of every child attending public schools.

Sanitary expenses.—These average about \$50 to \$100 per year.

Heat and ventilation of dwellings.—Stoves are usually employed, although every year adds to the number of dwellings into which steam heating is introduced.

During the winter of 1894-95 and during the spring of 1895 the "grip" was very prevalent in our township.

Although the summer months were dry and the water supply poor, there were only the usual cases of bowel trouble and diarrhœa. The attention of the board has just been called to three cases of typhoid fever at Sunnyside in our township, which in some way appeared to be connected with a creamery located there. The board met there at once to investigate.

The board organized on April 13th, 1895. On July 2d, 1895, the board met at Lebanon to act upon some hog pens, the owners of which were feeding the swine with the offal and refuse from slaughter-houses. The board abated the nuisance at once. During the month of July the board, through the health inspector, acted on a case of diphtheria, reported to the board by Dr. E. Hunt, of Glen Gardner. The said case was alleged to have come from Elizabeth—quarantine effectually prevented any other cases.

SPECIAL INQUIRIES FOR 1895.

1. All cases of dangerous communicable diseases have been reported to our board.
2. No printed blanks are furnished to physicians.
3. Yes; our record is complete.
4. Yes; two cases reported to State Board.

HUNTERDON COUNTY—*Continued.*

5. Very little vaccination has been done during past five years. There should be something done to awaken the people in this matter.

8. Dr. W. E. Berkaw, Annandale, health inspector, receives per diem allowance of \$2.

9. About \$50 is appropriated.

W. E. BERKAW,
Inspector.

AUSTIN CRAMER,
Secretary.

DELAWARE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Reading M. Dils, Stockton; Peter S. Hockenbury, Sergeantsville; Lewis Case, Sergeantsville; Hiram D. Hoppeck, Sergeantsville; Dr. George N. Best, Inspector, Rosemont.

Population of Delaware township 2,819. Post-office villages—Stockton, Rosemont, Raven Rock, Locktown, Croton, Sand Brook, Grover, Oakdale.

The board of health of Delaware township met May 18th, 1895, and organized for the year. It resolved itself into two committees, one to look after the sanitary condition of North Delaware, the other of South Delaware.

The board met October 2d to hear the reports of the committees. Only one complaint of a nuisance had been made, and that was promptly abated.

Scarlet fever having broken out among the pupils of Reading public school, the board ordered it closed until such time as the health inspector should deem it advisable to open again.

The board met October 5th to inspect the sanitary condition of Stockton. Surface drains were ordered to be opened and cleansed and accumulations of filth to be removed.

The general health of the inhabitants has been good. During the winter and spring influenza, catarrhal bronchitis and whooping-cough prevailed. A few cases of scarlet fever, usually mild, have occurred about Stockton and Rosemont.

HUNTERDON COUNTY—*Continued.*

The sanitary condition of the township is good, with the exception of Stockton, which is somewhat improved, but not as good as the board would wish.

HIRAM D. HOPPOCK,
Secretary.

EAST AMWELL TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Edward M. Larowe, Ringoes; Andrew J. Blackwell, Ringoes; William B. Prall, Wertsville; Levi Holcombe, Ringoes; Peter C. Young, M.D., Health Inspector, Ringoes.

Our board of health, I think, is doing everything in its power to prevent and abate all evils which may be considered prejudicial to health. It is acting with credit to itself and to the community in which it exists.

The sickness throughout the township for the past year has not differed very materially from that described in my last annual report. The diseases nearly approaching an epidemic were scarlet fever and dysentery. Both were quite severe, but no mortality was reported. For the few past months we have had a great deal of gastro-intestinal troubles, which I have concluded was owing to the excessive dry weather. No typhoid has existed to the best of my knowledge.

PETER C. YOUNG, M.D.,
Health Inspector.

FRANKLIN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. D. Ward, Chairman; Wm. L. Scott, Treasurer; Peter H. Conover; Geo. W. Snyder, Assessor; Q. E. Snyder, M.D., Physician. Post-office address of all, Quaker-town.

This board has met once during the past year. The general health of the township has been good. No epidemics or contagious diseases to report.

GEO. W. SNYDER,
Assessor.

HUNTERDON COUNTY—*Continued.*

FRENCHTOWN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

W. P. Loper, Health Inspector; Robt. McIntyre, C. H. Fulmer, H. M. Harmon, M.D., O. R. Kugler. Post-office address of all, Frenchtown.

The board has not met since May 1st. The condition of our borough is just the same as last year.

O. R. KUGLER,
Secretary.

HIGH BRIDGE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. N. Miller, President, Califon; Harry Latimer, High Bridge; Percival Chrystie, High Bridge; William C. Alpaugh, M.D., Health Inspector, High Bridge; I. H. Hummer, Secretary, High Bridge.

Water-supply from springs, wells and cisterns.

Good natural drainage.

No sewerage system.

No house-to-house inspection.

The contents from cesspools are either buried or spread over the soil.

No diseases of animals known or reported during the year.

Slaughter-houses are kept in fairly good sanitary condition.

Our board has passed a code of ordinances, from Section 1 to 15, inclusive, of model health ordinances recommended for township boards.

There has been no epidemic of disease the past year.

The only communicable disease has been five cases of scarlet fever.

The board has met a few times to abate ordinary nuisances.

SPECIAL INQUIRIES FOR 1895.

All cases of communicable diseases have been reported.

We do not furnish printed blanks for reports.

A record has been kept of communicable diseases.

HUNTERDON COUNTY—*Continued.*

Weekly statement of reports has not been transmitted to State Board of Health.

Gratuitous vaccination has not been offered.

No serious defect in water-supply.

No salary; \$2 per member each meeting.

There has been a sufficient amount allowed by the township committee to pay for publishing health ordinances and for the meetings of the board.

I. H. HUMMER,
Secretary.

HOLLAND TOWNSHIP.

No report received.

BOROUGH OF JUNCTION.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

H. Servis, M.D., Health Inspector; D. W. Anderson, W. O. Sandenberger, H. M. Bigelow, M. R. Albright. Post-office address of all, Junction.

Located on the side and top of hill. Population 975.

Drainage good—natural.

No public water-supply; twelve wells in use.

Houses well built. No inspection as yet.

Garbage burned or carted to waste places. Cesspool and out-house collections buried.

One public school building.

No ordinances as yet.

We have had three cases of diphtheria.

Nothing in particular has been done, as the board has just organized.

M. R. ALBRIGHT,
Secretary.

HUNTERDON COUNTY—*Continued.*

KINGWOOD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. B. Chamberlain, President, Baptisttown; Frank S. Grim, M. D., Health Inspector, Baptisttown; Samuel J. Snyder, Secretary, Locktown; John N. Smith, Locktown; Thomas McAlone, Raven Rock.

No epidemic of disease during the past year.

CITY OF LAMBERTVILLE.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter McGill, M.D., President; William A. Cole, Gervas Ely; W. Wayne Robinson, Clerk; John Sproat, Gersham L. Swallow; John L. Coryell, Health Inspector. Post-office address of all, Lambertville.

Lambertville is sixteen miles above Trenton on the Delaware river. Population 4,620.

Water works owned by a private company. Twenty-four wells.

Surface drainage.

A house-to-house sanitary inspection was made.

Garbage collected twice a week during four of the summer months, and once a week during the remaining eight months of the year. Cesspools and out-houses are cleaned and contents disposed of by an authorized person, who is especially equipped with odorless appliances.

No markets.

One city jail, which is in good sanitary condition, is the only lock-up.

One cemetery within city limits, and one outside city limits. Carefully looked after by the local board of health as prescribed by law.

All contagious diseases have been quarantined or isolated.

A majority of the dwellings have stoves and hot air furnaces; about twenty-five have hot water and steam heat.

Our board has met regularly twice a month from April 1st to November 1st, and once a month the balance of the year. A house-to-house sanitary inspection was made during the months of June, July and August, and all nuisances promptly abated.

HUNTERDON COUNTY—*Continued.*

SPECIAL INQUIRIES FOR 1895.

All cases of communicable diseases have been reported.
We furnish blanks to physicians for this purpose.
A record is kept of all such cases.
Weekly reports have been transmitted to the State Board.
No free vaccination since the last epidemic.
About once in every three years we have a house-to-house inspection.
Have no serious defect in water-supply. No sewer system.
Two hundred dollars is appropriated.
No new ordinances, rules or regulations have been adopted during the past year.

W. WAYNE ROBINSON,
Clerk.

LEBANON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Isaac J. Eyears, Glen Gardner; Calvin Castner, Chaugewater; Daniel C. Anderson, Wood Glen; Abram S. Banghart, Secretary, Glen Gardner; Dr. Theodore B. Fulper, Health Inspector.

Located in the northwestern part of Hunterdon county. Population of township is 1,900. The post-office villages are Glen Gardner, Wood Glen and Anthony.

The soil is generally clay; a good deal of stony ground. The surface is drained by the Spruce Run creek. The surface is dry, very few marshes or swamp lands in the township.

Water-supply principally from hydrants put in by private water company. The water is very good. Quite a number of wells are used, and few cisterns, and some excellent springs.

Houses are tenanted principally by one family. There is no house-to-house inspection.

Cesspools are built with open bottoms. Contents of out-houses mixed with ashes or lime and used on land; some is buried.

No disease of animals.

HUNTERDON COUNTY—*Continued.*

Slaughter-houses in good condition.

Schools in good sanitary condition.

Township almshouse is in good sanitary condition.

Cemeteries in good condition; burials are made in conformity to law.

Have adopted a code.

Physicians are prompt in reporting.

The prevalent diseases during the year were la grippe, colds, pneumonia and summer diseases. No contagious diseases.

Our board have not had much to do the past year. The inspector passes over the most of the township several times a year. We have had the usual trouble with foul privies and pig-pens, but have had them cleansed promptly.

 RARITAN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

E. S. Wyckoff, Wilson B. Moore, Asa Fisher, Charles Alpaugh; John H. Ewing, M.D., Health Inspector. Post-office address of all, Flemington.

Inspection made only on complaint.

No regular system for removal of garbage, out-house collection or cleansing cesspools.

Public health laws are very fairly enforced. The local board has passed the code as suggested by the State Board of Health.

Vital statistics are collected according to law.

All cases of contagious diseases are quarantined. No regular quarantine for typhoid fever cases, but disinfectants are carefully used.

The general health has been fairly good during the past year.

The board has ordered a pig-pen and cow-yard cleansed and the pigs removed from the town limits. Several closets and heaps of garbage have been inspected and ordered placed in a sanitary condition.

A number of wells and cisterns have been examined, the water found impure, and, as far as possible, have been placed in a sanitary condition. When not possible they have been abandoned.

HUNTERDON COUNTY—*Continued.*

A slaughter-house and adjoining yards have been ordered cleansed and kept in a sanitary condition.

Half or more of the garbage of the town is carted from the town and fed to pigs and poultry; it is carted in barrels.

CHARLES ALPAUGH,
Secretary.

 READINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Wm. M. Dalley, Chairman, Three Bridges; Geo. Stillwell, White House Station; Abram Honeyman, White House Station; W. W. Pursell, M.D., Health Inspector, White House Station; Elijah Lowe, Assessor, Barley Sheaf.

Population 2,776, according to the census of this year.

Post-offices—Barley Sheaf, Centerville, Potterstown, Rowlands Mills, Readington, White House and White House Station.

Water-supply—natural springs, wells and cisterns.

The board has met four times during the last year to investigate nuisances that were complained of, but had no particular trouble to abate the same.

ELIJAH LOWE,
Secretary.

 TEWKSBURY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Benj. Backer, Califon; Richard Craig, New Germantown; Theo. Miller, M.D., Califon; David K. Apgar, Secretary, Califon; Geo. A. Teats, Mountainville.

This has been a very healthful year. There has been no epidemic of contagious disease in the township. Only a few cases of sore throat in a mild form.

Our board has been called out twice and have ordered some chickens buried, out-houses cleaned, springs cleaned up and a slaughter-house put in better condition. Only a few complaints have come to the board and we have attended to the matter promptly.

D. K. APGAR,
Secretary.

HUNTERDON COUNTY—Continued.

UNION TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

H. A. Dalrymple, Pattenburg; Jonas Tharp, Pattenburg; George Frace, Norton;
N. B. Boileau, M.D., Health Inspector, Jutland; Morris Stockton, Clerk, Pattenburg.

The medical member of the board states that the health of the township at present is good. No contagious diseases of any kind during the year. The board is well organized. There has been but one complaint before the board, and that was properly attended to. The last meeting was held on October 12th.

SPECIAL INQUIRIES FOR 1895.

No communicable disease to report.
We have blanks for physicians.
We keep a record of communicable diseases.
Reports have been sent to the State Board.
House-to-house inspection is not performed.
No defect in water-supply or sewers.
No salaries are paid.
No certain amount appropriated. We receive \$2 for each meeting.

WEST AMWELL TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

R. H. Fisher, President, Lambertville; J. K. Leigh, Lambertville; George E. Vanbuskirk, Lambertville; Dr. J. W. Silvaria, Ringoes; G. H. Carr, Secretary, Lambertville.

The board of health met at Mount Airy July 9th. No complaints were made.

No contagious diseases have been reported the present season.

G. H. CARR,
Secretary.

MERCER COUNTY.

EAST WINDSOR TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Levy Updyke, Hightstown; D. H. Cunningham, Hightstown; R. W. Norton, Etra; Adolphus Messlor, Assessor.

EWING TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel T. Atchley, Chairman, Ewingville; Horace G. Hough, Trenton; James F. Herbert, Trenton Junction; J. Stockton Hough, M.D., Trenton; James M. Mathews, Clerk, Trenton Junction.

No reports of births or deaths received by assessor.

SPECIAL INQUIRIES FOR 1895.

1. None.
2. No.
3. None reported.
4. No.
5. No. Ninety per cent. in five years.
6. No.
7. No.
8. None.
9. To cover expenses.

JAMES M. MATHEWS,
Clerk.

HAMILTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

B. C. Kuser, Trenton; Ellis Middleton, Crosswicks; James W. La Baw, Hamilton Square; Samuel M. Robbins, Assessor, Hamilton Square; Dr. Geo. R. Robbins, Hamilton Square; Azariah Cubberly, Clerk.

MERCER COUNTY—Continued.

Lies between the Crosswicks and Assanpink creek.
 Population 4,000.
 Post-offices—Hamilton Square, Yardville, Mercerville.
 Geology—sandy soil with clay subsoil.
 Topography—flat, except in southern portion, where there are some gulleys.
 Water-supply by wells.
 Drainage natural.
 Garbage cared for by the owners of property.
 No diseases of animals.
 Manufactories and public buildings as follows: 3 rubber mills, 2 potteries, 5 flour mills, 10 school-houses, 1 township poor-house, 1 city pest-house.
 Five church cemeteries, eight others.
 Code has been passed.
 Typhoid fever in some locations during the summer.
 There has been little done by our board of health.
 We have informed parties to clean up all nuisances on account of the prevalence of typhoid fever.

SAMUEL M. ROBBINS,
 Assessor.

BOROUGH OF HIGHTSTOWN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

W. Irving Norton, President; John G. Scheible, Charles E. Stults, Elmer J. Rogers, David Cole; Dr. William L. Wilbur, Medical Examiner; Fred. B. Appleget, Health Inspector. Post-office address of all, Hightstown.

The Hightstown board of health has not been confronted with any unusual or serious difficulties this year, and its work has been correspondingly light. Much has been done, however, in the line of attending to complaints of minor nuisances, most of them neglected closets or drains. As a general thing, the efforts of the board are well received by property owners, and there is little opposition to suggested reforms. The sanitary condition of the town is excellent. There has been very little sickness during the year and no deaths

MERCER COUNTY—Continued.

from any contagious disease. There have been two cases of diphtheria, two of scarlet fever and one of typhoid. All were promptly reported and quarantined, and the houses thoroughly disinfected later. From a hygienic point of view, probably the most important work in Hightstown this year has been the construction of a water works plant by the borough. The plant is almost completed, and it is hoped that in a short time the town will have an abundant supply of pure water. The supply is from four artesian wells of a depth of about two hundred feet each, and, as it may be of general interest, we append the result of the analysis made by Henry Leffman, of Philadelphia; the figures are parts per million:

Total Solids.....	55
Chlorine.....	8

Dr. Leffman further says in his report that the water is clear and alkaline and quite free from pollution.

FRED. B. APPEGET,
 Inspector.

BOROUGH OF HOPEWELL.

No report received.

HOPEWELL TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

T. Romeyn Voorhees, President, Harbourton; N. Stout Voorhees, Glen Moore; J. Philip Hart, Pennington; Wm. M. Radcliffe, M.D., Township Physician, Woodville; W. D. Hunt, Secretary, Harbourton.

MERCER COUNTY—Continued.

LAWRENCE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel H. Van Cleve, Chairman, Lawrenceville; Clark Flock, Lawrence Station; William C. Brearley, Trenton; Isaac B. Baker, Secretary, Lawrence Station; Dr. Edmond De Witt, Lawrenceville.

This township has been very healthy this year, only two cases of scarlet fever; nothing of importance to report.

ISAAC B. BAKER.

BOROUGH OF PRINCETON.

No report received.

PRINCETON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. E. H. Bergen, President and Inspector; H. B. Bayles, H. L. Robinson, B. F. Gulick; W. L. Briner, Clerk. Post-office address of all, Princeton.

Most of the work in this township is taken care of by the Princeton borough board of health, which, of course, has the borough and most populous portion of the township under its charge.

The township board holds regular meetings each month from April to October and specials at call of inspector. Have had no contagious diseases this year and health in general has been as usual.

W. L. BRINER,
Clerk.

TRENTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Garret D. W. Vroom, President; William Cloke, Secretary; Thomas S. Chambers, Treasurer; Wm. H. Mickel, Health Inspector; Wm. C. Allen, Edward L. Titus, Assistant Health Inspectors; Dr. Ira W. Shepherd, Medical Inspector; Jos. Schaefer, Inspector of Plumbing; Dr. Chas. P. Britton, Dr. F. V. Cantwell, William Golding, Dr. W. McD. Struble. Post-office address of all, Trenton.

MERCER COUNTY—Continued.

The board has held regular meetings throughout the year. The health ordinances and rules and regulations of the board have been administered with vigor, intelligence and effect. The health inspector and his assistants and the inspector of plumbing have performed their duties with fidelity, to the undoubted sanitary advantage of the city. Foul places have been cleaned up, alleys and lots and back ways have been kept free from accumulations detrimental to the public health, numerous nuisances have been abated and the general health of the city maintained at a high and satisfactory grade. An idea of the administrative work performed during the year is conveyed in the statistical facts given in the annual report of the inspectors of the board. Health Inspector Mickel reports 980 complaints investigated during the year and 728 notices sent. He also reports 436 cases of diphtheria, of which 108 proved fatal; 79 cases of scarlet fever, 4 of which were fatal, and 33 cases of typhoid, of which 5 resulted fatally. To locate, isolate and supervise these cases involved a great deal of work on the part of the force. The water from a number of wells was analysed and the wells ordered closed.

The inspector of plumbing, Mr. Schaefer, reports 670 plans filed during the year. Fifty-three plans were rejected. Two thousand inspections and 547 air tests were made. There were 32 violations of plans, all of which were corrected under the inspector's direction. Three violations of ordinance during the year were also corrected. During the same period he issued 67 notices to reconstruct defective plumbing work, examined into 86 complaints, condemned and ordered removed 67 water-closets and compelled 4 reconstructions. There were supervised by him 587 new plumbing systems, 43 alterations and 35 additions. Four hundred and forty-three sewer connections were made during the year, 148 cesspool connections and 4 drain connections. The total receipts of the plumbing department were \$1,088. After giving in detail the large amount of work he had performed in examining and testing materials that entered into the works above mentioned, the inspector of plumbing says: "I would respectfully call the attention of your honorable body to the fact that more stringent laws are required to prohibit the use of cesspools on the line of completed sewers. Cesspools, although a neces-

MERCER COUNTY—*Continued.*

sary evil in the unsewered portions of the city, have no excuse for existence on the line of completed sewers, and should be abandoned and filled up." He reports that during the entire period since the code has been in operation (August 7th, 1893), there has been but a single complaint (and that unjustified) of poor workmanship, a record to which, he says, "the plumbers of this city can point to with pride."

It will be observed from the statistics given in the health inspector's report that there has been considerable diphtheria in Trenton during the past year. The board has grappled with the scourge with energy and intelligence, and has succeeded, so far, in holding it within bounds. Its methods are, immediately upon the report of a case by the attending physician, to isolate the patient and placard the house. Disinfectants are also employed, and the quarantine enforced and maintained until all danger of spreading the contagion is over. The board has the prompt co-operation and sympathetic support of the physicians of the city, with a very few exceptions, aiding very materially in the effective performance of its work.

The board is now engaged, through a committee appointed for the purpose and clothed with full power, building a commodious hospital for the care and treatment of cases of diphtheria and other contagious diseases. The plan will be a modification of the admirable institution at Morristown, which the committee inspected and unanimously recommended as the best they examined. During the present year a diphtheria ward and appurtenances will be erected, while it is the intention to enlarge it from year to year to meet the entire necessities of the case.

The sewer system of Trenton is among the best in the State and is answering the highest expectations of its advocates. It was planned by Rudolph Hering, C.E., and provides for the entire city. Up to this date about twenty-seven miles have been completed, including the great brick outlet, through which a man may walk upright, and several large intercepting sewers. The system has been extended all over South Trenton and the annexed district of Chambersburg, and sewer building through all these parts of the city is rapidly progressing. The sewer building is done under the most faithful, competent and

MERCER COUNTY—*Continued.*

rigorous supervision, and no bad work or defective material goes into them.

The "garbage question" is still unsolved and continues to be a growing nuisance and subject of constant complaint. The garbage is collected under the contract system and dumped by the contractor wherever the official eye happens for the time being to be turned away. When told to "move on," he seeks some other place for creating a nuisance, and so is hustled from point to point, leaving a trail of foulness and stench along his tracks. The city authorities have declared themselves in favor of the disposal of garbage by cremation or the reduction system, but all efforts thus far to carry the purpose into effect have come to nothing. I think, however, that before the end of the ensuing year the problem will be solved on one of these lines.

The water-supply of the city, under the enlarged and improved system, is copious, ample and of a pure and wholesome quality.

Several miles of vitrified brick pavements have been laid since last year, and the work of street improvement is progressing in all directions. This has a marked effect in lessening mud and dust, with decided advantage to the public health and comfort.

WILLIAM CLOKE,

Secretary.

WASHINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR:

Forman Hutchinson, Chairman, Windsor; William Coleman, Windsor; George Ford, Allentown; George A. Silvers, M.D., Windsor; J. P. Hutchinson, Secretary, Windsor.

WEST WINDSOR TOWNSHIP.

No report received.

BOROUGH OF WILBUR.

No report received.

MIDDLESEX COUNTY.

CRANBURY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Abram Voorhees, Chairman; Frank A. Brown, Secretary; W. I. Stults, J. Edward Bennett, Dr. Henry C. Symmes. Post-office address of all, Cranbury.

Our board has nothing of importance to report. Our location, population, climate and drainage have all been reported before and remain about the same. The general health has been good; no prevalent disease among cattle or horses. The ordinances we adopted last year are printed on heavy board and kept posted all the while before the public, and I think have an excellent effect, because complaints, made so frequently before, are seldom heard now.

FRANK A. BROWN,
Secretary.

BOROUGH OF DUNELLEN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

C. D. Boice, President; G. E. Lowrie, Secretary; J. Peters, Inspector; Geo. W. Churchill, P. W. Brakeley, M.D. Post-office address of all, Dunellen.

EAST BRUNSWICK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John O. Cozzens, Spotswood; John Perdun, Milltown; John Kohlhepp, Milltown.

We have no organized board of health in this township, the township committee thinking it unnecessary. The location of our township is healthy. The ground is rolling and of a gravelly, sandy subsoil. Water-supply from individual wells, which is very pure. The health of the township is generally good, very good, with the exception of South River; there dysentery and throat diseases have amounted to almost an epidemic; from what cause I do not know.

MIDDLESEX COUNTY—Continued.

We have no regular township physician. The manufacture of tallow and soap-fat by S. Tederer & Son is considered a nuisance by persons residing in the vicinity where it is located, but I do not know of any sickness arising therefrom.

DANIEL HERBERT,
Assessor.

MADISON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

James Fountain, President; S. M. Diebrow, Physician; Ambrose Green, W. H. Lamberson; D. H. Brown, Inspector and Secretary.

The condition of our township throughout the past year has been good. Have not been troubled with any contagious disease whatever.

MONROE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles G. Hoffman, Chairman; Chas. H. Edwards, Secretary; J. Perrine Applegate, Samuel E. Perrine, Garret W. Reid; J. L. Suydam, M.D., Medical Inspector Post-office address of all, Jamesburg.

We have had no epidemics this year. There were three cases of diphtheria in and around Union Valley, but they came under the Hightstown physicians' treatment. There was one death, but the other two cases yielded to treatment. A fever was quite prevalent in the village of Jamesburg, which was diagnosed as a typho-malarial. There were in all about six cases. We have also had some "measles of a true type" and they, too, were amenable to treatment. I suppose that the last two named diseases belong more properly to the board of the village. The drainage of the township as well as the sanitary conditions in general are good. We have been extraordinarily vigilant and are well satisfied with the results when we consider the continued drought of the latter summer and early autumn.

J. L. SUYDAM, M.D.,
Medical Inspector.

MIDDLESEX COUNTY—*Continued.*

CITY OF NEW BRUNSWICK.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry N. Baldwin, F. B. Kilmer, I. B. Smith, George K. Pursell; P. A. Shaanon, City Physician; George Litterst, City Clerk; A. M. Baldwin, Inspector. Post office address of all, New Brunswick.

Situated upon a hillside, the advantages for drainage are unsurpassed, save where errors in grading have made it difficult.

The public water-supply from Weston's pond has almost entirely superseded the public wells, which have in most instances been filled up.

The board have under consideration a plumbing ordinance, but have been unable to put it in force from lack of sufficient funds.

Our streets are in bad condition, often rendered unsightly, not to say dangerous, by quantities of loose paper and inefficient sweeping apparatus.

Many of our tenement-houses are far from wholesome. They are inspected and evils abated so far as possible.

The lighting is by gas and electric light, and, of course, in many instances by kerosene.

The collection of garbage is a difficult problem. This board passed an ordinance directing the separation of ashes and garbage. It has thus far failed in execution, and during the heated term the open carts sent forth disgusting odors.

The vigorous action of the board in the past has mostly abated any nuisances made by slaughter-houses.

The board has been zealous in looking after contagious and infectious diseases, and no unvaccinated children are allowed to attend the public schools.

Sanitary expenses, October 1st, 1894, to October 1st, 1895, \$1,048.34.

There has been reported to this board during the year 17 cases of typhoid fever, 21 cases of diphtheria, 16 cases of scarlet fever, and 52 cases of measles.

This board of health has with earnest persistence labored to prevent the pollution of the stream, Lyle's brook, running through the

MIDDLESEX COUNTY—*Continued.*

city and a constant menace to health. They have made constant inspections into causes of complaint and have abated scores of nuisances and granted 246 permits for emptying out-houses.

HENRY R. BALDWIN,
Secretary.

GEO. J. LITTERST,
City Clerk.

NORTH BRUNSWICK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John A. Wines, Assessor, Milltown; Charles Hodapp, Milltown; B. Stevenson, New Brunswick; Neilson Williamson, New Brunswick; Ferdinand E. Riva, M.D., Health Inspector, Milltown.

CITY OF PERTH AMBOY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George W. Mercer, President; John Toft, John Pfeffer, E. V. R. Sofield, James Growney, Dr. E. A. Huls, F. J. Richters; G. W. Tyrrell, M.D., Health Inspector. Post-office address of all, Perth Amboy.

The population of Perth Amboy is now slightly over 13,000, and seems to be rapidly increasing. Wells and cisterns still continue to be used, and from the general dissatisfaction expressed in regard to the condition of our water plant I am inclined to think the wells will continue to exist. The fact that only 136 house taps have been added this year is no doubt owing to this general dissatisfaction, which is not without reason, for though naturally perfectly clear and wholesome it has been allowed to become polluted by decaying vegetation, despite the fact that attention was called to the matter long before the decomposition took place. Complaints of unwholesomeness are also made by those who forget that, owing to the many breaks in our main and needs of repair to the machinery, the polluted water from the old reservoir is supplied to us oftentimes admixed with pure

MIDDLESEX COUNTY—*Continued.*

water from the brook. These are serious defects, and though about \$2,500 has already been spent by the city in repairing the numerous breaks under the river, nevertheless the end is not yet, and the city is confronted by the necessity of laying a new main, buying a new pump, changing the intake and perhaps seeking a still better source of supply. For a full report of this supply see account of our recent inspection as sent you under the title of "An Inspection and a General Consideration of the Water-Supply of the City of Perth Amboy."

After much misunderstanding and opposition on the part of plumbers, plumbing is now performed under a permit issued by this board and subject to our inspection. Such inspections have resulted in the condemning of four systems of new plumbing, all of which were forthwith ordered corrected.

The sewers of the city are in great part too small, and after a heavy downfall of rain are very apt to back up in various cellars along the line. This occurrence early in the year caused, it is said, a loss of \$300 to one of our prominent butchers, who immediately instituted a suit against the city. This liability was shown the committee on streets and sewers a long time previous to its occurrence and measures were suggested that would have permanently prevented its occurrence. In order to ventilate the sewers the committee have, despite all reasoning to the contrary, broken very many of their water seals, thus allowing all the gas in the sewer to escape close to the curb. During the past year 43 permits have been filed to tap the sewers, and in a majority of cases full plumbing plans have been immediately filed in connection therewith.

During the year a good macadam road has been constructed between this city and Woodbridge. As this road is very extensively traveled, its completion marks a very important addition to our extremely few good roads. This is in sharp contrast to the poor condition of a few of our streets, due to the casting or falling upon them of unlimited quantities of loose stones, bricks, &c. Waste paper is also cast upon our streets in such quantities as to be a most decided nuisance; and though these conditions may not be specially detrimental to health, they may well be considered a menace to the safety and comfort of those in our city who are in the habit of riding.

MIDDLESEX COUNTY—*Continued.*

Streets have recently been ordered graded, opened and improved; a new pavement has been constructed in our park, and most all sidewalks greatly improved; new receiving basins have been added when found necessary, and this branch of the city has received all the attention possible with so small an appropriation.

Winter house-to-house inspection shows premises kept in very fair condition, together with good evidence of increased interest in such matters as pertain to good health. Refrigerator butcher-wagons appeared this year for the first, and this step in a right direction was, I am sure, duly appreciated by all.

Gas-lighting has again, under very able management, almost regained its wonted power. Electric (arc) lighting of the streets is now maintained all night.

Our system of garbage collection still consists of anything from a band-box to hogshead for receptacles, the large, clumsy wagon for carting and the "within city limits" dumping-ground. Wagons have been ordered occasionally deodorized, and the best progress possible is made under a bad system. The fact that our system does not require ashes and garbage to be kept separate explains, in some measure, the cause of a source of foulness that for a long time annoyed this board. The city having built a bulkhead at the foot of Gordon street, it was resolved to fill it in with garbage. This was attempted, and the work went along smoothly until hot weather set in, when decomposition of the garbage took place, and was hastened by an alternate soaking in salt tide-water and baking in the hot sun. To all this was added the offensive odors from the mouth of the sewer. The stench from these causes was almost unendurable. Complaints were numerous (but unwritten). Prior to a meeting of the board of health the street commissioner was urged to fill in as quickly as possible with earth. At its next meeting the board ordered that all dumping of garbage should be prohibited. This proved very unsatisfactory, pools of excessively foul water rapidly forming, and giving off, if possible, odors still more foul. The people in the neighborhood demanded immediate filling in of the large pool, and once again the board changed their order, and the dumping of all kinds of garbage was again instituted. Garbage dumping was hurried as much as possible, and the refuse

MIDDLESEX COUNTY—*Continued.*

covered with a thick layer of dry earth, after which the stench rapidly disappeared, until now nothing remains but a memory and more or less foulness noticeable at the point where the large sewer empties. Cesspools and privy vaults, of course, still exist and are cleaned by moonlight, under permits granted by the board.

During the month of May last some horses suffering with some disease resembling glanders were seen drinking at the public fountain. Not having a veterinary physician in town at the time to make a diagnosis, the water was immediately shut off and the fountain scrubbed with a carbolic solution and afterward with clean water, after which the water was again turned on and quiet restored.

Dead animals are, for most part, carried out of town gratis by some industrious New Brunswick firm.

The cork factory, of this city, has been subject to a complaint by many well-known citizens. The substance of the complaint is that the said company needlessly burn cork refuse on very irregular occasions, and that such smoke, being decidedly heavier than air, sinks almost immediately to the ground, where it contaminates the air taken into the houses, thus causing violent coughing, to say nothing of a sense of suffocation experienced just before waking. They also contend that the smoke, being of a greasy nature, soils the linen placed upon the drying lines, thus necessitating a second washing. The complaint has been laid upon the table for future consideration by the board.

Again, with pleasure, we report that means are being taken to gain additional school-room by the construction of a large school, at a cost of about \$30,000. This school is to have all the modern improvements, and is the most important step ever taken by our progressive school board. During the course of the yearly house-to-house inspection, part of the plumbing and ventilation of school No. 2 was pronounced defective, and the school board and committee on public buildings was requested to see that steps were taken immediately for its correction.

On two occasions during the year I was informed of scarletina existing among the children attending one of our schools, and was consulted regarding the advisability of closing it. However, on carefully considering the matter, I was so firmly convinced that

MIDDLESEX COUNTY—*Continued.*

closing the school might do more harm than good, that I advised its continuance, all the scholars to be kept under strict surveillance, and all possible precaution taken to prevent the disease from spreading. The fact that the disease did not spread is evidence sufficient of the wisdom of the course pursued. Impetigo has prevailed here this summer, and though not at all dangerous, I have excluded those suffering with it from school, believing it best to exclude a few from school rather than have all the scholars suffering from a disease that temporarily renders them unsightly and exceedingly uncomfortable.

Nothing has been done to better the sanitary condition of the jail.

Though our police force still continues small in number, it is not lacking in ability, and with pleasure we report them as earnestly endeavoring to aid us in the ferreting out of all matters liable to be a detriment to health.

A new health code has just been completed by a committee appointed for that purpose and will probably come up for its first reading at the next regular meeting.

The register of vital statistics having informed the board of the neglect of a clergyman to submit to him the report of marriages performed by him, a notice was served on the reverend gentleman, who complied in a reasonably short time, considering the amount of work entailed in making out reports for ten years, during which time it had been neglected.

During the past year there were 160 marriages, 278 births and 288 deaths recorded, the causes of death being enteric troubles in 17 cases, lung diseases in 58 (15 tubercular), infantile disorders in 99, brain and nervous troubles in 18, kidney lesions in 10, heart lesions 7, accidental 28, and the others from miscellaneous causes.

To prevent the spread of contagious diseases schools, public libraries and sometimes churches and Sunday-schools are notified of its place of existence, and a very careful search for the cause is instituted as soon as a case of communicable disease is reported. The following inquiries will give a fair idea of the method of such searches: Name of disease; name, residence, age, sex, color and occupation (if any) of the diseased; condition of premises—cellar, sewer connection, traps, vents, &c., water-closets, yard, privy-well, cesspool, local

MIDDLESEX COUNTY—Continued.

surroundings; name of grocer, milkman, butcher and baker; age of house; was disease in house before, when; condition of local drainage; number of occupants in house; where do they work; how many school children; what school; any sickness in school (as cough, sore throat, sore eyes, &c.); any sickness among domestic animals; name of physician; any visitors lately; have any of the family been visiting; were any sick there; any acquaintance sick lately, what disease; bought any old furniture or bedding lately, where; what sickness in house during last twelve months, any deaths; brought any books home from free or Sunday-school library; does anyone sleep in basement; are walls papered; anything left by old tenants, what; who does the washing; does anyone in house take in washing; is cistern or well used; been to any funeral lately; received any freight or express matter lately, where from; has manure or cesspool matter been spread near dwelling. These inquiries seldom fail to show a cause, after which verbal directions are given relative to its removal and the care of the defect.

Our appropriation this year was only \$500. Our expenses will aggregate about \$800; this difference being made up by the sum remaining to our credit from last year, together with fines collected and fees received from permits issued during the year.

Late last fall the health officer of the port discovered on board a vessel here from Navassa several cases of sickness which he diagnosed as beri-beri and ordered placed in the emergency hospital. Here, despite the fact of the best of attention, a large per cent. of them died; the others, upon becoming convalescent, were allowed to return to their various homes and since that time we have seen no new cases of the disease.

The few cases of scarletina which occurred during the year were very easily traced to one family. The first reported case was traced to Public School No. 1. Suspicion being thus directed, immediate search was instituted and four cases were found that had not been reported by the attending physician.

However, notice being served on him, he afterward promptly complied with the law. The school authorities were notified to cause all children suffering from suspicious symptoms to bring a certificate of good health to school from some physician. From that time on

MIDDLESEX COUNTY—Continued.

no scarletina was traced to the school and the few new cases were quite readily traced to the first five cases mentioned.

With diphtheria we were not so fortunate, one case practically defying our best search for cause.

In a letter from the State Board, dated May 29th, 1895, we received notice of nine emigrants destined for our city from Bremen via steamer Ems, on which steamer a case of small-pox was isolated. As soon as the notice was received slips were made out requesting the chief of police, the Catholic priest and some of the principal German, Polish and Hungarian merchants to aid us in finding them and in causing them to report to us at very short intervals. However, but few words need be spent in this connection, suffice it to say that no trouble was experienced from this quarter.

DATE.	Complaints received.	Complaints verified.	Nuisances inspected.	Orders given to abate nuisances.	Nuisances abated.	Drainage plans presented.	Drainage plans approved.	Drainage plans rejected.	CONTAGIOUS DISEASES.				Total.	
									Measles.	Scarletina.	Diphtheria.	Chicken-pox.		
1894.														
November 12th...	6	6	40	23	26	6	6
December 10th...	7	7	23	16	23	3	3
1895.														
January 14th...	5	5	9	4	9	10	8	2	65	12	5	7	89	
February 11th...	3	3	10	.....	10	2	2	.....	66	2	1	1	70
March 11th...	3	3	20	17	18	.....	.....	.....	27	4	6	1	38
April 8th...	11	10	38	27	29	5	5	.....	6	1	3	.....	10
May 13th...	5	5	33	28	30	13	12	.....	.....	.....	.....	.....	.....
June 10th...	3	3	71	25	39	7	7	.....	.....	.....	.....	.....	.....
July 8th...	7	7	69	40	58	12	12	.....	.....	.....	.....	.....	.....
August 12th...	4	4	49	27	104	13	13	.....	.....	.....	.....	.....	.....
September 9th...	1	1	39	22	24	12	12	.....	.....	.....	.....	.....	.....

The accompanying chart shows in brief considerable of what has been done by the board during the past year, together with these facts. I might report that means are about completed toward the draining and filling in of another large pond. A long maintained nuisance consisting of a foul drain about 2,000 feet long has been done away with. Five lawsuits have been instituted this year, in every case of which judgment was rendered for the board.

MIDDLESEX COUNTY—*Continued.*

SPECIAL INQUIRIES FOR 1895.

Communicable diseases, with a few exceptions, have been regularly though somewhat tardily reported on blanks furnished by the board. A record of the same is carefully kept and a weekly statement transmitted to the State Board.

Gratuitous vaccination has not been offered, and the proportion vaccinated within the last five years is not known.

A house-to-house inspection is regularly performed, but records are only kept when a detriment to health is found.

The serious defects in our water-supply and sewer system can be found in the body of the report.

The board pays a salary of \$600 to the inspector, \$50 to the clerk, and \$50 as a retainer to the attorney.

G. W. TYRRELL, M.D.,
Health Inspector.

PISCATAWAY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

S. R. Dayton, President, New Market; Warren L. Smalley, New Brunswick; Jos. V. D. Field, Bound Brook; Dr. M. J. Whitford, New Market; C. E. Kelly, Secretary, New Market.

Population 2,352.

Sandy shale.

Natural drainage.

Our board has heard several complaints and had nuisances abated where found to exist. Passed one resolution which asked physicians to make reports.

We do not have any inspector, nor do we have any plans for preventing nuisances, but we investigate all complaints, and if we find a nuisance to exist have it abated at once.

There is a record of births, marriages and deaths kept and the cause of deaths, but we find it very difficult to get proper returns for births, as some doctors are very careless about these matters.

C. E. KELLY,
Secretary.

MIDDLESEX COUNTY—*Continued.*

RARITAN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. J. Gebhardt, Chairman, New Brunswick; Luther H. Tappen, Metuchen; A. C. Litterest, Mento Park; Dr. A. Hunt, Medical Member, Metuchen; B. M. Kelly, Secretary, Metuchen.

BOROUGH OF SAYREVILLE AND SAYREVILLE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

August Rhode, Chairman; Leferts Smith, Assessor; J. H. Beekman, M.D., Physician; Max Nagel, Inspector; J. M. Blew, John Quade. Post-office address of all, Sayreville.

The health of the township is in a good condition. Several nuisances have been reported and all attended to at once. There has been an epidemic of diphtheria and several deaths have occurred. In some cases the doctors were not called until it had terminated in diphtheric croup. The board of health took immediate action and notified the families in each case that public funerals would not be allowed, and burial as soon as possible was recommended.

BOROUGH OF SOUTH AMBOY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. Treganowan, M.D., J. H. Greene, John Dykes, Cornelius McGonigle, Michael Welsh, Henry Wolf, Christian Straub; Thomas Baker, Health Inspector. Post-office address of all, South Amboy.

Located on Raritan river, Raritan bay and Princes bay.

Public water works in operation about eighteen months.

Two-thirds of the people are using water from wells.

Surface drainage; very little plumbing.

Cesspools and vaults are not kept as clean as demanded. Principal trouble is the property owned by the railroads.

Garbage collected by contract. Cleaning of vaults and cesspools left to property-holders and tenants.

MIDDLESEX COUNTY—*Continued.*

The board has had removed as far as possible all nuisances and have tried to keep the borough clean and healthy.

We have kept our diphtheria cases well isolated.

A new code is being passed.

THOS. BAKER,
Health Inspector.

SOUTH BRUNSWICK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. F. Stout, President, Monmouth Junction; H. E. Hathaway, Secretary, Monmouth Junction; Edgar Carroll, M.D., Health Inspector, Dayton; D. G. Rowland, Dayton; William P. Hagerman, Deans.

WOODBIDGE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

C. P. Christie, Sewaren; C. A. Ames, Woodbridge; W. S. Anness, Woodbridge; J. V. Freeman, Woodbridge; S. E. Freeman, M.D., Inspector, Woodbridge.

Woodbridge township is located on Staten Island sound and Raritan river. Population about six thousand.

Names of post-offices in the township—Woodbridge, Seawaren, Carteret, Port Reading and Ford's Corner.

The soil is of a clayey nature. Land level.

The water-supply is mostly from wells. In Seawaren water works have been provided.

The town depends mostly on surface drainage. In three of our streets we have sewers. Seawaren has a regular system of sewerage.

In the towns the houses are largely owned by those who dwell in them. The tenement-houses are in fair condition.

The houses are mostly lighted by kerosene lamps, some by gas.

The refuse and excreta are collected in cesspools and carted out and placed on farm lands.

There are no markets. There are no slaughter-houses, the meat supply coming from the west.

MIDDLESEX COUNTY—*Continued.*

There are in the township five fire-brick factories, one iron foundry, two fertilizer factories, one oil works and the Canda Car Works.

The school-houses are large and in good order. One new one has been built this summer.

We have no almshouse, no hospital, no prison. No regular police is maintained.

There are three cemeteries in the township.

There has been no epidemic of contagious disease during the past year. A few sporadic cases of diphtheria and scarlet-fever have been reported. By strict quarantine they were kept from spreading.

Dwellings are mostly heated by stoves and hot air furnaces, a few by steam and hot water.

The board has caused two brooks running through the town to be straightened, in order to improve the drainage of swampy land bordering on them.

MONMOUTH COUNTY.

BOROUGH OF ASBURY PARK.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Nelson E. Buchanan, President; Hon. Jas. A. Bradley, M. L. Bamman, Theo. H. Beringer, David W. Sexton, W. W. Davis; D. C. Bowen, Inspector. Post-office address of all, Asbury Park.

One hundred and sixty-eight plans and descriptions for the plumbing and drainage of buildings have been filed in the office of the board of health during the past year. Total number now on file, 780. All work tested by air pressure.

Twenty-five new sewer connections have been made during the year, making 1,000 connections with the public sewers.

The improvements which are being made in grading and graveling the public streets in the borough add greatly to the beauty and cleanliness of the town.

Sanitary inspections of every premises in the borough are repeatedly made and the results of each inspection are recorded on blanks which are filed in the health office, where they may be consulted by interested persons.

MONMOUTH COUNTY—Continued.

No change in the collection and final disposition of garbage and town refuse has been effected since our last report. The merits of various garbage furnaces are now being inquired into by this board preparatory to making a report to the mayor and council, and it is expected that before another season this borough will be prepared to dispose of all waste products by incineration.

An ordinance relating to external fire-escapes for buildings in the borough of Asbury Park has been enforced during the past year, and all hotels, boarding-houses and large buildings are required to be provided with safe means of escape in cases of fire.

Reports of communicable diseases are required by ordinance, and the number of cases reported from October 1st, 1894, to October 1st, 1895, was 29; 9 cases of typhoid fever, 8 cases of measles, 2 cases of tuberculosis, 6 cases of diphtheria and 4 cases of scarlet fever. Isolation of persons affected with communicable diseases, and disinfection of infected premises and articles, is required, under supervision of the board of health.

Arrangements for the bacteriological examination of specimens of diseased tissues have been made by the board, and boxes containing culture tubes for receiving the specimens are furnished to physicians upon application.

The following blank is in use in this borough, and all descriptions of plans filed for the plumbing and drainage of buildings must be presented on these blanks:

Board of Health of the Borough of Asbury Park, N. J.—Description of the Plumbing, Drainage, Lighting, Heating and Ventilation of Within Designated Buildings.

Notice.—Owners, architects, builders and plumbers are hereby notified that strict adherence to the plans and specifications on which this permit is granted will be required by the board of health, unless permission in writing has been previously given by order of the board allowing their modification. Approval of plans and description shall expire within six months after the date of filing. Drawings shall in each case accompany this written description. They shall show every line of supply-pipe and waste-pipe, and every fixture, and the location of every stop-cock. They shall show the sizes of all pipes, their grade, angles and lengths. Figures showing distances between all angles shall be plainly marked on the plans. All plans shall be drawn to scale. All work done under this permit shall conform to the requirements of an ordinance of the board of health, entitled, "An ordinance governing the plumbing, drainage, ventilation, lighting and heating of buildings," adopted July 11th, 1893.

MONMOUTH COUNTY—Continued.

Action of the Board of Health of the Borough of Asbury Park, N. J., upon the plan of the within-described buildings, as embodied in these specifications and the drawings filed herewith.

Plan No....., for the Plumbing, Drainage, Lighting, Heating and Ventilation of within-described building is hereby [Date]..... upon the following conditions, said approval to expire six months after date.

No.....
 Description of the Plumbing and Drainage of the Buildings Herein Designated.
 Location.....
 Owner..... Address.....
 Architect..... Address.....
 Plumber..... Address.....

Pursuant to the requirements of law, the accompanying plan for the plumbing and drainage of the above-mentioned building, and the following description thereof is hereby submitted for the approval of the board of health, the undersigned hereby agreeing to cause the work to be done and the material to be furnished in accordance therewith, with such modifications as may be required by the board of health. No modification of the plans, nor of the work described herein, will be made, unless the same is previously allowed by said board, on the written application of owner; and all work pertaining to the proper plumbing and drainage of the buildings and premises which is not covered by the plans, but is found necessary during the progress of the work in order to carry into effect the true intent thereof, will be executed in accordance with the directions of the said board of health.

GENERAL DIRECTIONS.

It is expressly understood that these descriptions and the drawings submitted herewith to the board of health for approval constitute together, as approved by said board, the plans for the plumbing and drainage of the buildings herein described; and in respect to all work not covered thereby, the plumber is to be governed by the rules and regulations as to plumbing and drainage established by the board of health.

The plumber will furnish all materials and perform all labor requisite and necessary for putting up and completing all the plumbing work in a good and thoroughly workmanlike manner, according to the plans therefor as approved by the board of health.

All materials will be of good quality and free from defects. The diameter of pipes herein specified is inside diameter.

The will properly close all openings in floors and ceilings about lines of drain and vent pipe, so as to prevent the passage of foul odors from one floor to another along said lines of pipe.

The plumber will send notice to the board of health when the work will begin, and also at various times during the progress of said work before any part of it is permanently covered.

MONMOUTH COUNTY—Continued.

The plumber will properly protect all pipes and fixtures as soon as set and close all pipe openings so as to prevent obstruction and damage.

The will do all the excavating and refilling required for the proper carrying out of these specifications, except as such work is herein otherwise specifically provided for.

The plumber will obtain and pay for all necessary permits, and comply with all corporation laws relating to the subject-matter of these specifications.

After the completion of the work under these plans and specifications, and before its final acceptance, the plumber must obtain the certificate of the board of health that there is no violation of law on record against said work, and water will not be turned on nor used in connection with this drainage system until said certificate is issued.

MATERIALS, ETC.

Earthenware Pipe.

All earthenware pipe, herein specified, must be hard, smooth, salt glazed and cylindrical, and not less than three-quarters of an inch in thickness. Each length will be perfectly straight and free from any fire cracks, flaws, blisters or other defects.

All special fittings to be of the same quality as the pipe.

Cast-iron Pipe.

All cast-iron pipe and fittings must be sound, cylindrical and smooth, free from cracks, sand-holes and other defects, of a uniform thickness, and of the grade known in commerce as extra heavy. All iron pipe will be firmly secured in position by proper pipe supports, placed not more than five feet apart, and in the case of each vertical line of soil or waste-pipe, it shall rest at its foot on a pier or foundation. No tar-coated pipe will be used, but after the pipes have been tested and accepted by the inspector they will be coated with.....

The following average weights per lineal foot will be accepted:

2 inches.....	5½ pounds per lineal foot.
3 "	9½ " " " "
4 "	13 " " " "
5 "	17 " " " "
6 "	20 " " " "
7 "	27 " " " "
8 "	33½ " " " "
10 "	45 " " " "
12 "	54 " " " "

All joints in cast iron pipes will be made with picked oakum and molten lead, and the plumber will make the joints impermeable to gases by bedding the lead with hammer and calking-iron. For each joint in cast-iron pipe twelve ounces of lead must be used to each inch of diameter of the pipe in which the joint is made. No putty or cement joints will be permitted. The lead used for calking will be pure, soft pig lead. No old joints or other defective material will be used.

MONMOUTH COUNTY—Continued.

Wrought-Iron Pipe.

.....

Lead Pipe.

All lead soil, waste and vent pipe, including bends, will be drawn pipe of the best quality and of the following weights per lineal foot:

Diameters :	Weight per foot :
.....
.....
.....
.....

All connections of lead with iron pipes will be made by heavy brass ferrules of the same size as the lead pipe, set in the hub of the branch of the iron pipe and calked in with lead; the lead pipe to be attached to the ferrule by a solder wiped joint. No putty or cement joints will be permitted.

All connections of branch lead soil, waste and vent pipes will be made by wiped joints.

All lead pipes will be firmly secured in place with hard metal tacks and screws, placed not more than three feet apart; and all horizontal lead pipes will be well supported for their whole length by shelves or carrying strips, to be provided and put up by.....

TEST.

The plumber will test all of the soil, waste, drain and vent pipes herein described in the presence of a plumbing inspector, and after due notice to the board of health, by air pressure; the pressure to be applied as directed by the inspector, and after all openings in the pipes have been securely closed by the master plumber or other person in charge of the work. The pressure will not be less than five pounds per square inch, as shown upon a guage provided by the board of health and attached by the plumber. None of said pipes shall be covered until after they have stood the test to the satisfaction of the inspector.

House Sewers—Excavation.

The.....will make the necessary excavation for the house sewer from the..... wall to the.....sewer in....., making a smooth bottom for each pipe, and with the soil well rammed to prevent settling of the pipe.

House Sewer—Earthenware.

The.....will make a separate connection for each building with the..... sewer by an earthenware pipeinches in diameter, hard and salt glazed, andof an inch thick, run at a uniform grade of not less than ¼ inch per foot, extending the same to.....

MONMOUTH COUNTY—Continued.

Every section will be bedded in cement at the hub. The ends of the pipe will be wetted before applying the cement, and the space between each hub and the small end of the next section will be completely and uniformly filled with the best quality of hydraulic cement, care being taken to prevent any cement being forced into the drain to become an obstruction. No tempered-up cement will be used. A straight edge will be used, and the different pipe sections laid in perfect line on the bottom and sides.

House Sewer—of Iron.

Or the plumber will make a separate connection for each building with..... sewer in.....by..... inch extra heavy cast-iron pipe run at a uniform grade of not less than $\frac{1}{4}$ inch per foot, to a point just inside of the.....cellar or foundation wall.

The house sewer in each case will be connected to the street sewer at a point directly in front of the house for which it is laid.

Old sewers or house drains can be used for new buildings only when found by a plumbing inspector to conform in all respects to the regulations governing new sewers and drains. They will in each case be uncovered by the for examination by the plumbing inspector.

Notice will be sent to the board of health when any sewer or drain pipe herein specified is ready for inspection; and it can be covered only after it has been examined and pronounced satisfactory by an inspector from the board of health. In filling the trench no stones will be placed in contact with the pipe, and the earth will be thoroughly packed in without moving the pipe in the slightest degree, or starting any of the joints.

HOUSE DRAIN.

The plumber will make a proper connection with the house sewer by extra heavy cast iron pipe, and set a four-inch extra heavy cast-iron running, or half S trap just inside of the foundation wall, with a hand hole for cleaning, covered with a screw cap, properly fitted.

A fresh-air inlet of extra heavy cast-iron pipe, not less than four inches in diameter, will be provided and properly connected with the house drain on the inlet side of the house trap, and extending to not less than feet from any door or window, and opening at least four inches above finished grade, with return bend.

The will build a box with cover about the drain trap, so as to make it readily accessible.

The plumber will continue the house drain of extra heavy cast-iron pipe inches in diameter, from trap to the point shown on the plan, giving it a uniform grade to the trap of not less than $\frac{1}{4}$ inch per foot. The house drain must not be laid beneath the cellar floor, unless the location of fixtures in the cellar or basement, or the drainage of yards, cellars or areas requires it to be so laid. Make necessary changes in direction by curved pipes, and all connections by Y branch pipes and one-eighth or one-sixteenth bends.

All of said branch pipes to be of the diameter hereinafter described and as shown on accompanying plan.

MONMOUTH COUNTY—Continued.

Where hand-holes for cleaning are provided on the house drain or its branches, proper ferrules, with screw covers, will be used and made gas-tight.

SURFACE DRAINAGE, ETC.

All yards, cellars, areas and light-courts will be properly graded by the owner and drained as hereinafter specified. The traps for all such drains will be placed inside the cellar wall and made accessible, and will be provided with hand-holes.

Cellars will not be directly connected with the house drain. If connected to the house drain, running traps, with open sinks and proper water-supply will be provided for each connection, as follows:

.....
Where subsoil drains are provided, their construction, trapping and special provision for maintaining their trap seal will be as follows:
.....

UPRIGHT SOIL, WASTE, VENT AND DRAIN-PIPES.

Soil-Pipes.

For each water-closet or line of water-closets and adjacent fixtures, as shown on plans, provide and set..... inch extra heavy cast-iron soil-pipe, connecting with the house drain by a Y branch and one eighth or one-sixteenth bend and extending two feet or more above the highest part of the roof or coping; said pipe will be increased to inches in diameter from the roof upward. If near a light-shaft or other ventilating opening extend to soil-pipe.....feet above it. The soil-pipe to have.....inch Y branches to receive the traps of the water-closets on each floor; and.....inch Y branches for other fixtures as shown on plans

Connect with the above described Y branches inch iron pipe for iron water-closet traps; short lengths of four-inch lead pipe for earthenware water-closet traps, and short lengths of inch lead pipe for other fixtures.

Waste-Pipes.

Provide and set, with proper connections for each basin, bath, sink, urinal, wash tub, or tier of same, where shown on plans, inch extra heavy cast iron waste-pipe, connecting with the house drain, and terminating above the roof in the same manner as soil-pipe; said waste-pipe to be not less than inches in diameter from below the roof upward. The waste-pipe to have... inch Y branches on each floor; and each of the fixtures, shown on plans, to be connected with said vent-pipe by short lengths of inch lead pipe, with inch traps, as specified in detail under fixtures.

All branch soil and waste-pipes must have fall of not less than $\frac{1}{4}$ inch per foot.

Vent-Pipes for Water-Closet Traps.

Set for all water-closets and as shown on plans inch extra heavy cast-iron vent-pipe, connecting by branch lead pipes inches in

MONMOUTH COUNTY—Continued.

diameter, with the crown of each water-closet trap, and inches in diameter for traps. Extend the main vent-pipe above the roof separately, as specified for soil-pipe, four inches in diameter from the roof upward, or connect with soil-pipe above the highest fixture as shown on approved plans.

Said vent-pipe to have inch T branch on floor.

Vent-Pipes for Other Traps.

Set for traps of all other fixtures, as shown on plans, inch extra heavy cast-iron vent-pipe, connected by a branch lead pipe inches in diameter, with the crown of each trap. Extend the main vent pipe above the roof separately, as specified for soil-pipes; said pipe to be enlarged to four inches in diameter from the roof upward, or connect with waste-pipe above the highest fixture as shown on approved plans.

Said vent-pipe to have inch T branch on floor.

There will be soil, waste and vent-pipes extended above the roof of building.

The arrangements of all pipes throughout the building will be as direct as possible, and all unnecessary offsets must be avoided.

All vent-pipes will be graded so as to discharge water collected by condensation, and connected at the bottom with the drain, soil or waste-pipe, as shown on plans, and in such manner as to avoid obstructions from accumulated rust. The bowing of vent-pipes must be avoided.

Whenever practicable, all pipes and traps will be left so that they may at all times be readily examined and repaired. Where they are necessarily placed in partitions or recesses in walls, they will be covered with face boards which will be fastened with screws, so as to be readily removed.

No caps, cowls or bends will be affixed to the tops of such pipes, but the opening of each will be protected by a strong wire basket securely fastened thereto.

All pipes above an extension roof will be extended above the roof of the main building when otherwise they would open within twenty feet of the windows of the main building or of an adjoining building.

The joints between all pipes and the roof will be made water-tight by heavy sheet lead flashings or.....

Roof Drainage.

The will provide leader outside the house, of galvanized sheet-iron inches in diameter; and the plumber will connect same with the house drain by a inch extra heavy cast-iron pipe, extending feet above level and a inch extra heavy cast-iron running trap so placed beneath the ground or inside the cellar wall as to prevent freezing.

The will provide leader inside the house, of extra heavy cast-iron, to be trapped at the base, if it opens near a ventilating shaft or window, and the plumber will make the joint between said leader and the roof by means of a brass ferrule and lead or copper tube properly connected.

When there is no sewer connection the will connect the leader above specified by inch with the street gutter or

MONMOUTH COUNTY—Continued.

Refrigerator Waste-Pipes.

The waste-pipe from refrigerators to be so arranged as to discharge over a properly trapped sink supplied with water from street main.

In no case will a refrigerator waste-pipe be connected directly with the house-drain or sewer.

TRAPS.

Trap every water-closet, urinal, sink, basin, bath and every wash-tub or set of tubs, and all other sewer-connected fixtures effectively in the manner shown on the plans; the traps to be as near the fixtures as practicable. The traps will be so arranged that in no instance will the waste from a fixture pass through more than one trap before entering the house-drain.

All traps will be of the same weight and thickness as their corresponding branches. They will be well supported and set true with respect to their water levels.

Special precaution must be taken to secure perfect joints between water-closet traps placed above the floor and the branch soil and vent-pipes for same. Cast-iron traps must have lead-calked joints.

Proper floor-plates must be used with earthenware water-closet traps and the joints made permanently secure and gas-tight by means of bolts and red lead, or.....

The vent-pipe connections for earthenware traps will be made permanently gas-tight by.....

WATER-CLOSET CISTERNS.

The..... will put up, over each water closet a cistern X X; and the plumber will connect the same with the supply-pipes by inch..... lead pipe, and with closet bowl by..... inch lead pipe arranged for the proper flushing of the closet, and leave the whole in complete working order with the necessary chain and pull or.....

In no case will a water-closet be flushed directly from the supply-pipes; and the water from cisterns which supply water-closets directly will be used for no other purpose. Where water does not rise to water-closet cisterns they will be supplied from a house-tank, or pumps will be provided to properly supply the same; said pumps to be so placed, arranged and connected as to enable tenants using the water-closets to conveniently secure at all times a proper flush for each of said water-closets.

Discharge the overflow pipe from each water closet cistern into the bowl of the water-closet. In no case will it discharge into the soil or waste-pipe or into the drain or sewer.

HOUSE-SUPPLY TANK.

.....

PUMPS.

.....

MONMOUTH COUNTY—Continued.

NUMBER, LOCATION AND DISCRPTION OF FIXTURES.

Supply and set up in complete working order the following fixtures of the pattern and kind hereinafter described; the exit pipes of all fixtures except water-closets to be provided with strong metallic strainers:

	Yard.	Base-ment.	1st Floor.	2d Floor.	3d Floor.	4th Floor.	5th Floor.
Water-Closets.....							
Wash Basins.....							
Bath Tubs.....							
Wash Tubs.....							
Sinks.....							
Refrigerators.....							
Boilers.....							
Ranges.....							

WATER-SUPPLY PIPES.

The plumber will grade each line of supply-pipe so that it can be completely emptied at its lowest point.

Water-pipes in exposed places will be packed by the.....with mineral wool, or other substance equally good, to prevent freezing, and will be properly boxed and cased to the satisfaction of the board of health.

The..... will excavate for and the.....will cause to be inserted.....inch tap in street main.

The plumber will connect tap and house-supply at point indicated on the plans byinch.....pipe, to weigh.....per foot, to be laid.....feet below curb level.

Also place a stop-cock at.....to shut off the water when necessary.

Also place a stop and waste-cock on main supply-pipe in cellar at lowest point.

Description of quality, diameter and weight of supply-pipes to fixtures:

GAS FITTINGS.

MONMOUTH COUNTY—Continued.

ELECTRIC-LIGHT FITTINGS.

(Signature of owner).....
 (" " architect).....
 (" " plumber).....

Date.....

Inspection of the work herein described was made as follows:

For convenience in referring to the plans and descriptions which are on file in the health office, the following index and record are employed:

INDEX.

American street.	A	Page. 102
Benson street.	B	109
.....street.		

Date When Filed.	Plan No.	Street No.	Owner of Premises.	Name of Plumber.	Remarks.

D. C. BOWEN,
Clerk.

BOROUGH OF ATLANTIC HIGHLANDS.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George D. Fay, M.D., William T. Franklin, Thomas H. Mickens, Edgar H. Cook, Thomas J. Emery, William P. Irwin; Frederick Roberts, Health Inspector. Post-office address of all, Atlantic Highlands.

MONMOUTH COUNTY—Continued.

Southerly shore Sandy Hook bay. Population 1,715.

Drainage good.

Artesian wells. Probably one hundred surface wells are still in use.

Every house is required to be connected with sewer.

The inspector personally visits each house and inspects.

Garbage collected by a licensed carrier and dumped outside borough limits.

About the only matters attended to by the board has been the enforcement of the ordinances.

E. H. COOK,
Secretary.

ATLANTIC TOWNSHIP.

The town committee of Atlantic township have not organized as a health board.

LEVI SCOBAY,
Assessor.

BOROUGH OF BELMAR.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. C. H. Thompson, President; Dr. F. V. Thompson; F. P. Philbrick, Recorder of Vital Statistics; Samuel L. Gillin, Joab Titus; James B. Housel, Health Inspector; Neil H. Miller, Clerk. Post-office address of all, Belmar.

Located on the Atlantic coast, between Avon and Como; is a summer resort. Summer population has not, to my knowledge, been estimated. Winter population about 500 to 600.

Our borough is divided by a lake. All that portion of the borough north of the lake has public sewers, which has an outlet in the Atlantic ocean. The other portion of borough has cesspools and vaults.

We have no public water-supply. The question of a public water system is being considered by the borough authorities. Driven wells are used; some are artesian, but a majority of the wells are surface

MONMOUTH COUNTY—Continued.

wells. A number of people residing near the north bank of Shark river use the water from springs along the bank of the river. The water is suspicious, and at the last regular meeting of the board the sanitary committee was instructed to have an analysis made of the water from these springs.

The streets which are used most are in as good condition as the funds raised will warrant. They are mostly clay-gravel and are kept sprinkled and clean. The borough authorities are also considering the matter of street improvements.

Garbage is removed by contract and taken about two miles west of the borough. Accumulations from privy-vaults and cesspools are removed by scavengers and are taken outside of borough limits. They are required to secure a permit from the board for each job.

We have a code which embraces all our health laws at present.

Collection of vital statistics is looked after by our recorder of vital statistics.

The present board was created by an ordinance of the borough council, passed October 16th, 1894, and which legislated the members of the old board out of office. The members as above were appointed by the borough council. The new board organized on November 10th, 1894. A committee was appointed at this meeting to prepare a sanitary code, which, after going through its several readings, was finally adopted February 14th, 1895, and published in the local paper, the *Coast Echo*, for the time required by law. The board also issued the code in pamphlet form.

After publishing the code as required by law the board was in a position to enforce it about the last of March, and have since that time been using every effort to secure its enforcement and to secure the best results possible for the good of the town from a sanitary standpoint.

Several fines have been imposed upon parties for violations of the code.

All complaints are properly investigated and the nuisances removed.

MONMOUTH COUNTY—*Continued.*

SPECIAL INQUIRIES FOR 1895.

All cases of communicable diseases have been reported as far as we know.

Our board furnishes blanks to physicians.

A record is kept of all cases reported.

A weekly statement has been sent to State Board whenever they are reported to this board.

No gratuitous vaccination has been offered to the public by this board. I believe most of the population have been vaccinated.

A house-to-house inspection has just been ordered by the board.

James B. Housel, health inspector, receives \$75 per year; Neil H. Miller, clerk, receives \$25 per year.

Three hundred dollars was apportioned by the borough council for the use of the board of health.

NEIL H. MILLER,
Clerk.

BRADLEY BEACH BOROUGH.

No report received.

EATONTOWN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Elwood Snyder, Eatontown; Bloomfield Cook, Eatontown; George Gibbs, West Long Branch; Chas O. McFaddin, Oceanport; E. W. Crater, M.D., Health Inspector, Oceanport.

We have been seriously annoyed for many years by the practice of many people in carting, or permitting to be carted, to their premises in this township all sorts of refuse—swill, night soil, cesspool cleanings, decaying vegetables, fish, butcher's offal, &c., from Ocean township. Most of this material is from the incorporated city of Long Branch. We are each year put to great trouble and considerable expense. By the end of the "season" we get things in good shape, only to have the same trouble again next "season" with the same parties.

MONMOUTH COUNTY—*Continued.*

SPECIAL INQUIRIES FOR 1895.

1. No.

2. No.

3. No.

4. No.

5. No. Probably 90 per cent.

6. No.

7. At present the water-supply is very deficient, and to that I attribute the great prevalence of malarial diseases, although I know of no enteric fevers.

8. None.

9. Fifty dollars.

E. W. CRATER, M.D.,
Health Officer.

TOWN OF FREEHOLD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Bowden, President; Jacob O. Burt, Secretary and Inspector; O. R. Freeman, M.D., W. S. Combs, M.D., Theodore Fields, Chas. L. Shepherd, Henry C. Thorn. Post-office address of all, Freehold.

Public water-supply from artesian wells. About one-half of the people are using water from open wells.

The town is sewerred and we think the system a good one.

Dwellings are mostly occupied by their owners.

Garbage is collected by individuals for use. Cesspools cleaned by odorless excavators.

There is one slaughter-house in town.

One shirt manufactory, employing about 450 hands; one foundry, employing about 35 hands; one file factory, employing about 25 hands.

The board has had three meetings during the year, attended to all complaints and all other business that came before them. Thirty-eight permits to attach to the sewer.

MONMOUTH COUNTY—Continued.

FREEHOLD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Andrew J. Buck, President; C. D. B. Forman, Millard F. Conover; Joseph W. Errickson, Assessor; Rulif V. Lawrence, Secretary; O. R. Freeman, M.D., Health Inspector. Post-office address of all, Freehold.

But two complaints have been made to our board during the past year; one relative to the filthy condition of a hog-pen in the vicinity of the town of Freehold, and the other of foul matter left in a house in the neighborhood known as the Peach Orchard. Prompt measures were at once taken by the inspector to abate the same, with effectual results.

The inspector reports no epidemic diseases. The general health of the township has been excellent.

The sanitary condition of the school buildings is good.

The vital statistics are collected by the town clerk.

RULIF V. LAWRENCE,
Secretary.

HOLMDEL TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Theodore R. Thorne, Chairman; Aaron Longstreet, Assessor and Secretary; Wesley Mason, Jacob O. Lambertson; Dr. H. G. Cook, Inspector.

HOWELL TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Benjamin M. Cooper, Lakewood; Robert H. Morris, Turkey; Charles Donahay, Turkey; James H. Batcher, Ardena; Van M. Disbrow, M.D., Health Inspector.

The board of health of Howell township is in good working order. Have met several times during the summer and adjusted several complaints that have been brought before us. Our township is a farming community, with no large towns; therefore not so much for a board

MONMOUTH COUNTY—Continued.

of health to look after. Our inspector is diligent in his duties, often correcting matters of importance in different localities where his practice calls him. We have stated meetings, of which record is kept, and are at all times ready to meet at the call of the chairman. The general health of our township is good, not many deaths except those of the aged ones. Our school-houses are kept in good sanitary condition and ventilation is carefully looked after.

JAMES H. BATCHER,
Secretary.

TOWN OF KEYPORT.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William B. Bedle, Chairman; J. Frank Mason, William Con Smith, Timothy Mount, Augustus Maurer, Dr. E. B. Reed; James M. Walling, Health Inspector. Post-office address of all, Keyport.

CITY OF LONG BRANCH.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William J. Smyth, Jr., President; E. B. Blaisdell, Clerk; Theodore Howland, Paul F. Brazo, C. V. N. Wilson, J. P. Pemberton, M.D., G. H. Baker, M.D.; Benjamin S. Van Huel, Health Inspector. Post-office address of all, Long Branch.

A portion of the town is supplied with water from the public works. More than three-quarters of the population use wells.

We do not have a house-to-house inspection.

Garbage is carted out of the town by licensed scavengers in water-tight boxes.

Vital statistics are collected by the clerk of the board of health.

Five hundred dollars are expended for sanitary purposes.

The board of health met weekly during the summer. All complaints were disposed of promptly.

The general health of Long Branch has been very good. A few cases of diphtheria appeared during the past summer, two or three proving fatal. One case of small-pox (a colored man) appeared at

MONMOUTH COUNTY—*Continued.*

the hospital early in July. This board was notified at once, and the case was removed to the Eatontown isolation hospital within twenty-four hours. Every precaution was taken to prevent the spread of the disease. The man died.

Our public water-supply is good.

The sewer system is fairly good. Some improvements that have been suggested by this board will be made.

The milk-supply is good, the most of it coming from near-by farms.

Our streets are in excellent condition. We have about two miles of asphalt pavement.

E. B. BLAISDELL,
Clerk.

MANALAPAN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Wm. H. Reid, Chairman, Tennent; Daniel S. Aumack, Englishtown; Edward Hendrickson, Manalapan; A. T. Applegate, Physician, Englishtown; S. C. Bown, Assessor, Tennent.

BOROUGH OF MANASQUAN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. A. Higgins, M.D., R. W. Herbert, M.D., D. H. Ammerman, W. C. Bray, Wm. Bowen; Samuel Garrison, Health Inspector. Post-office address of all, Manasquan.

Board inactive.

E. P. LONGSTREET,
Borough Clerk.

BOROUGH OF MATAWAN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Isaac F. Rue, William Hardwick, Dr. A. J. Jackson, Edwin Lambert, Isaac W. Bedle, William Rodgers; J. William Maggs, Health Inspector. Post-office address of all, Matawan.

MONMOUTH COUNTY—*Continued.*

They have looked after and preserved the healthy condition of the borough.

W. M. RODGERS,
Secretary.

MATAWAN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John E. Kuhns, Jr., Cliftwood; Isaac T. Rue, Matawan; Patrick J. Devlin, Matawan; Charles A. Geran, Matawan; William Rogers, Clerk, Matawan; Dr. C. Knecht, Health Inspector.

Our township health board and inspector have been very watchful as to the sanitary condition of the township. There have been no epidemics nor contagious diseases. Everything is in a very healthful condition, for our board is very careful in looking after and causing to be abated all nuisances.

MARLBORO TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

P. C. Vanderveer, Wickatunk; David A. Baird, Marlboro; Alfred Hardy, Morganville; Dr. J. D. Ely, Marlboro; William Carson, Holmdel.

MIDDLETOWN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George F. Bartleson, Atlantic Highlands; Harry H. Hendrickson, M.D., Health Inspector, Atlantic Highlands; Jacob Swan, Atlantic Highlands; James Bray, Jr., Lincroft; George Brannin, Secretary, Atlantic Highlands.

Middletown township is located in the eastern part of Monmouth county. The population, exclusive of the borough of Atlantic Highlands, is about 6,600.

MONMOUTH COUNTY—*Continued.*

Water-supply is from individual wells and springs.
Localities in which nuisances are likely to be found are visited at short intervals by members of the board of health.

No slaughter-houses in the township.

Our schools are kept in excellent sanitary condition.

There have been no contagious diseases reported to the board of health this year.

All complaints are promptly investigated by the full board and nuisances are abated.

All sanitary expenses are paid by the township.

GEORGE BRANNIN,
Secretary.

MILLSTONE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Curtis B. Forman, Chairman, Smithburg; Wm. Parker, Smithburg; Aaron L. Eldridge, Clarksburg; Geo. J. Ely, Assessor and Secretary, Perrineville; W. T. MacMillan, M.D., Health Inspector, Perrineville.

Drainage of this township is good.

We have no swamps and no malaria.

We have no sewer system.

Houses are constructed with cellars, none have basements.

We have no yearly house inspection.

No prevailing diseases.

Slaughter-houses in good condition.

NEPTUNE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Harvey B. Johnson, President; Thomas T. Gravatt, Jonathan T. Applegate; Dr. Alexander Williamson, Township Physician; Samuel A. Clines, Clerk. Post-office address of all, Asbury Park.

MONMOUTH COUNTY—*Continued.*

BOROUGH OF NORTH SPRING LAKE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Middleton, President, Spring Lake Beach; George Height, Secretary, Spring Lake Beach; James E. Reed, Spring Lake Beach; Charles R. Brahn, Lake Como.

Location on high ground at the seaside. Population in winter about two hundred; in summer will average about one thousand. Climate mild.

Surface undulating enough to give good drainage.

We are introducing a new supply of water from an artesian well 675 feet deep. This water is good; has a slight trace of iron. The majority of residents are yet using surface well water. The houses are generally far apart, and little danger as yet from contamination of wells.

We have sewers in about one-half the streets, and these are doing good service. The sewage is discharged 600 feet out in the ocean. Nearly all the houses on the line of sewer are connected with it. Where there is no sewer we use cesspools and vaults.

The houses are nearly all owned by the occupants and kept in good order.

Garbage is collected every day and taken outside of borough.

We have a code of health ordinances, with penalties.

Vital statistics are regularly collected and forwarded to State Board.

Contagious diseases are quarantined.

Our sanitary expenses for the last year have been \$200.

We have had no special diseases this year, except two cases of diphtheria last October. Both cases were fatal. The premises were thoroughly fumigated and the disease stamped out.

JOHN MIDDLETON,
President.

OCEAN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

H. B. Sherman, President, Long Branch City; James W. Conover, Oakhurst; L. G. Irwin, Sea Bright; Scudder J. Woolley, M.D., Health Inspector.

MONMOUTH COUNTY—Continued.

Having just been appointed inspector and township physician, about a month ago, I have little to report this year. Since I have commenced to carry out my duties as inspector, I have looked into the cause of the many cases of typhoid fever which prevailed last fall at Monmouth Beach, and have had an analysis made of the drinking water in that vicinity and found it to be unfit for domestic use. At a meeting of the township board I reported to that effect, and they issued a circular to the people of that vicinity, recommending to them to have driven wells placed on their property or to take their water-supply from the city of Long Branch.

I have also found pig-pens in bad condition, and have caused the owners to have them cleaned.

The above is all the work that has been done so far.

SCUDDER J. WOOLLEY, M.D.,
Health Inspector.

OCEAN GROVE.

NAME AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Rev. E. H. Stokes, D.D., President, Ocean Grove; Rev. A. E. Ballard, Sea Isle City; Rev. J. R. Daniels, Ocean Grove; D. H. Brown, Brooklyn, N. Y.; Hon. Jas. L. Hays, Newark; Hon. Holmes W. Murphy, Freehold; J. H. Alday, M.D., Sanitary Officer, Ocean Grove.

The Ocean Grove board of health is continually on the alert as to the sanitary condition of the town. This implies and embraces the inspection of the homes of the people and instruction of the inmates in all matters which appertain to good health and security against disease. We are making special efforts to secure connection of all premises with our sewer and water systems. We have now an extensive new electric and water plant, which greatly enlarges the capacity of our water-supply, so that we will have an excess of water over the demand. Since our last annual report there have been made—sewer connections 29, water connections 31; making a total of sewer connections 1,100, water connections 1,157.

During the past summer season, notwithstanding the great crowds, the health of the community was very good; it is now remarkably so.

MONMOUTH COUNTY—Continued.

Our board of health keeps constant and diligent supervision of all matters which relate to and are embraced in proper sanitation, thereby securing the same in the highest degree to the town and its inhabitants as far as possible.

J. H. ALDAY, M.D.,
Sanitary Officer.

RARITAN TOWNSHIP.

In the township of Raritan there has been no epidemic of any kind and no complaints have come before the board.

A. F. BEDLE,
Assessor.

TOWN OF RED BANK.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Sheehan, James Walsh; Samuel Sabath, Secretary; Charles D. Warner, President; Henry J. Child; Frank P. Stryker, Health Inspector. Post-office address of all, Red Bank.

Red Bank is located on the south bank of the Navesink river, in the township of Shrewsbury, in the county of Monmouth. Population of about 5,050. Climate mild.

Soil naturally sandy on surface, with underlying layers of clay and gravel varying from four to six feet; below that, marl. The town is built upon a ridge which slopes toward the north and toward the south, thus affording excellent surface drainage in nearly every portion of the incorporated district.

Water-supply consists of several artesian wells on west with a reservoir several feet above the town on the hill on the east side. About one-half the inhabitants use surface wells.

The premises using the town water are piped and trapped, carrying the waste to cesspools.

MONMOUTH COUNTY—*Continued.*

Streets are graded and graveled. Stone sidewalks in nearly every street in town have been laid this year by order of the commissioners.

The dwellings are located away from the business part of town, most of them being occupied by one family. Very few houses have more than three families. All buildings are inspected once a year and oftener when the attention of the board is called to any particular defect.

Garbage is collected by a man employed by the board, who gathers the same about three times a week and carts it out of town. All persons employed in the occupation of cleaning cesspools and closets are licensed, and the owner during the summer months who needs their services has first to obtain a permit, under a penalty against both the owner and employe for neglect. The cleanings are sold by the parties to farmers out of town. The work is done with pumps, tight barrels and a furnace.

We have three school-houses. Two complete, with all modern improvements for heat and ventilation, the third now being erected, to be finished in the same way; all brick.

Immediately on being notified of the existence of any contagious disease the patient is removed, if possible, to the hospital; if not, the premises are guarded night and day and no one allowed to enter or leave the premises. Afterward the premises are disinfected. Vaccination is generally attended to without trouble; those who cannot afford to pay for the same are provided for by town.

During the past year we have expended \$250 allowed by the town and license fees from cesspool cleaning.

The board has met regularly every second week, listened to complaints of citizens and report of the inspector and abated any nuisance brought to our notice. The work this year has been comparatively easy, the citizens assisting all in their power to further the work of cleaning and improving the town.

By a vote of the people a resolution to sewer the town was carried and the system will be commenced this winter.

SAM'LE SABATH,
Secretary.

MONMOUTH COUNTY—*Continued.*

SHREWSBURY TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

W. Tabor Parker, Little Silver; Charles B. Parsons, Red Bank; Borden Hance, Red Bank; W. S. Whitmore, M.D., Oceanic; Thomas P. Brown, Assessor, Red Bank; A. C. Harrison, Clerk, Red Bank; William Smith, Health Inspector, Fair Haven.

Northeastern part of Monmouth county; long and narrow, extending south half-way across the county. It has a population of 9,764. Climate mild. Post-offices are Oceanic, Fair Haven, Little Silver, Red Bank, Shrewsbury and Tinton Falls.

The whole township depends on wells for water-supply, except town of Red Bank, and the residents on the road leading from there to Seabright, a distance of about six miles, have their own water works.

The six miles above mentioned have all the modern improvements in the shape of drainage and plumbing.

In this locality the roads are cared for by the citizens residing there and are in fine condition. The rest of the township is cared for by the public road overseers.

Hogs have been dying in large numbers during the past two months of hog cholera.

We have seven school-houses.

No police station or jails or other public buildings.

The board takes charge as soon as contagious diseases are reported and guards houses and premises, or, in cases of small-pox, removes to Red Bank hospital. Vaccination is attended to in all cases.

The township has been inspected and all complaints attended to.

THOMAS P. BROWN,
Assessor.

BOROUGH OF SPRING LAKE.

No report received.

MONMOUTH COUNTY—*Continued.*

UPPER FREEHOLD TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William Kirby, President, Cream Ridge; William Quicksell, Assessor, Horners-town; C. C. Wyckoff, Allentown; E. A. Hyers, Red Valley; F. C. Price, M.D., Secretary, Imlaystown.

Our board has held two meetings this year—August 3d and October 12th.

In submitting our annual report, we can say that the first quarter of this year was healthful. Early in the second quarter an epidemic of influenza appeared. Rheumatic and neuralgic complications were quite frequent, while lung troubles occurred less frequently than in former visitations of this malady.

July, August and September were notable months for the prevalence of gastro-enteric troubles. Aside from a number of cholera infantum cases, epidemic colitis, sometimes developing into severe dysentery, being the most frequent form, resulting, however, in only a few deaths. The unusually hot, dry weather from July to October has no doubt been a prominent factor in the cause of the above troubles. One case of scarlatina developed in a boy of thirteen years while on his vacation here from New York City, commencing July 18th. Two younger children belonged to this family, but because of thorough precautionary measures did not take the disease. Isolation, antiseptic ointments, applied early and continuously until desquamation ceased, and lastly an antiseptic general shampoo, together with disinfection of clothing, room and contents were means observed.

A few cases of typhoid fever are reported occurring since August.

A disease among swine, beginning in June and continuing with unabated energy to this time, has taken the attention of our board of health more than other matters. Two veterinary surgeons have been called here, who pronounced the disease hog cholera. They held no post-mortems, but visited all farms where the disease was and saw a large number of sick pigs and hogs. Medicines of various kinds and quantities have been thoroughly tried with the universal conclusion that they are useless in this disease.

There were two foci of development, one about a mile out on the

MONMOUTH COUNTY—*Continued.*

Prosperstown road from Imlaystown, occurring in June. From there it spread first southwest about three-quarters of a mile down a creek which runs through a meadow where the first sick hogs were kept after being taken sick; thence north to adjoining farms, and so from one farm to another, yet the first farm on the west escaped until this month, October. The farm on the east of where it first occurred developed the disease about five weeks later, on July 10th, and from thence the farms one after another were visited by the disease, extending to farms both north and south until it has reached Prosperstown, three and a half miles from where it first started. August 1st three sheep died on a farm about one and a half miles north of the nearest point where this disease was raging, that were left unburied in a field where a herd of over fifty hogs and pigs were. Buzzards soon came and fed upon the sheep, and in four or five days this herd of swine broke out with the disease, most all of which have died. In this vicinity the dead swine have been buried, excepting one hog, so far as our board could learn, but the buzzards often found the dead animals first, although the owners have looked them up from two to three times daily, as a rule.

The second focus of infection occurred close to the Burlington county line. In which county it occurred first I am not certain. The soil in most of this section where the disease has been is dry, red shale or clay loam.

Dogs have killed a large number of ground-hogs, which have been left in the fields until buzzards have eaten them up. On several farms where the fields were occupied by hogs, outbreaks of this disease have occurred in about a week after buzzards have been seen in the fields, and I have no doubt have taken the disease in fields over which buzzards fly frequently.

Dogs have been seen with a bone from a pig, taken no doubt from one dying of the disease and buried too shallow on a neighbor's farm, and in a few days—four to seven days—the disease developed among the swine of the owner of the dog. By further study and inquiry one could most likely find the source of the exposure in most of the herds of swine in which this disease occurred. It is highly important that these outbreaks of so fatal a disease, with its great financial loss to the owners of the animals, should be exhaustively investigated and

MONMOUTH COUNTY—*Continued.*

the best means for controlling the ravages of the pestilence should be found. Some legislative means should be attempted for controlling the disease. Since June, or within about four months, the farmers of this township have lost in the affected district from 25 to 60 per cent. of their hogs and from 70 to 100 per cent. of their pigs. Total deaths of hogs up to date about 225, and of pigs over 1,300. Our local board of health ask the State Board of Health to lay the hog cholera epidemic before the coming Legislature at an early date, praying for the best means of legislative aid that can be rendered.

We wish to say that our school board has made important repairs in the school-houses of the township, and their year's work has been very commendable indeed.

F. C. PRICE, M.D.,
Secretary.

WALL TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George B. Wooley, New Bedford; Frederick B. Craig, Lake Como; Benjamin E. Allgor, New Bedford; George E. Rogers, Clerk, New Bedford; William W. Trout, Health Inspector, Spring Lake.

MORRIS COUNTY.

TOWN OF BOONTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. A. E. Carpenter; Ellis G. Myers, President; George H. Fitzpatrick, Secretary; William Grubb, Inspector; William J. Reynar, Thomas Byard, George Harris, C. F. Hopkins. Post-office address of all, Boonton.

New water-supply completed, but not in general use yet.

Natural drainage, and plumbing fair.

Garbage collected twice a week. Cesspools and out-houses cleaned by licensed scavenger.

MORRIS COUNTY—*Continued.*

No disease among animals.

No slaughter-houses.

The board only holds meetings at the call of the president or inspector. It is taking much interest in the new water-supply, which has not as yet been recommended for domestic consumption.

GEO. H. FITZPATRICK,
Clerk.

BOONTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Horace Ford, Thomas Byard, E. H. Stickle; G. D. Crane, Clerk; Joseph Steventon, Assessor; Dr. Cuthbert Wigg. Post-office address of all, Boonton.

Adjoining Hanover, Rockaway and Montville townships. Inhabitants, 3,970.

Water-supply from wells and streams, except in the town of Boonton.

Good county roads. No public grounds.

Garbage, &c., used on farms as manure.

No disease among animals worth mentioning.

No contagious diseases; no quarantine; no public vaccination.

The township is so small outside the town of Boonton we have not felt called on to do anything.

If we had a case of small-pox or other contagious disease the house would be quarantined or the patient would be sent to the Morris county poor-house, near by.

JOSEPH STEVENTON,
Assessor.

CHATHAM TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles E. Genung, President, Chatham; Henry Young, Secretary, Afton; George W. Genung, Health Inspector, Afton; Hudson Muchmore, Chatham; George M. Swain, Health Physician, Chatham.

MORRIS COUNTY—*Continued.*

There are four cemeteries in the township.

We have adopted the State code and ordinances.

Quarantining rigidly enforced in cases of all contagious diseases.

This board has not taken any action in regard to vaccination.

SPECIAL INQUIRIES FOR 1895.

1. They have, as far as we know.
2. No, not yet.
3. Yes.
4. No reports to make.
5. No.
6. No.
7. Have none.
8. None.
9. No appropriation made.

Our township has been almost free from the usual contagious diseases. All of the known cases have been carefully quarantined. No contagious diseases exist at present.

Our township has enjoyed a singular immunity from the ordinary illness incident to all communities.

During the early part of this month (October) there occurred about fifteen cases of catarrhal jaundice of a mild character. Patients' ages ranged from five years to twenty-five years. The majority ranged from five to eight years.

TOWN OF DOVER.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. S. B. Johnston, President; James Hagan, Inspector; Joseph V. Baker, Secretary; A. J. Titman, William H. Byam. Post-office address of all, Dover.

Replying to "Special Inquiries for 1895" would say that all our physicians are furnished with blank forms for reporting to the board all communicable diseases, of which a record is kept and weekly reports of same are sent to the State Board of Health.

MORRIS COUNTY—*Continued.*

Gratuitous vaccination has not been offered to the public by our board, and it would be difficult to say the proportion of population vaccinated within the past five years.

We make a yearly house-to-house inspection, but keep no record of the same, except where we find defects.

Our water-supply has for some time been bad, and is now improving, as well as diminishing, and that very fast.

The only person regularly employed by our board is our inspector, who receives a salary of \$120 per annum, payable monthly, and he certainly earns his money.

The city makes an appropriation of \$250 to the board for our use annually for a population of 5,000.

JOS. V. BAKER,
Secretary.

HANOVER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. L. Cobb, Treasurer, Parsippany; George Cook, Chairman, Hanover; Robert McEwen, Whippany; Dr. E. P. Cooper, Parsippany; Joseph H. Bastedo, Assessor, Bconton; Walter M. Shipman, Whippany.

JEFFERSON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Patrick S. Delaney, Chairman, Woodport; Charles Jennings, Milton; Horace Pulis, Milton; A. J. Fretz, Township Clerk, Milton; Dr. H. W. Kice, Health Inspector, Port Oram; Charles Chamberlain, Secretary, Woodport.

On April 12th we met to hear complaints or any other business that might come before the board.

There was but one complaint made, as follows:

To the Board of Health of the Township of Jefferson:

The undersigned, residents of the Township of Jefferson, do petition your honorable board in the matter of retaining a sufficient supply of water in Lake Hopatcong for the preservation of the public health.

MORRIS COUNTY—*Continued.*

For successive years past the Morris Canal Company have drawn off the water to such an extent as to expose mud and vegetation, resulting in sickness, as well as being detrimental to the health of the public.

We request that you confer with the said company looking to some agreement whereby a sufficient quantity of water may be maintained at all times, and more especially during the summer months, to guarantee freedom from what may lead to a dangerous epidemic.

This petition, as presented, was signed by fifty residents. It was received by the board, and the following resolution was adopted:

Resolved, That the secretary of the board be instructed to communicate with the Secretary of the State Board of Health, setting forth the grievances mentioned in the petition, and asking for information and assistance in the manner of procedure in bringing the matter before the canal company.

So far there has been nothing done to prevent drawing off the water. There is no water in nearly half a mile of the upper end of the lake now.

In general the health has been good. No contagious disease, but here in Woodport chills and malarial fever have been very bad.

CHARLES CHAMBERLAIN,
Secretary.

BOROUGH OF MADISON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Calvin Anderson, M.D., President; Charles E. Cook, Secretary; Dr. I. R. Van DeWater, Treasurer; Samuel Brant, John McTernan; Frederick Burnett, Health-Inspector. Post-office address of all, Madison.

The town of Madison is located in southeast corner of Morris county, and has a population of 3,250, as per census of a few months since.

Madison, lying high, has naturally a very fine drainage, and there is no land which is reached by freshets.

The water-supply is furnished by a large dug well, about thirty feet in diameter and thirty feet deep, and has furnished to takers this summer 200,000 gallons of water daily. There are about thirty-five surface wells still used in the borough, and perhaps seventy-five cis-

MORRIS COUNTY—*Continued.*

terns for drinking purposes, all of which are watched and kept in good condition.

Houses in the town are in a good condition in respect to cleanliness, and, with the exception of two or three which are fearfully overcrowded, are in capital condition.

We have undertaken this year to educate our people to the necessity of having the garbage removed at least twice a week, and have succeeded very satisfactorily. As regards cleaning of cesspools, &c., we order them cleaned whenever necessary, which work is done by a licensed scavenger.

There are two cemeteries, the keepers conforming to all laws pertaining to public health.

It is somewhat difficult to get physicians to report births promptly, and therefore I am unable to make monthly reports, as required by the State Board. I believe all of our physicians report all births, &c., only they are sometimes negligent.

We quarantine all cases of contagious diseases, except in houses where we are satisfied that the families interested are careful.

The board has just been presented with a bill for damages caused by burning sulphur candles in a clothing store after diphtheria, \$167; otherwise our expenses will not reach over \$200 for this year, and never before have exceeded \$150, half of which is horse hire.

The health of the town has been remarkable, no contagion having spread.

We have had a few cases of diphtheria in mild form, all of which have been stamped out, and at the present writing there is not a case of contagion in the whole town.

If the local board of health could regulate the dealers of milk, all of whom come from outside the boundaries of the borough, it would be much better for us.

There is a small center of our town which is suffering very much for proper sewerage. Cesspools fill up with surface water, and it is very hard to make them answer the purpose intended. There is a stream running through the town which has been used to some extent, but, being uncovered, it is objectionable, and has caused some

MORRIS COUNTY—Continued.

comment, and the board have been accused of being unfair, but we have a difficult position to fill at best, and do what we think best for all.

Our board has given considerable attention to the health of the town this last year, and think we see proof that it pays.

C. C. COOK,
Secretary.

MENDHAM TOWNSHIP.

No report received.

MONTVILLE TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John H. Capstick, Montville; Walter A. Young, Boonton; Frederick Van Duyne, Glen View; J. W. Van Duyne, Assessor, Pine Brook.

There has been no meeting within the year.

J. W. VAN DUYNÉ,
Assessor.

MORRISTOWN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Mr. Roseure, Chairman; Thomas Martin, Secretary; Charles Macolm, Isaac G. Arnold, William S. King; R. S. Van Dyke, Health Inspector. Post-office address of all, Morristown.

We have 10,000 inhabitants.

The aqueduct water-supply from springs is plentiful and good.

Streets are of good width and in good condition, with few exceptions, and they are being improved.

No general house-to-house inspection. We have inspected some of the worst tenements and caused cleansing by landlords and agents.

The inspector does not receive pay enough to devote all his time to the work.

MORRIS COUNTY—Continued.

Garbage is burned or carted out of the city and buried, and in some cases it is mixed with ashes. We are educating the people to keep it separate. Cesspools are cleansed by odorless excavators and contents taken out of the city.

Our board is governed by a code of ordinances.

Cases of contagious and infectious diseases are taken to Memorial Hospital, except those which can be isolated. We have nine cases in hospital now and seven quarantined cases.

Less than \$1,000 was appropriated for the uses of the board during past year.

There are no noticeable improvements, but the city is at the present time in a better condition than in the past in regard to cleanliness. Some of our principal streets have been macadamized, and are much cleaner than heretofore. Some good work has been done, but there is still room for improvement. Plumbing ordinances should be passed and house-to-house inspection insisted on.

R. S. VAN DYKE,
Health Inspector.

MORRIS TOWNSHIP.

No report received.

BOROUGH OF MOUNT ARLINGTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John L. Taylor, M.D., Chairman; J. B. von Furstenwarthen, F. W. Zuck, R. Chaplin, J. H. Lowe; C. F. Cook, Clerk. Post-office address of all, Mount Arlington.

All cesspools have been inspected regularly by the board and are in first-class condition.

Streets have been attended to and greatly improved, and in some places they have been curbed.

No house-to-house inspection.

Garbage has been removed daily, out of the borough, from May 1st to October 1st.

MORRIS COUNTY—Continued.

Our one public building, the town hall, containing school-room and jail, is well cared for.

There has been but little disease and only one contagious case, *i. e.*, scarlet fever, which was quarantined.

The board holds meetings monthly when required.

C. F. COOK,
Clerk.

MOUNT OLIVE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESSES OF MEMBERS AND HEALTH INSPECTOR.

Stewart A. McPeak, Chairman, Draketown; Aaron Hulse, Budd Lake; Samuel Bartley, Treasurer, Bartley; C. N. Miller, M.D., Inspector, Flanders; S. H. Bartley, Secretary and Assessor, Bartley.

The collection of vital statistics has been slow. So many physicians do not know the township lines, or, knowing, do not care, so that it sometimes is several months before the certificates get around to the assessor.

No contagious diseases this year. The most prevalent disease has been influenza, although not fatal, except in two or three cases, when it was followed by tuberculosis.

No business of importance has come before the board. Not more than two complaints were made to the inspector, which, upon inspection, were found to be trivial.

S. H. BARTLEY,
Secretary.

BOROUGH OF MOUNT TABOR.

NAMES AND POST-OFFICE ADDRESSES OF MEMBERS AND HEALTH INSPECTOR.

Henry L. Coit, M.D., President; Charles E. Fisher, Secretary; Charles L. Pitts, A. A. Campbell, Samuel Warren, James H. Cox, S. M. Long.

In submitting their third annual report the local board of health of Mount Tabor beg to call your attention to the fact that this board is now elected by the governing body of the place, according to law,

MORRIS COUNTY—Continued.

and consists of residents and property-owners of Mount Tabor. Three members are elected to serve three years, two to serve two years, and two to serve one year.

Semi-monthly meetings have been held during the season which extends from June 1st to October 1st.

Periodical inspections have been made into the food and water-supplies, and also a proper supervision has been kept over the system now in use for the disposal of waste from dwellings.

The usual recommendations for the changes necessary to make public dwellings conform to the regulations of the board have been presented to the authorities from time to time.

The ordinances with reference to street-cleaning and the removal of garbage have been enforced with more thoroughness than in former years.

An ordinance has been passed during the summer requiring the removal of all water-closets found to be in an unsanitary condition and their replacement by suitable ones before the beginning of another season.

The plumbing ordinances have been for the first time enforced during the present season. A drawn plan, with specifications signed by the owner, has been filed with this board before consent to alterations or new construction has been given. Five such plans have been approved and two have been condemned.

The board has made a veterinary inspection of the milk herds in the vicinity of Tabor, and has obtained a signed contract from all dairymen selling milk within the jurisdiction. The meat and vegetable-supply has been exceptionally good, competition in the latter case having its usual good effect on the quality of the material offered for sale.

The amount of sickness is diminishing from year to year under the sanitary regulations, the number of cases requiring a physician's attention being only one-half what were found prior to the organization of this board.

There have not occurred thus far any cases of continued fever or of contagion, although some vigilance has been necessary on account of the close proximity of scarlet fever to our borders. One case of

MORRIS COUNTY—Continued.

diphtheria was held in such close quarantine that no other case developed.

The first complete chemical analysis of the water-supply of Mount Tabor has been made this year. The collections were made on July 15th, and were submitted to Durand Woodman, Ph.D., of New York City. The results of his analyses are as follows:

THE OLD SPRING NEAR FARM-HOUSE.

In 100,000 Parts of Water.

Free Ammonia	0.004	parts	
Albuminoid Ammonia	0.008	"	
Chlorine in Chlorides	0.284	"	= 0.16 grain per gallon.
Organic and Volatile Matter	0.80	"	= 0.45 " "
Dissolved Mineral Salts	5.00	"	= 2.93 " "
Total residue on evaporation, 3.38 grains per gallon.			

THE MEADOW SPRING RESERVOIR.

In 100,000 Parts of Water.

Free Ammonia	0.002	parts.	
Albuminoid Ammonia	0.004	"	
Chlorine in Chlorides	0.284	"	= 0.16 grain per gallon.
Organic and Volatile Matter	1.40	"	= 0.82 " "
Dissolved Mineral Salts	6.30	"	= 3.67 " "
Total residue on evaporation, 4.50 grains per gallon.			

THE NEW WELL (20 feet deep, 15 feet in diameter).

In 100,000 Parts of Water.

Free Ammonia	0.0046	parts.	
Albuminoid Ammonia	0.010	"	
Chlorine in Chlorides	0.568	"	= 0.32 grain per gallon.
Organic and Volatile Matter	1.200	"	= 0.70 " "
Dissolved Mineral Salts	11.80	"	= 6.20 " "
Total residue on evaporation, 6.90 grains per gallon.			

HENRY L. COIT, M.D.,
President.

MORRIS COUNTY—Continued.

PASSAIC TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Veader, Green Village; Jacob Ogden, New Vernon; F. Leo Hendrickson, New Vernon; Samuel Ortman, Stirling.

PEQUANNOCK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Artimus Zeliff, Lincoln Park; Dr. Charles D. V. Romont, Pompton Plains; John De Motte, Pompton Plains; Harvey Hosier, Mountain View; John Cullen, Butler; Robert C. Getty, Assessor, Butler.

The public health in this township has been exceedingly good for the last two years. There has been no contagious disease, and the people are particularly healthy, living one family in a house, as a rule.

ROBERT C. GETTY,
Assessor.

RANDOLPH TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William H. Tonking, Port Oram; Frank O. Hedden, Dover; P. J. H. Bassett, Dover; Dr. John Walters, Inspector, Port Oram; Francis H. Tippet, Clerk, Dover.

Board just organized.

BOROUGH OF ROCKAWAY.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Norris, President; William May, Secretary; George S. Dearborn, Physician; Mahlon Hoagland, Jr., David C. Berry, Samuel A. Cook.

Situated in a southeasterly part of the township of Rockaway. Its population is about 1,350.

Has a foundry and machine shop, a bicycle factory and a factory for the manufacture of ladies' underwear.

MORRIS COUNTY—Continued.

SPECIAL INQUIRIES FOR 1895.

1. They have been.
2. No.
3. Yes; kept by the secretary.
4. No.
5. No.
6. No.
7. No.
8. There are none.
9. Fifty dollars.

WILLIAM MAY,
Secretary.

ROCKAWAY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph H. Brooks, President, Rockaway; Augustus Munson, Hibernia; Charles C. De Hart, Rockaway; William May, Secretary and Assessor, Rockaway; F. W. Flagge, M.D., Rockaway.

SPECIAL INQUIRIES FOR 1895.

1. So far as we know, yes.
2. No.
3. Kept in the minute-book of the secretary.
4. Yes.
5. Yes; 359 children vaccinated by the board in the year.
6. No.
7. No.
8. There are none.
9. No special appropriation made.

ROXBURY TOWNSHIP.

No report received.

MORRIS COUNTY—Continued.

WASHINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Stewart Neighbor, Clerk, German Valley; Jacob W. Welsh, German Valley; F. A. Appgar, Parker; William E. Senth, Schooley's Mountain; Jacob H. Hann, Assessor, Stephensburg; Joseph R. Farrow, M.D., Health Inspector, German Valley.

OCEAN COUNTY.

BOROUGH OF BAYHEAD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

B. F. Hawley, M.D., President; Julius Foster, Secretary; C. R. Priest, W. M. Applegate, B. F. Hance. Post-office address of all, Bayhead.

Bayhead is located at the head of Barnegat bay, on the sandy strip extending along the Atlantic coast. The drainage is into cesspools, which are cleaned every winter and oftener if found necessary.

The water is supplied from two artesian wells, 710 and 840 feet deep. No private wells used, except on the outskirts. Artesian water is used exclusively.

The garbage and contents of the cesspools are taken to the woods and there disposed of.

The principal disturbance we have had has arisen from odorous hog-pens, which nuisance we have not succeeded in abating, though they were made much less objectionable.

There has been one case of a contagious fever reported. The patient recovered, and the disease did not spread.

About half the houses have water-closets, which drain into cesspools. The remainder have earth closets, which are emptied every night.

We are pleased to report ourselves as entirely free from typhoid fever, which gave us some apprehension last season. The one case we had could in no manner be attributed to last-year's sickness. It was

OCEAN COUNTY—Continued.

in a house that was free from disease last year. Neither were there any cases of contagious disease.

We can report the season as one more than usually healthful.

JULIUS FOSTER,
Secretary.

BOROUGH OF BEACH HAVEN.

Population 230.

Natural drainage. Surface water. Borough extends from ocean to bay.

Garbage dumped in bay.

G. S. BUTLER,
Assessor.

BERKLEY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry Williams, Assessor; Thomas Harvey, Clark Jeffrey, C. Lawrence. Post-office address of all, Bayville.

Berkley township is a small township of about one hundred and fifty voters.

Our drainage is perfect and the soil of such a nature that the surface is nearly always dry, and the board of health is hardly ever called upon.

No sickness of any dangerous character has happened for a long while and the inhabitants generally are very healthy.

Our drinking water is very pure and abundant.

CORNELIUS LAWRENCE,
Chairman.

OCEAN COUNTY—Continued.

BRICK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. W. Darsett, Point Pleasant; J. W. J. Osborn, Osbornesville; A. W. Downey, Burrsville; C. C. Pearce, Burrsville; Dr. Whittaker, Point Pleasant.

I can only say that as this township is sandy and the land high, the health in it is generally good. There has been during the past year only three or four cases of contagious disease, diphtheria, and they are all recovered. There are no towns of any size in the township, therefore the board of health have but little to do.

C. C. PEARCE.

DOVER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Adolph Ernst, John Tilton, James I. McKelvey, Thos. B. Irons. Post-office address of all, Toms River.

EAGLESWOOD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John W. Holman, West Creek; John W. Salmons, West Creek; J. Clarence Cranmer, West Creek; Samuel P. Cranmer, Assessor, West Creek; D. B. Palmer, M.D., Health Inspector, Tuckerton.

Surface conditions are generally level with good drainage into nearby streams of water which empty into a large bay.

Water-supply entirely from wells.

Cesspools and outhouse collections are utilized for fertilizing.

No epidemic among animals this year.

Slaughter-house and abattoir are in clean and healthy condition.

Four school-houses, three new ones, and all well ventilated and well kept.

The only thing done of importance has been to declare one outhouse a nuisance and requiring the same to be removed. We have not incurred any expense.

J. CLARENCE CRANMER,
Secretary.

OCEAN COUNTY—Continued.

BOROUGH OF ISLAND HEIGHTS.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. M. F. Middleton, President; William Y. McKaig, Secretary; Morris Hallock, Dr. August Koendoffer, George Migrantz, T. C. Parsons, Henry Wootton; Daniel B. Parker, Health Inspector. Post-office address of all, Island Heights.

Located on the banks of Toms river, with sixty to eighty feet elevation.

Water-supply from wells.

Drainage and plumbing good, with one or two exceptions.

Garbage removed three times a week during the months of July, August and September, and once a week during the other months.

No slaughter-houses.

Sanitary expenses, \$150, or as near that figure as can be given.

The board during the past year has taken charge of the sanitary work and disinfected all the water-closets, passed ordinances, and can say that they have met with a hearty support of all the people.

WM. Y. MCKAIG,
Secretary.

JACKSON TOWNSHIP.

No report received.

LACEY TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

I. C. Van Arsdale, Chairman; A. G. Wilbert, B. F. Holmes; B. F. Mathews, Secretary; Dr. D. W. Blake, Health Inspector. Post-office address of all, Forked River.

Our local board of health is very efficiently organized.

The board holds at least one regular meeting each year, usually in June. Notices giving time and place of meeting are posted, and all persons feeling an interest in the general health of the township are requested to meet with the board.

OCEAN COUNTY—Continued.

A full record is kept in the township health-book.

The people of the township take great interest in the local board, and anything that is likely to prove a nuisance is immediately reported.

People generally take much more interest to abate nuisances themselves without interference of the board.

We believe that all cases of contagious diseases are immediately reported.

This year one family had two cases of scarlet fever. Due caution was taken and the disease was confined to one place.

B. F. MATHEWS,
Secretary.

LAKEWOOD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Sherman, Walter S. Shinn, A. S. Lacrober, H. H. Cate, M.D., Physician; R. B. Robbins, Health Inspector. Post-office address of all, Lakewood.

Population 1,800.

Climate mild.

Sandy soil; no clay. Slightly rolling; no high ground. Drainage good. Surface condition good, but very little low land in the township.

We have a public water-supply. There are about fifty surface wells in use also. Less wells used every year.

Streets, gravel and stone. No public grounds.

Houses, mostly wood, inspected often if any disease occurs.

Lighted by gas, electricity and oil.

Garbage carried off by farmers.

Three public schools; three private schools.

Fire escapes on large hotels, but not sufficient.

Three cemeteries.

Good health regulations; legally adopted.

Sanitary expenses about \$100 this year, including publishing of by-laws.

OCEAN COUNTY—Continued.

No prevalent diseases.

We have had nothing to do except to quarantine three houses for scarlet fever and pass our health by-laws.

 BOROUGH OF LAVALETTE.

No report received.

 LITTLE EGG HARBOR TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph I. Smith, President; C. W. Palmer, Clarence Ireland, Alfred Palmer, Assessor; Theophilus T. Price, M.D., Physician. Post-office address of all, Tuckerton.

We have nothing special to report. No complaints have been made to the board, and no serious epidemic has prevailed during the past year. The long-continued drought has given some inconvenience from failure of water-supply in wells.

 MANCHESTER TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

C. A. Wilbur, Manchester; David Webb, Wheatland; Wm. Montgomery, Manchester; O. C. Johnson, Manchester; Dr. F. Browner, Manchester.

 OCEAN TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William B. Wilkins, President; Charles F. Jones, Elven R. Penn, Inspectors; J. H. Wilkins, Secretary. Post office address of all, Waretown.

OCEAN COUNTY—Continued.

PLUMSTED TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Thomas Hartshorn, New Egypt; G. W. Ivins, Jr., New Egypt; Dayton Hopkins, Hornerstown; Daniel W. Bussom, Secretary, New Egypt; Charles E. Woodward, M. D.

Population of New Egypt village, 586. Population of township, including village, 1,300.

Depend for water-supply on wells and cisterns.

During the past year the sanitary condition of the township has been very good.

We have three slaughter-houses in our village. All of them are kept in as good condition as circumstances will admit.

C. E. WOODWARD, M.D.

 POINT PLEASANT BOROUGH.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. B. Cramer, E. E. Johnson, J. J. Pearce, J. J. Mickle, Charles B. Imlay.

 STAFFORD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

C. H. Cranmer, Manahawkin; Thomas H. Letts, Manahawkin; Lewis A. Cranmer, Mayeta.

There has been no organization of the local board of health during the past year.

JNO. B. COURTNEY.

OCEAN COUNTY—Continued.

UNION TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. Edmund Bennett, Joseph A. Pharo, George H. Van Note, John R. King, Emmer R. Wills. Post-office address of all, Barnegat.

The health of the township has been very good for the past year.

PASSAIC COUNTY.

AQUACKANONK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Theodore S. Perry, President, Paterson; Daniel H. Schoonmaker, Richfield; Nicholas Frederick, Delawanna; William Holden, Clifton; Hiram Keasler, Nutley; Charles F. Hemmenway, Secretary, Paterson.

Twelve miles from New York. Population, 2,562 in 1890.

Sandstone; slight elevations; good drainage to Passaic river.

Our board heard several complaints about small alleged nuisances, which were abated without action, and in one case a nuisance caused by fermenting manure piles was abated by owner after suit and fine imposed.

SPECIAL INQUIRIES FOR 1895.

1. Yes; communicable diseases are reported as far as known.
2. No blanks are furnished physicians.
3. No such diseases have been reported.
4. No gratuitous vaccination.
9. One hundred and fifty-two dollars are voted for health purposes. No new ordinances adopted.

CHARLES F. HEMMENWAY,
Secretary.

PASSAIC COUNTY—Continued.

LITTLE FALLS TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Chas. H. Booth, Richard I. Jacobus, Robert A. McMinn, Henry Crane, Geo. Jackson; R. W. Furbeck, Assessor; E. A. Keeler, Health Inspector; M. J. Synnott, Deputy Health Inspector. Post-office address of all, Little Falls.

Location on the Passaic river, four miles above Paterson.

Population, 2,410.

Land is flat; drainage fair.

Water-supply is from wells and cisterns.

No markets.

No epidemics.

Three public schools.

No epidemics during year.

Salary of health inspector, \$50 per annum.

A number of minor nuisances inspected and abated.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. No.
3. Notice sent of one case of diphtheria.
4. No.
5. No; two per cent.
6. No.
7. No.
8. See above.
9. One hundred and fifty dollars.

E. A. KEELER,
Health Inspector.
M. J. SYNNOTT,
Deputy Inspector.

MANCHESTER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry Atkinson, Paterson; Adrian Struck, Paterson; Adam Vreeland, North Paterson; William D. Wilson, Little Falls; Dr. Sylvester Utter, Health Inspector, North Paterson; William D. Berdan, Paterson.

PASSAIC COUNTY—Continued.

The board has had notices printed and posted throughout the township notifying the public to have their cellars, yards and grounds thoroughly cleaned, and to desist from dumping ashes and garbage in the streets. We have in several instances ordered nuisances abated.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Yes.
3. Yes.
4. No.
6. No.
7. No.
9. No appropriation made.

WM. D. BERDAN,
Secretary.

CITY OF PASSAIC.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Percy H. Terhune, M.D., President; A. H. Smith, Secretary; Charles E. Denholm, Treasurer; Rev. R. M. Offord, Patrick J. Delaney, Carl Pfeil; G. J. Van Schott, M.D., Health Inspector. Post office address of all, Passaic City.

Population, about 20,000.

Water-supply is by gravity, through pipes from upper Passaic river (above the falls). There are about fifty wells left, no new ones being dug, and old ones being gradually filled in. All tenement-houses have a supply of city water.

Separate system of sewers; gives perfect satisfaction. Rain water is disposed of by the gutters. Where old buildings are connected with sewers, ventilation is required. Total number of sewer connections, 1,700.

The plumbing in the city is under the supervision of the plumbing inspector. The highest class of work only is approved of and the code is strictly followed.

PASSAIC COUNTY—Continued.

We have two parks—City Hall and Passaic Bridge parks; well located and well cared for. Our streets are mainly macadamized. Sidewalks are all flagged and kept in good order.

All tenements in the city have modern improvements and are connected with sewer.

Iron garbage carts were introduced, and ashes and garbage are collected separately. For this service the contract price was raised from \$1,800 to \$3,000 per annum. Cesspools or vaults are not cleaned during May, June, July, August and September, except by special permit from the board, and no work of this kind can be done except by licensed scavengers, who must first secure a permit, use an odorless apparatus and remove the matter in air-tight vessels.

All animals and stables are under the supervision of the veterinary inspector, and no disease of cattle has been reported.

It is estimated that there are thirty-seven different manufactories in the city.

A new school building, to be known as No. 6, is in course of erection. This is to be an eighteen-room brick building, with all modern improvements, with Smeed-Wills exhaust fan ventilating system, driven by an eight-horse gas motor. All schools are considered in good sanitary condition, excepting the system still used in the high school, which has been condemned by the board.

We have an emergency hospital and dispensary, an orphans' home, and a day nursery. The main hospital will likely be commenced during this year. A new hospital, St. Mary's, has been opened with sixteen beds.

We have one police station, with four cells, supplied with city water and connected with sewer.

There is one cemetery within the city limits. Burials are conducted by about twelve undertakers, securing permits from the registrar of vital statistics, who is not a member of our board.

The health code has during the year been revised and published. All health ordinances are strictly enforced. In cases of contagious disease the house is quarantined by placard, which has proven very satisfactory. The health inspector has power to employ guards if necessary. Vaccination in the schools is compulsory and attended to by the board of education.

PASSAIC COUNTY—Continued.

Appropriation for 1895-6 was \$2,500, to which may be added about \$1,000 from fines, licenses and fees.

From October 1st, 1894, to October 1st, 1895, there were twenty-eight cases of scarlet fever and fifteen of diphtheria, a total of forty-three, of which five only died.

Last year the board secured the connection of seventy-two saloons with the sewer. They are all provided with urinals and closets. Numerous applications have been made to this board during the past year for permission to dig vaults for out-houses, but in all cases they have refused.

We have added a new section to our code requiring rag-gatherers and junkmen to secure a license, and the number of same is required to be displayed upon the vehicle used, and where none is used then upon any bag or basket which may be carried.

Our greatest annoyance has been the condition of the Passaic river. We have taken into consideration all proposed plans of restoring the river to its original condition, and have about decided that the only way the object can be obtained is through legislation, compelling each city to take care of its own sewage. This is a subject which needs considerable agitation and one that should be held uppermost in mind by all boards of health of every city and town bordering on the Passaic river. If nothing is done and the river is allowed to remain in its present condition, which every year will be worse, there is no question that before another year or two some dreadful epidemic will arise.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Yes.
3. Yes.
5. No. Vaccination has been very thorough within two years.
6. House-to-house inspection is made among tenements.
7. None.
8. See above.

ALBERT H. SMITH,
Secretary.

PASSAIC COUNTY—Continued.

CITY OF PATERSON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Theo. Y. Kinne, M.D., President; James P. McNair, Esq., Andrew F. McBride, M.D., Thomas L. Paton, M.D., Isaac H. Voorhis, Esq.; John L. Leal, M.D., Health Officer; James W. Smith, M.D., Assistant Health Officer; Joseph B. Mills, Secretary and Treasurer; William I. Lewis, Counsel; John T. Pollitt, Registrar of Vital Statistics; William H. MacDonald, Plumbing Inspector; James Fitzpatrick, Sanitary Officer. Post-office address of all, Paterson.

The past year has been an important one in the sanitary history of our city. Besides the regular routine of the board, we have been able to undertake new work of very important character. We have also had the cordial co-operation of his honor, the mayor, and also of the other branches of the city government, as well as the support of the general public. There is certainly good reason for the belief that our labors for the public health have been better appreciated than ever before; a more thorough understanding of the importance of the public health exists on the part of our citizens generally, and a better appreciation of the utility of the measures directed to that end. There is also reason for congratulation in the small number of deaths—1,756—which have occurred during the year. This is the best record in the last four years, notwithstanding the fact that the population is constantly increasing. The death rate—17.48—is phenomenally low, and is probably not equaled by any other city of this size in the country. To be sure, this rate is based on a population of 100,000 inhabitants, which is only an estimate; still it is probably correct, as at the same rate of increase as in the past, we would have more than that number. Granting, however, that our estimate is too large, it certainly is not enough out of the way to rob us of the lowest death rate ever known in this city.

Contagious diseases.—During the year we have had fewer cases of preventable disease than ever before since the organization of this board in 1882. A comparison of the total deaths, death rates and cases of preventable disease and deaths therefrom during the last five years will doubtless prove interesting.

PASSAIC COUNTY—Continued.

For the year ending March 1st, 1891:

Total deaths.....	1,712	Death rate.....	21.84
Preventable diseases—Scarlet Fever,	253 cases; 11 deaths.		
Diphtheria,	321 " 106 "		
Typhoid Fever,	69 " 18 "		
Small-pox,	1 " 0 "		

For the year ending March 1st, 1892:

Total deaths.....	2,044	Death rate.....	23.93
Preventable diseases—Scarlet Fever,	414 cases; 23 deaths.		
Diphtheria,	431 " 133 "		
Typhoid Fever,	84 " 15 "		
Small-pox	0 " 0 "		

For the year ending March 1st, 1893:

Total deaths.....	1,784	Death rate.....	19.76
Preventable diseases—Scarlet Fever,	300 cases; 10 deaths.		
Diphtheria,	223 " 66 "		
Typhoid Fever,	104 " 33 "		
Small-pox,	4 " 1 "		

For the year ending March 1st, 1894:

Total deaths.....	1,925	Death rate.....	20.20
Preventable diseases—Scarlet Fever,	297 cases; 21 deaths.		
Diphtheria,	439 " 140 "		
Typhoid Fever,	146 " 28 "		
Small-pox	4 " 0 "		

For the year ending March 1st, 1895:

Total deaths.....	1,756	Death rate.....	17.56
Preventable diseases—Scarlet Fever,	163 cases; 8 deaths.		
Diphtheria,	194 " 67 "		
Typhoid Fever,	80 " 21 "		
Small-pox,	6 " 1 "		

A study of the above tables will certainly show good ground for congratulation on the part of this board. Our city is certainly becoming a healthier place to live in, our general death rate is decreasing and the preventable diseases are coming more under control. With the increased facilities for the handling of these diseases which we hope to have at our disposal during the coming year, we can look forward confidently to a still better standing. It will be noticed in the table that six cases of small-pox developed during the year. All these cases came from outside of our city, and with the exception of two were entirely distinct and separate and occurred at different times. The two consisted of father and son who developed the disease about the same time from the same exposure, which occurred in New York.

PASSAIC COUNTY—Continued.

All these cases were handled according to our usual methods and not a single secondary case developed. A glance at the table will show that during the last five years we have had fifteen cases of small-pox. All of these cases were infected from outside, but two deaths occurred and not a single secondary case developed.

New contagious disease hospital.—After many years of effort we have now almost obtained our reward in a proper hospital for the care and isolation of cases of preventable disease. It has long been one of our crying needs and has been recommended from year to year in our annual reports. During the last session of the Legislature we succeeded in having a bill passed empowering this city to issue bonds for the building of such a hospital. The board of aldermen have taken advantage of that law and we hope to have buildings completed and in use before next winter. The advantages of such an institution to the city we believe will prove almost incalculable. It will provide a place for the care of those suffering from preventable diseases in boarding-houses, hotels, institutions and tenements, as well as for homeless persons, and servants and other employes living with their employers. In such an institution patients will not only receive better care than it would be possible for them to receive elsewhere, but the general public will be protected by the removal thither of persons who are a menace to the public health. I firmly believe also that it will prove only a question of time when persons suffering with contagious disease will be willing to leave their homes and go to the institution, not only on account of the better care to be obtained there, but also on account of the menace to the community due to their presence, as well as for the purpose of saving themselves and friends from the inconvenience and pecuniary losses caused by the restrictive measures employed for the preservation of the public health. When we have advanced to such a point I can see no reason why we should not bring this class of diseases under our almost absolute control.

Inspection of cattle and their surroundings.—A marked advance has been made in this respect during the past year. All cattle and their surroundings are now inspected by a veterinarian and licenses

PASSAIC COUNTY—*Continued.*

granted or refused on his report. This gives us complete control of this branch of our work, and will undoubtedly result in great good.

Garbage.—Our garbage system has been very satisfactory, both as regards collection and disposal. In my opinion a better system, taken as a whole, does not exist in the country to-day. Three thousand five hundred and eighty-five tons of garbage were collected and rendered during the year. Only nineteen complaints were received by this board, and investigation proved only ten of them to have any foundation. Not a single complaint was received against the rendering works.

Passaic river.—In our former reports allusion has been made to the condition of the Passaic river below the falls, caused by the discharge into it of the sewage of this city. During the past year a good deal of work was done to remedy the matter. Notices were served on this city by the boards of health of Acquackanonck and Saddle River townships calling for the abatement of the nuisance within a given time. This city finding it impossible to comply, the matter was carried by the township to the State Board of Health. Acting on the advice of the State Board a conference of the local boards for the purpose of considering the matter was held. At the meeting the position of the city of Paterson was explained; that the discharge of sewage in the river was no doubt unfortunate; that the city of Paterson suffered from it more than any one else; but that it was an utter impossibility for this city alone and unaided to find a remedy. The condition of affairs having there been made plain to the representatives of the townships it was unanimously resolved to request the State Board of Health to have introduced into the State Legislature a bill calling for a State commission to investigate and report a system of sewage disposal for the northern part of the State. This bill was introduced as requested but unfortunately did not pass. Undoubtedly the attempt will be made again at the next session, for the matter is a serious one and action on these lines seems the only solution.

PASSAIC COUNTY—*Continued.*

BOROUGH OF POMPTON LAKES.

This borough was constituted in February, 1895, but has had so many other matters to consider, attendant upon the institution of its new municipal machinery, that it has not yet organized a local board of health.

WILLIAM NELSON,
Corporation Counsel.

POMPTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

James V. Beam, Assessor, Wanaque; Gabriel Decker, Wanaque; Charles Sigler, Wanaque; John F. Sisco, Butler; Silas A. Pellington, Midvale; Daniel A. Wheeler, Erskine.

The board has met twice within the year, but there being no nuisances and no prevalent diseases to look after, no inspector was appointed or money appropriated.

WAYNE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George W. Van Ness, Mountain View; William Birchenough, Paterson; George W. Colfax, Pompton; George Van Houten, Paterson; Garret Berdan, Chairman, Paterson; G. V. Zelif, Secretary, Paterson.

Water-supply is from wells and springs.

There is no system of drainage other than natural surface drainage. Cellars are generally dry. No malaria last year.

Vegetables, as a general thing, are stored in house cellars. No yearly house-to-house inspection.

No sewerage in township.

No prevalent disease among cattle last year.

Have no slaughter-houses.

Our board met on April 12th and organized. No business to transact, adjourned. Have had no occasion to meet since.

G. V. ZELIFF,
Secretary.

PASSAIC COUNTY—*Continued.*

WEST MILFORD TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William W. Eckhart, Chairman, New Foundland; Dr. R. G. Maines, Physician, West Milford; Celestine Tintle, Secretary, Echo Lake; T. P. Terhune West Milford; John R. Freeland, Upper Macopin; David G. Vanderhoff, Oak Ridge; Joseph H. Schuster, Health Inspector, Echo Lake.

The township of West Milford has been unusually healthy during the past year, no epidemic of any kind having occurred. On an average the death rate has been less than for a number of past years. During the cold winter the "grip" has prevailed to a moderate extent, and a few of the older people have died.

The township of West Milford, embracing Dewitt, part of Greenwood Lake, West Milford, Macopin, Echo Lake, Union Valley, Oak Ridge, and a portion of New Foundland and Stockholm, &c., has an altitude of 800 feet above sea level. The air is comparatively free from moisture, bracing and invigorating at all times of the year. The natural drainage is excellent, and noxious or malarious vapors are almost unknown. Particularly can this be said of Macopin and Echo Lake. The township is generally healthful.

R. G. MAINES, M.D.

SALEM COUNTY.

ALLOWAY TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Joseph G. Kerlin, Alloway; John D. Drummond, Alloway; Joseph Garton, Cohansey; W. L. Ewen, M.D., Alloway.

We have no organized board of health in Alloway township. The health of the township seems to be generally good. However, I hear that there is a case of typhoid fever in the village at the present time and have heard of some cases of scarlatina.

J. F. AYRES,
ASSESSOR.

SALEM COUNTY—*Continued.*

EL SINBORO TOWNSHIP.

No report received.

LOWER ALLOWAYS CREEK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Edward F. Brown, Assessor; Keasby Smith, Hancock's Bridge; Winfield S. Carll, Canton; John Anderson, Harpersville; Dr. F. B. Harris, Canton.

We have to report no serious epidemic of any kind the past year. There have been a few mild cases of scarlet fever. At present there are many cases of simple continued fever.

F. B. HARRIS.

LOWER PENNS NECK TOWNSHIP.

No report received.

MANNINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

E. Smith Bassett, Elmer Smith, Barclay Griscom, Samuel P. Allen. Post-office address of all, Salem.

Mannington township is in Salem county and adjoins the city of Salem on the north and east. Its population taken by the assessor in 1895, was 1,931.

It is a strictly rural township, having but three or four small hamlets in it, whose inhabitants mostly work on the adjoining farms.

Mannington has a length of eight miles from east to west, and six and a half miles from north to south. Farms will average over 100 acres each in size.

Claysville is across Salem creek from Salem city and has about 230 inhabitants. Marlboro is the only post-town in the township.

Mannington is drained by Salem creek and its tributaries exclus-

SALEM COUNTY—Continued.

ively, and to the fact of its being well drained, and our pure drinking water, taken from wells entirely, we attribute our freedom from all epidemic diseases. Malarial affections that are always found some time of the year where the land is wet and undrained, are almost unknown here.

We have had no cases of anthrax or tuberculosis among our horses or cows reported to us this year, although they have had an epidemic of anthrax in the adjoining county of Cumberland.

There were a few unreported cases of hog cholera in a section of the township in October.

The Salem county almshouse is situated in Mannington township. It is managed by twelve trustees, one from each township in the county, who are appointed by the board of freeholders and is subject to political changes. Each trustee has it in his power to decide whether the sick and needy poor can be better taken care of and more economically at the township's expense, or to be sent to the almshouse at the expense of the county.

In reference to vaccination and contagious diseases we have never known but one case of small-pox in forty-five years in this township, and that was contracted by a resident in another state.

From this absence of small-pox I think that vaccination is not as strictly attended to as it should be. Diphtheria has been worse in Salem this winter than for many years, and all the public schools were closed for three weeks and thoroughly fumigated by the board of education. We have had only two cases in Mannington, and they were contracted by children from Claysville attending the public schools in Salem. That it was contracted there is proven by the fact that there is a colored school of fifty or sixty children within seventy-five yards of the house where the children died two months ago, and that there has not been a single case in that school or the village of Claysville.

SAMUEL P. ALLEN,
Assessor.

OLDMANS TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Levi Justice, Pedricktown; John Richard, Pedricktown; Frank Gaventa, Pedricktown; H. T. Johnson, Pedricktown; George Lippincott, Auburn; H. I. Johnson, Health Inspector.

SALEM COUNTY—Continued.

A few cases of scarlet fever, very mild, and a few cases of measles have occurred. Malarial influences are always present in nearly every case of illness, more or less.

BOROUGH OF PENNSGROVE.

No report received.

PILESGROVE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

George B. Grier, Woodstown; John G. Borton, Woodstown; D. W. C. Hinchman, Sharptown; L. A. D. Allen, Physician, Woodstown; C. H. Richman, Assessor, and Clerk of Board, Woodstown.

Population, about 1,500.

Country rolling; natural drainage.

Water is taken from wells and springs, except in Woodstown, where there is water-supply from artesian wells, but surface wells are largely used.

Streets and public roads in good condition.

No house inspection by board.

Each family disposes of garbage and excreta in their own way, principally by composting.

No prevalent diseases. A few cases of hog cholera and one or two cases of disease among horned stock.

School-houses in good condition and schools well equipped and governed.

No epidemics. Have had some scarlatina and mumps during past year.

Under other heads, about the same as heretofore.

The board has had no complaints brought to its special attention and has done no special work. There has been considerable complaint in a general way against canning factories dumping their waste into running streams, and on complaint of owners of property the dumping of refuse has been stopped by injunction.

General health of the community good.

C. H. RICHMAN,
Secretary.

SALEM COUNTY—*Continued.*

PITTEGROVE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles P. Atkinson, President, Palatine, Albert J. Fox, Centreton; Frank Parvin, Norma; A. B. Woodruff, M.D., Elmer; Lewis Whitaker, Assessor, Centreton.

QUINTON TOWNSHIP.

No report received.

CITY OF SALEM.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Austin T. Walton, President; Clinton Bowen, Secretary; Wm. Carney, Inspector; Thomas Hughes, J. Forman Sinnickson, Louis Hoelzel, John Shepherd; C. M. Sheron, Physician. Post-office address of all, Salem.

Salem is in Salem county, situated on Salem river, three miles from its entrance in the Delaware.

Population, 6,343. Water-supply by Holly system of water works from Laurel river, three miles from the city; about 600 water takers. Seventy-five double-nozzle fire hydrants furnish protection from fire. Many wells are used. A good quality of water lies from fifteen to twenty feet below the surface. Streets are from fifty to ninety feet wide, kept in good condition by oyster shells.

Our health inspector visits all cases of contagious diseases, disinfects and quarantines when necessary. Vaccination is compulsory. Diphtheria broke out here July 15th; a child from Philadelphia, pronounced well before coming here, spread the contagion, which so far has caused three deaths and thirteen cases. All except two were traced to contact. One case being in a family of Russian Jews, and the parties being poor the board procured antitoxine, which was administered by the physician of the board with a satisfactory result. The board took vigorous measures at ones, quarantining and placing special officer to enforce it.

SALEM COUNTY—*Continued.*

Hog-pens are the greatest, in fact about the only, nuisances we have, and the board contemplates improving them next season.

The board of health holds its meeting monthly with special meetings during the heated term, and from close attention to matters before them many causes of complaints have been removed the past year. The board requires reports when communicable diseases occur in the district. Reports are regularly made, and when received are entered in a book, and immediate measures taken to assist the attending physician in finding the causes, which, when found, are reported as speedily as possible. Although the board or its agents do not cleanse apartments after a communicable disease, they take all possible means to see that proper cleaning and disinfection are performed by the owners of the dwelling infected.

AUSTIN T. WALTON,
President.

UPPER PENNS NECK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John M. Bevis, President; George W. Hewitt, Secretary; Joseph E. Clark, James Hutchinson, John M. Summerill, M.D. Post-office address of all, Pennsgrove.

As this is a country district, without a single village, we have very few cases to cause a meeting of the board. We have had but one the past year, and that was caused by leaving a dead horse too much exposed after an attempt to bury the same. After being notified by the board, the nuisance was abated.

GEO. W. HEWITT,
Secretary.

UPPER PITTSBORO TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR

Henry Coombs, Elmer; Israel F. Newkirk, Elmer; Whilden DuBois, Daretown; George W. H. Fitch, Physician, Daretown; J. N. Gray, Secretary, Pittsgrove.

SALEM COUNTY—*Continued.*

Since making my report last year we have not had any epidemics. In the early spring, during the variola scare, vaccination was constantly urged. While not gratuitous, prices were in reach of all. Our local board is fully organized and able to cope with any ordinary case requiring attention.

No complaints have been made during the past year.

GEO. W. HORTON FITCH, M.D.

BOROUGH OF WOODSTOWN.

No organized board.

SOMERSET COUNTY.

BEDMINSTER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. J. Poulson, Chairman, Lamington; R. B. Nevius, Bedminster; Ellis Tiger, Peapack; E. F. Farrow, M.D., Health Inspector, Peapack; H. L. Kennedy, Secretary, Gladstone.

There are 1,789 inhabitants in the township. The climate is healthful. The names of the post-offices in the township are Gladstone, Peapack, Bedminster, Pluckamin and Lamington. The drainage is very good; water-supply is from springs and wells. No public water-supply. Streets and public grounds are well kept. Tenant-houses are well looked after and cared for.

No diseases among animals last year. Slaughter-houses are well kept.

Vaccination well attended to. Sanitary expenses very small. No prevalent diseases to report this year.

H. L. KENNEDY,
Secretary.

SOMERSET COUNTY—*Continued.*

BERNARDS TOWNSHIP.

No report received.

BLOOMINGTON BOROUGH.

No report received.

BOROUGH OF BOUND BROOK.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Hon. John B. Codington, President; Dr. C. R. P. Fischer, Medical Officer; W. S. Negus, Secretary and Treasurer; J. M. Rowland; Gerald R. Cushman, Counsel; Charles McNabb, Health Inspector.

In making our annual report for the past year we do not deem it necessary to answer the lettered questions in regular order, for the reason that in regard to very nearly all of them the answers would be exactly as given in preceding reports.

The general health of this borough has been very good, no epidemics of any kind having taken place. During September there were a few more cases of malaria and chills than usual, and for the two weeks in this month a number of cases of measles, but no fatal cases. Only one case of scarlet fever reported during the year.

The water-supply has not been very good nor abundant, owing to the long protracted draught. The water company has no means of filtering the supply furnished the borough, and generally, after heavy rains, the water is very oily, and the borough council has ordered the board to have the water analyzed on the next occasion that it gets into this condition.

The sewers are not all in working order as yet, although a good many of the house owners have made connections with them. The flush tanks empty themselves twice in twenty-four hours and serve their purpose very well. The pumping station is now being built, so that in case of high water in the river the lower sections of the sewer will not be flooded.

Very few complaints of nuisances have been made during the year, and in all cases complaints have been promptly investigated by the inspector and immediately remedied.

SOMERSET COUNTY—Continued.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Yes.
3. Yes.
4. We did not so understand the law as to weekly reports.
5. Probably 15 per cent. of the public school children have not been vaccinated. Offered free to all.
6. Yes.
7. The defect in the water supply is the lack of filtration.
8. None outside the board. The inspector receives \$50, the secretary \$10.
9. One hundred dollars.

CHAS. MCNABB,
Inspector.

W. S. NEGUS,
Secretary and Treasurer.

BRANCHBURG TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry S. Van Fleet, Chairman, Readington; John G. Sutphin, North Branch Station; Ellsworth Brokaw, South Branch; Adonis Nelson, M.D., Neshanic Station; L. T. Schenck, Secretary, Readington.

Source of water-supply, wells, cisterns and springs.

Houses all have basements or cellars; no tenement-houses of more than two families. No house-to-house inspection.

No prevalent diseases. General health throughout the township has been such that special inquiry or investigation have been uncalled for.

L. T. SCHENCK,
Secretary.

BRIDGEWATER TOWNSHIP.

No report received.

SOMERSET COUNTY—Continued.

FRANKLIN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter J. Staats, South Bound Brook; John Stothoff, New Brunswick; John L. Suydam, Franklin Park; Sanford Snyder, Assessor; J. Howard Cooper, M.D., Health Inspector, Middlebush.

No report from Franklin township board is made, aside from other years, with the exception of the following contagious cases being reported: Eight cases of diphtheria. For two of the families strict quarantine was carried out. The other four cases, in mild form, were isolated from other members of the families. Also one case of scarlet fever and one of dysentery. No deaths from any of the above cases.

At the present time the township is in a fairly healthy condition.

SANFORD SNYDER,
Secretary.

HILLSBOROUGH TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. V. D. Smith, Weston; Peter Huff, Montgomery; Frederick Wykoff, Frankfort; Abraham D. Baird, Assessor and Health Inspector, Frankfort; W. H. Merrell, M.D., Secretary, South Branch.

There is at present but one slaughter-house in Hillsborough township. It is difficult to keep it inoffensive.

No almshouse in township.

Have not issued a code or ordinances.

Collection of vital statistics is attended to.

Care over contagious diseases has been exercised by isolation and disinfection.

Sanitary expenses about twenty-five dollars.

There have been some cases of dysentery and a few of fever (typhoid). Summer complaints of children light.

Board has twice been called upon to abate a foul well.

W. H. MERRELL, M.D.,
Secretary.

SOMERSET COUNTY—*Continued.*

MONTGOMERY TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Edwin S. Voorhees, Chairman, Rocky Hill; J. Hervey Stout, Stouteburg; John S. Hoagland, Secretary, Griggstown; A. S. Dixon, Assessor, Harlingen; A. E. Mosher, M.D., Griggstown.

The board has not found it necessary to take any action but once during the year, viz., at Rocky Hill, where malignant dysentery was prevalent. Found several out-houses and drains in bad condition, and ordered them cleaned and disinfected, which was complied with.

BOROUGH OF NORTH PLAINFIELD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Rev. William E. Honeyman, President; Andrew Lane, Frank Curtis, E. P. Stevens; J. H. Carman, M.D., Secretary; Peter Hansen, Health Inspector. Post-office address of all, North Plainfield.

North Plainfield has enjoyed another year comparatively free from contagious diseases. Have had a few cases of diphtheria and scarlatina, all of which have been quarantined, all fatal cases assuming the laryngeal form.

All nuisances reported during the year have been promptly acted on and abated. Pertussis is at present epidemic, a few cases proving fatal from cerebral complications.

J. H. CARMAN, M.D.,
Secretary.

NORTH PLAINFIELD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Elias Allen, Chairman; Frank Mobus, Secretary; Robert Fountain; Dr. J. H. Carman, Town Physician; J. H. Cooley, Assessor; George Steward, Health Inspector. Post-office address of all, Plainfield.

The local board of health for the township of North Plainfield has recently organized and adopted ordinances that were to take effect

SOMERSET COUNTY—*Continued.*

October 22d, 1895. There have been no epidemics in the township and the general health has been excellent. Some nuisances have recently sprung up in the shape of badly-kept boarding shanties for Italian laborers, and the board has ordered them abated. No other action has been taken since the board was organized.

J. H. COOLEY,
Assessor.

RARITAN BOROUGH.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Geo. A. West, President and Health Inspector; Wm. Killmger, Secretary; J. P. Hecht, M.D., Rev. Wm. H. DeHart, James Cooper. Post-office address of all, Raritan.

A large majority of the houses in the borough have open wells for ordinary purposes, with rain water cisterns for washing, while a few depend on the cisterns altogether.

A public supply is furnished by the Somerville and Raritan Water Company by pumping the river water into a standpipe 140 feet high. The water is as thoroughly filtered as it can well be, having one of the best filtering systems, with an abundance of filtering surface. The water is soft, has no metallic taste, and it is always clear unless the river is very muddy for several days in succession, under which circumstances it sometimes happens that it cannot be thoroughly filtered, but will have a slight color.

The filters are washed every day and oftener when needful. There is no pollution entering the river above the intake of the water works.

From our partial examination of all properties in the borough we report 141 properties; 33 have city water, 104 open wells, 92 cisterns, 16 water barrels. When our canvass is complete, we hope to have reliable facts in reference to the water-supply of the borough.

The greater portion of the village has natural slope enough to drain quite thoroughly, but a portion on north side of Main street is flat and is not, as yet, sufficiently drained either naturally or by sewers. Our street authorities are promising us much for this district. All cellars are dry except in the above described flat district. There are

SOMERSET COUNTY—*Continued.*

no swamps in the borough. Malaria is not a frequent disease. There is a partial system of sewerage owned by the town to which additions are made from time to time, a section of which is being constructed at the time of this writing, as funds permit. There are a few small districts that have private sewers to the river. A few people have cesspools, and many throw all slops on the surface.

We have no public grounds, save the school property, a fine, large ground, beautifully shaded, and the engine house property and town hall. All are in good condition and carefully looked after as to sanitary condition. Nearly all houses have cellars, and a very few have basements that are used as living rooms.

Fourteen out of 106 dwellings on south side of Main street have more than two families.

Our business places are largely lighted by gas or electricity. Main street is lighted by gas, all other streets by gasoline lamps of a very excellent kind.

Refuse material is largely thrown out and carted away at intervals. Excreta, in most cases, is received in out-houses and carted away occasionally. A few have full accommodations by connections with public sewer.

No markets. Our grocery stores and butcher shops are frequently inspected and generally found clean and free from all decaying matter. All this is carted from the borough.

There have been no prevalent diseases among animals. There is no register of persons keeping animals.

Our slaughter-houses are frequently inspected and are in a clean condition.

We have two large woollen mills, two large foundaries with machine shops, one paint mill, two flour mills, one carpenter and builder shop, two blacksmith and carriage repair shops.

We have one public school of six departments, and one parochial school of four departments. Buildings are both of brick, well heated with steam, ventilated only by windows, but otherwise in good sanitary condition. Rooms large, not crowded.

The school buildings and the woollen mills are all well supplied with fire escapes.

SOMERSET COUNTY—*Continued.*

Our secretary keeps a careful registry of vital statistics.

Careful quarantine is placed over all cases of contagious and infectious diseases.

Typhoid fever has prevailed for the past two months, thirteen cases having thus far been reported, and three deaths having occurred.

TOWN OF SOMERVILLE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

A. L. Stillwell, President; George W. Anderson, Secretary; L. T. Reid, J. B. Betts, E. F. Brown. Post office address of all, Somerville.

We have had no diphtheria, only two or three mild cases of scarlet fever and but one case of typhoid fever.

Peter's brook, which runs on the north and east sides of the town, is used as a public sewer. It gets in a lamentable condition in summer. A petition is now before the commissioners asking for a sewer for that part of town. We have hopes of getting a sewer another year.

A. L. STILLWELL,
Secretary.

BRIDGEWATER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter Gulick, President, Raritan; C. L. Voorhees, Secretary, Somerville; Peter H. Smith, Bound Brook; William Hardgrove, Somerville, A. L. Stillwell, Somerville.

The board has received but one complaint during the year, and that was promptly attended to.

WARREN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John D. Bornmann, Dietrich Ehlen, John Gunten, Peter J. Zeglio, M.D.; Peter Newmiller, Assessor. Post-office address of all, Warrenville.

SOMERSET COUNTY—*Continued.*

The sanitary condition of the township during the past year has been good; no prevalent or communicable diseases.

Population of township, 1,086.

Post-office villages, Warrenville, Gallia (Mount Bethel).

No vaccination has been done during the past year. A few years ago all the school children were gratuitously vaccinated.

PETER NEWMILLER,
Secretary.

SUSSEX COUNTY.

ANDOVER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles M. Howell, Andover; Benjamin D. Totten, Andover; Charles W. Roof, Newton; Green C. Cook, Assessor, Andover; Sidney B. Straley, M.D., Andover.

No ordinances, by-laws or rules have been adopted.

But one complaint has been made to members of the health board, calling their attention to a slaughter-house, where offal was thrown out on the surface in a hog-yard, there to be consumed or carried away by dogs to feed on at their leisure in neighboring dooryards and lawns.

The medical member of the health board visited the premises and found cause for complaint. The owner of the premises complained of was notified to abate the cause of complaint, which he promised to do and also to prevent further nuisance.

There has never been any appropriation for health board and sanitary expenses. Consequently there has never been a meeting of the board of health, other than the usual meetings of the township committee.

There have been no contagious diseases reported during the summer and fall months to present date. The medical member of the board reports forty-eight cases of dysentery in his practice (not all in this township), and only two fatal cases thus far.

No contagious diseases of horses, cattle or swine have been reported.

SUSSEX COUNTY—*Continued.*

There has been nothing done in the matter of sanitary improvement.

The village of Andover contains about 400 inhabitants.

Property-owners and tenants, as a rule, show interest and pride in keeping the properties in a neat and healthful condition; houses and out-buildings kept painted, the streets clean, and lawns and door-yards are kept clean and neat.

In canvassing the township for making annual assessments for taxes and enumerating the number of inhabitants, found the rural district in fair sanitary condition.

Population of the township, 1,072.

Fifteen deaths in the township since January 1st, and seventeen births.

GREEN C. COOK,
Assessor and Secretary.

BYRAM TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

David Stone, Chairman, Andover; George P. Hart, Stanhope; Robert Slaght, Stanhope; Daniel W. Goble, Assessor, Andover.

BOROUGH OF DECKERTOWN.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles E. Stickney, President; Samuel N. Puff, Clerk; David B. Everett, Jonathan Wright; James M. Martin, Health Inspector. Post-office address of all, Deckertown.

FRANKFORD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Manning F. Lantz, Augusta; Linus Clark, Branchville; Victor Compton, Branchville; George Phillips, Assessor, Branchville; Edward S. Dalrymple, M.D., Health Inspector.

SUSSEX COUNTY—Continued.

Location in the central part of Sussex county, with an area of about 20,000 acres. Population, 1,430.

The county almshouse is situated in this township, has from 75 to 100 inmates, and is well managed in all its different branches.

The board of health has not had any regular meeting this year, and but one complaint has been made to them, and that was promptly abated on notice.

GEO. PHILLIPS.

TOWNSHIP OF GALLOWAY.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Huenke, President, Egg Harbor City; Joseph M. Collins, Port Republic. Daniel Mathews, Oceanville; Anthony Kienzle, Secretary, Egg Harbor City; Dr. K. Pitney, Health Inspector, Absecon.

GREEN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel Van Syckle, Andover; Wm. Van Riper, Tranquility; A. J. Bell, Tranquility; Dr. S. B. Straley, Andover; M. W. Northrup, Assessor, Huntsville.

HAMPTON TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Robt. G. Kinney, Chairman, Newton; Chas. M. Williams, Baleville; Elmer Case, Halsey; Frank Emmans, Secretary and Assessor, Newton.

Location in central part of Sussex county. Population, census 1895, 859.

Post-office villages—Halsey and Baleville.

No inspection of houses.

One cemetery in the township, well kept.

No contagious diseases have been reported.

There have been no matters of importance brought before the board.

No ordinances have been passed.

Last meeting September 27th, 1895.

SUSSEX COUNTY—Continued.

SPECIAL INQUIRIES FOR 1895.

1. Have heard of none in township.
2. Have not, as yet.
3. None to record.
4. None to report.
5. No.
6. No.
7. No.

FRANK EMMANS,
Secretary.

HARDYSTON TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

W. Hooker Ingersoll, Chairman, Hamburg; James I. Crane, Franklin Furnace; Daniel B. Ross, Stockholm; Horace E. Rude, Assessor and Secretary, Hamburg; Joseph P. Couse, M.D., Hamburg.

The board of health for the township was organized at the time of the first annual meeting of the township committee. There has been no meeting of the board since that time. General good health has prevailed throughout the township, and there seemed to be no necessity for the meeting of the board. The physician practices in every part of the township, and therefore has opportunities to observe the conditions existing bearing upon the general health and to bring before the board anything demanding its attention or action.

The State census being taken the past summer, the assessor made it a part of his care to closely observe the conditions existing among such classes of the community as would seem to be most likely to neglect proper sanitary regulations, and, so far as he was capable of judging, was surprised at the almost universal state of cleanliness and neatness existing where other conditions might have reasonably been looked for.

HORACE E. RUDE,
Assessor.

SUSSEX COUNTY—Continued.

LAFAYETTE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS OF TOWNSHIP COMMITTEE.

Samuel Warbasse, John N. Calvin, Jacob Manes. Post-office address of all, Lafayette.

Lafayette has no board of health.

Population, 700.

There is only one post-office in the township, and that is Lafayette.

Three schools in the township.

One cemetery in Lafayette.

NELSON ACKERSON,
Assessor.

MONTAGUE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Santford Nearpass, Tristales, N. Y.; James A. Rundle, Montague; Eugene De Salignac, Montague; William P. Hornbeck, Assessor, Montague.

TOWN OF NEWTOWN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Peter S. Decker, Martin E. Hough, Charles S. Steele; George Hardin, Assessor and Secretary; Shepard Voorhees, M. D., President. Post-office address of all, Newtown.

The public water-supply, of which mention was made in the reports from this board last year, is a gravity system and was completed September 1st. The source of supply is Morris lake, Sparta township. The lake and its water-shed are exceptionally free from sources of contamination. The water has been examined by a competent analyst and pronounced of excellent quality, both for domestic and mechanical purposes. The plant has a daily capacity of 750,000 gallons under ordinary pressure. While there is considerable variation of pressure at different points in the town, it is sufficient everywhere for ample fire protection. The ten-inch main, which brings the water from the lake, is nearly nine miles in length. There are six miles of street mains and seventy-four fire hydrants.

SUSSEX COUNTY—Continued.

It is unfortunate that there is no official supervision of plumbing now that so much new work is being done.

The disposal of garbage, neglected out-houses and cesspools have been the source of several complaints to the local board. In all cases a notice to abate has been complied with, though a few offenders have been a little slow to act.

There have been several meetings of the board during the past year, and sanitary matters have been given more attention than formerly. A code of ordinances has been adopted. It is far from being all that is desired, but seems the best that could be had under the present circumstances.

Vital statistics have not been as promptly nor as fully collected as they should have been.

No disease has been especially prevalent this year. Two cases of membranous croup, evidently diphtheritics, both of which proved fatal have been the only serious cases of communicable diseases in the town that the writer is aware of. These cases occurred in widely-separated families and at intervals of several months. The patients were isolated, and the apartments disinfected under the superintendence of the attending physician. This locality is remarkably free from zymotic diseases at all times. The writer has known of but two cases of typhoid fever in this town of 3,500 people during the five years he has practiced medicine here, and of severe cases of diphtheria, scarlet fever and malaria there have been still less.

The special inquiries for 1895, I regret to acknowledge, must receive negative answers. Bills of board are to be paid from town funds. Most of these have not yet been presented, and therefore the amounts cannot be given.

SHEPARD VOORHEES,
President.

SANDYSTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

G. E. Hursh, President, Layton; John J. Vansickle, Secretary, Layton; Madison Shay, Hainesville; John E. Jager, Hainesville; James N. Miller, M.D., Physician, Layton.

SUSSEX COUNTY—Continued.

STILLWATER TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. J. F. McCloughan, Swartswood; J. S. Opdyke, Assessor, Stillwater; Jesse Sherred, Swartswood; John A. Wintermute, Middleville; E. T. Moore, Stillwater.

The population of township, 1,225.

Water-supply, wells, springs and cisterns.

No inspection of houses.

School-houses and the out-buildings thoroughly cleansed.

There has been no report of communicable diseases this year.

The board has not furnished physicians with printed blanks. We would have kept a record of communicable diseases if any had been reported.

Gratuitous vaccination has been offered to all not able to pay.

The amount expended by the board the past year was \$119.24, which includes the payment of expenses in a small-pox case of last year, as the bills were not presented until this year.

We have not passed any ordinances this year. The rule of our board is for each member to inquire into the health of the township and to report communicable diseases of man or beast.

We are doing all that we think proper to do in regard to the health of our township, and with as little expense as possible.

J. S. OPDYKE,
Assessor.

SPARTA TOWNSHIP.

No report received.

VERNON TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Carlos Allen, M.D., Vernon; Benson F. Snyder, Canisteer; A. P. Shaw, Vernon; James H. Stidworthy, Vernon; Abram Van Winkle, Assessor, Glenwood.

We have no organization, consequently no report.

SUSSEX COUNTY—Continued.

WALLPACK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Martin Hull, Flatbrookville; Cornelius D. Gunn, Walpack Centre; John B. Fuller.

We have no board of health and have nothing to report. Our township has been unusually healthy the past year, and there have been no disease among animals.

J. W. BUNNELL,
Assessor.

WANTAGE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Frantz V. R. McCoy, Chairman; S. M. Parcell, Secretary; Brice Roy, Jonathan Coykendall. Post-office address of all, Deckertown.

The township has been free from epidemic diseases this year.

S. M. PARCELL,
Secretary.

UNION COUNTY.

CLARK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Isaac Terhune, Chairman; Benjamin King, Albert Lambert; Walter Cladek, M.D., Medical Member; F. P. Bullman, Assessor. Post-office address of all, Rahway.

The board of health in Clark township has held no meetings since its organization this year. The township is small and almost entirely an agricultural one, so there seems to be no occasion for board meetings.

We have had no communicable diseases.

No blanks furnished to physicians.

There are very few unvaccinated in the township. Gratuitous vaccination has not been offered.

UNION COUNTY—*Continued.*

No house-to-house sanitary inspection performed.
 No amount appropriated or allowed for use of board.
 No salary paid to any person employed by board.

F. P. BULLMAN,
 Assessor.

CRANFORD TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Edmund B. Horton, Nathaniel R. Foster, James A. Hibson, Philip Jahn, Joseph Severance, J. K. MacConnell, M.D., Edward S. Crane. Post-office address of all, Cranford.

Population, 2,145.

The houses and streets in the township are lighted by electricity and gas.

We are now building a sewer to tidewater.

The board has received very few complaints.

The health of township the last year has been good.

EDWARD S. CRANE,
 Assessor.

ELIZABETH.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John W. Whelan, President; Wm. A. M. Mack, M.D., N. L. Wilson, M.D.; R. J. Montfort, City Physician; John J. Donohue; James J. Manning, City Clerk; E. G. Putnam, Health Inspector. Post-office address of all, Elizabeth.

The board of health will apply to city council at its next meeting for an appropriation of \$10,000 to built a hospital for contagious and infectious diseases. In addition to small-pox hospital there will be a disinfecting plant. While there has been an increase of cases of diphtheria reported, there has been a decrease in number of cases of scarlet fever. Our physicians have been prompt in reporting cases, and in all of them the houses have been placarded and dis-

UNION COUNTY—*Continued.*

infected at once, and a second case in the same house very seldom occurs.

The question of improving condition of the Elizabeth river is now being agitated by our mayor, city council and board of health. It has become merely an open sewer, and while, perhaps, not detrimental to health, it is, during the dry season, very offensive. It will be a very expensive affair, but cannot be much longer delayed.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Yes.
3. Yes.
4. Yes.
5. No; three-quarters.
6. Partially.
7. Yes; but being improved.
8. Health inspector; only \$1,000 yearly.
9. Ten thousand dollars.

E. G. PUTNAM,
 Health Inspector.

FANWOOD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William Terry, Plainfield; L. W. Miller, Scotch Plains; T. J. Nicholl, Scotch Plains; John Robison, Scotch Plains; F. W. Westcott, M.D., Secretary, Scotch Plains.

LINDEN BOROUGH.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Edward Galager; John O. Etheridge, Secretary; Oscar Gesner, Ferdinand Blancke, E. A. Knapp, P. Rue; Milton C. Loudon, Inspector. Post-office address of all, Linden.

UNION COUNTY—Continued.

LINDEN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Wm. H. Donaldson, Linden; Samuel B. Redmond, Linden; Francis Stimson, Linden; John P. Winans, Tremly; Joseph Bauer, Elizabeth.

Borough board of health—Edward Galager, John A. Etheridge, Oscar Gesner, Ferdinand Blancke, Ernst A. Knopf, Parmenus Rue.

John A. Etheridge, Assessor and Secretary for both municipalities; Milton C. Lowdon, Health Inspector for borough and township.

In the month of August there were six cases of diphtheria, three in the township and three in the borough; one case in the borough proving fatal. Also one case of typhoid in borough, now convalescent, otherwise the general health of both township and borough has been good. No diseases of animals have been reported.

The township board has carefully looked after all matters appertaining to their duties and carefully inquired into the sanitary condition of the township.

MILTON C. LOWDON,
Health Inspector.

NEW PROVIDENCE.

NAME AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John R. Burnett, Jr., Chairman, New Providence; John M. Badgley, New Providence; Lewis E. Bergmiller, Berkley Heights; A. M. Cory, M.D., Assessor, Secretary and Health Inspector, New Providence.

Several meetings of the board of health have been held, but no emergent ones have been reported.

Intermittent fever has prevailed extensively since the opening of summer and during the autumn has been complicated with grip. No fatal cases have occurred.

A few cases of diphtheria have occurred, some of a malignant type; all were reported promptly and have terminated favorably.

The same may be said of whooping-cough.

Attention has been directed to the matter of sewerage along the Passaic river.

UNION COUNTY—Continued.

As it is necessary to have a duplicate record of vital statistics in every township, it has been proposed that definite printed forms should be prepared under the direction of the State, well bound for preservation and reference. This would afford scientific, reliable and valuable information for the uses of the physiologist, sanitarian and historian. This course would be economical, and as it has been contemplated by the State authorities and is under their advisement, it is hoped it will be adopted and productive of great convenience and good.

A. M. CORY, M.D.,
Inspector.

PLAINFIELD.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Geo. W. Rockfellow, President; Lemuel W. Serrell, Henry B. Newhall, Geo. W. Endicott, M.D.; H. O. Newman, Secretary; J. L. Mundy, Inspector. Post office address of all, Plainfield.

The sanitary work of the board of health during the year has been along the usual lines.

A careful watch has been kept over the boundaries under its control, and the inspector appointed by the board has performed the necessary duties falling to him.

During the twelve months, from October 1st, 1894, to October 1st, 1895, he has made inspections from house to house and served notices for abatements of nuisances where necessary. Permits have been issued for emptying 699 cesspools and for cleaning out and disinfecting 395 privy vaults.

The proposed sewerage system referred to in last year's report is now well under way and the "irrigation" system for the disposal of sewerage matter has been adopted, and the necessary area of ground purchased by the city for the erection of the sewer beds.

The city has been free from epidemics. The physicians have promptly reported all contagious diseases, which have been comparatively few, and confined to scarlet and typhoid fevers and diphtheria. There have been 244 deaths from all causes, including ten from diphtheria.

UNION COUNTY—*Continued.*

Arrangements have been made for conveying all dead animals in a closed vehicle and disposing of them outside the city limits.

The board of health has prepared and passed an ordinance regulating and governing plumbing, drainage and ventilation as applied to buildings within the city limits.

SPECIAL INQUIRIES FOR 1895.

1. Yes.
2. Yes.
3. Yes.
4. No.
5. No; have had no occasion to offer vaccination.
6. Yes.
7. Water-supply good. City now being sewerred.
8. Health inspector; \$30 per month.
9. One thousand dollars.

GEO. W. ROCKFELLOW,
President.

H. O. NEWMAN,
Secretary.

CITY OF RAHWAY.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Chas. B. Holmes, M.D., President; N. Page Hough, M.D., John M. Randolph, M.D., N. B. Rollinson, Daniel K. Ryno; S. Rusling Ryno, Secretary and Inspector; Wm. H. Way, Assistant Inspector. Post-office address of all, Rahway.

A considerable addition has been made to our sewer system during the past year—about two miles of 15-inch sewer having been constructed through a section of the city heretofore without sewer privileges; about a mile of 15 and 20-inch sewer is soon to be constructed, designed to afford sewage outlet through certain streets and from the proposed new State reformatory.

The general health of this city during the past year has been good, the death rate being lower than usual.

UNION COUNTY—*Continued.*

A few cases of diphtheria and typhoid fever were reported (of which report was duly forwarded to the health department at Trenton), but they were soon under control and nothing of an epidemic nature occurred.

The usual house-to-house inspection was made in the spring and nuisances, wherever found, were abated.

SPECIAL INQUIRIES FOR 1895.

1. As far as is known.
2. It does.
3. All that have been reported.
4. Statements have been sent whenever there was anything to report.
5. No; unable to say.
6. Yes.
7. None at all.
8. Salary of inspector, \$180 per annum; assistant inspector paid as services are rendered.
9. Four hundred dollars.

S. RUSLING RYNO,
Secretary and Inspector.

BOROUGH OF ROSELLE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

H. C. Pierson, M.D., President; Wm. P. Stevenson, Secretary; J. N. Meeker, Sanford Clark, Van S. Rorsa; Emil Worsinger, Inspector. Post-office address of all, Roselle.

During the past year a portion of Linden township, comprising a territory of four square miles and containing a population of 1,350, was set aside and constituted into the borough of Roselle, and for the period of time mentioned it has been generally healthful and especially free from contagious diseases.

No cases of scarlatina, variola or rubeola have occurred within the borough limits. In September one case of diphtheria manifested itself, which was treated with antitoxine injection with gratifying

UNION COUNTY—*Continued.*

results. By prompt isolation and thorough disinfection the disease was prevented from spreading beyond that one case.

During the past season a complete system of sewerage to tide-water has been constructed, which will result in the almost total abolishment in a short time of the cesspool system heretofore necessary.

Vaccination is very generally performed. The water-supply is excellent, a large proportion of the houses in the thickly-settled portion of the borough using the water of the Union Water Co., which has its artesian wells located at Netherwood, the remainder drawing their supply from wells. No cases of disease have arisen which could be traced to that source.

All cases of contagious disease are reported and proper quarantine exercised.

H. C. PIERSON, M.D.,
President.

SPRINGFIELD TOWNSHIP.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

E. D. Williams, President; J. J. Hoff, Secretary; A. D. Stiles, A. P. Carter; T. W. Harris, M.D., Health Inspector. Post-office address of all, Springfield.

The health of the township has been very good during the year. There have been but few communicable diseases and in no case have they spread. Communicable diseases are reported to the board. The board furnishes printed blanks for such reports and a record is kept.

Gratuitous vaccination has been offered by the board. There are but few unvaccinated persons in the township.

We have no house-to-house inspection, but all complaints are investigated and are usually promptly abated. The board meets as often as seems necessary.

T. W. HARRIS,
Health Inspector.

UNION COUNTY—*Continued.*

SUMMIT TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Charles S. Day, Chairman; Dr. W. H. Lawrence, Parker W. Page; Dr. W. H. Risk, Health Officer; John A. Hicks, Secretary; Wm. McMane, Inspector. Post-office address of all, Summit.

There have been no matters of special importance requiring the attention of the board. Complaints of nuisances of trifling nature have been investigated and abated under the direction of the inspector.

There have been a few cases of contagious diseases which have been promptly reported, properly cared for and isolated, and at the proper time the premises have been thoroughly fumigated by the inspector. Summit, during the past year, has been very healthy, and it is considered that the purity of our public water-supply and the very satisfactory working of our new system of public sewerage have been very important factors in producing this result.

JOHN A. HICKS,
Secretary.

TOWNSHIP OF UNION.

NAMES AND POST OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Daniel C. Beach, Union; William P. Bunnell, Roselle; William A. Allen, Hilton, Essex county; D. Hobart Sayre, Union.

The general health of the township has been exceptionally good. No contagious diseases reported and but little malaria.

The drought has affected the water-supply in some localities, and the necessity of a supply from artesian wells or some other source is becoming more imperative.

Many complaints of existing nuisances have been received during the year past. In minor cases, they have been acted upon by individual members without the delay and expense of a regular meeting. In serious cases, they have been dealt with by the whole board and all abated except one. This case is where a dam was erected under a county bridge crossing a county road at Aldene, causing a deposit of

278 REPORT OF THE BOARD OF HEALTH.

UNION COUNTY—Continued.

filth under said bridge and obstructing the flow of water in a manner deemed by our board a menace to the health of the neighborhood. The board of freeholders were duly notified of the nuisance existing on their property, but have failed to abate it. It has been resolved by our board to call the attention of the next grand jury to the case. As the question of jurisdiction and other legal points are involved, it was thought best that the question of responsibility should be determined for further guidance, and it may be deemed necessary to call for aid from the State Board.

The total population of the township by the census of 1895 is 3,412.

D. HOBART SAYRE,
Secretary.

D. C. BEACH,
Chairman.

WESTFIELD TOWNSHIP.

No report received.

WARREN COUNTY.

ALLAMUCHY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

C. L. Munroe, Hackettstown; Mathias Hibler, Allamuchy; Samuel H. Drake, Allamuchy; E. J. Harden, Collector, Allamuchy; Benj. A. Hendershot, Clerk, Allamuchy.

Population about 500.

Land level and rolling. About 500 acres of swamp land, but well drained.

Water-supply—wells and springs.

Drainage good, natural.

Cesspools and out-houses cleaned and refuse buried.

Animals; a few cows had tuberculosis, but have been inspected, killed and buried.

WARREN COUNTY—Continued.

School-houses are large and commodious buildings, and well ventilated.

Prevalent disease of the year was whooping-cough, but at this date this has disappeared.

BELVIDERE.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. W. J. Burd, Dr. G. W. Cummings, Robt. J. Reimer, John Robeson; Geo. H. Weaver, Secretary; U. G. Pursell, Town Clerk. Post-office address of all, Belvidere.

BLAIRSTOWN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Nathan Alpaugh, Blairstown; William Howell, Blairstown; J. J. Linaberry, Blairstown; Elmer Kishpaugh, Walnut Valley; H. O. Carhart, M.D., Health Inspector, Blairstown.

This township, situated in the hills of Warren, has excellent natural drainage. Water, from springs and wells, is of the best. Population about 1,600.

There has been an epidemic of diphtheria in our township; there were seven cases with three deaths. All the cases were in the same house. Antitoxine was used without any apparent success, as it was used on the patients who died. The house was thoroughly disinfected and furniture destroyed that was in the rooms where patients were confined. We have had several isolated cases of scarlet fever, but no deaths. Streams have been extremely low. The general sanitary condition of our township has improved wonderfully since the board of health has been established, and with very few exceptions the citizens have been willing to co-operate with the inspector. There has been considerable complaint in regard to a slaughter-house in the outskirts of town in times past, but during the year it has been kept in fair condition.

J. J. LINABERRY,
Assessor.

WARREN COUNTY—Continued.

FRANKLIN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Samuel H. Johnson, M.D., Health Inspector, Asbury; John M. Hoffman, Asbury; Chester T. Heitsman, Broadway; Wm. Pursell, Assessor, New Village; Elisha Beers, New Village.

Population of the township, 1,339.

There are three villages in the township, Asbury, Broadway and New Village.

The township consists of two valleys, divided by a mountain chain; at the foot of each side flows respectively the Musconetcong and Pohatcong creeks.

The water-supply is derived altogether from cisterns, springs and wells.

The board met July 20th, as prescribed by law, to hear complaints. At the same time all matters of sanitary interests were discussed and preparations made for emergencies.

Cellars are generally dry, except a few in the wet season. Most cellars are used for storing vegetables for the winter.

The health of the township has been usually good the past year. There have been a few cases of whooping-cough with one death reported. There are four well-kept cemeteries in the township. There are five school-houses, all of which are kept in good sanitary condition.

Vaccination has been and is sadly neglected. The statistics handed me by the district clerk shows that 76 per cent. of those between the ages of five and eighteen are not vaccinated. I think the board should enforce the law.

Cesspools are emptied by removal of contents, or covered with lime and new ones made.

Eight cattle killed in the spring in our township were found to be suffering from tuberculosis.

S. H. JOHNSON,
Inspector.

WARREN COUNTY—Continued.

FRELINGHUYSEN TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

J. P. Sticles, Chairman, Johnsonburg; Geo. Lundy, Johnsonburg; Geo. B. Armstrong, Marksboro; Dr. F. Rarback, Johnsonburg; A. L. Cook, Assessor, Marksboro.

GREENWICH TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

F. H. Metler, Chairman, Stewartsville; H. H. Stone, Stewartsville; Geo. Hamlen, Stewartsville; F. W. Curtis, M.D., Stewartsville; William Sherrer, Bloomsbury.

BOROUGH OF HACKETTSTOWN.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. J. S. Cook, Dr. A. E. Martin, R. G. Clark, A. W. Cutler, A. J. Martenis, Thos. Nolan; J. M. Everitt, Health Inspector. Post-office address of all, Hackettstown.

Population, 2,600.

Drainage fair.

Water supply—public water-supply, no wells.

Streets nearly all macadamized.

Refuse dumped in unused streets, and excreta disposed of in cesspools and privies.

Board has passed no ordinances.

No contagious diseases during year and vaccination general.

During the year the board has allowed no water closets or privies cleaned by anyone without first obtaining permission from the inspector of the board, and then to be cleaned under his supervision; that no horses, cattle or hogs be allowed to be buried in the thickly-settled portions of the town. The board also communicated with the secretary of the State Board of Health in reference to the new reservoir that is being built, to ascertain what steps should be taken to find out whether the supply of water is suitable for drinking purposes.

WARREN COUNTY—Continued.

They also ordered the inspector to look after the public school-house water closets to see that they are in a sanitary condition, and the inspector reported the same in good condition.

SPECIAL INQUIRIES FOR 1895.

All of the dangerous communicable diseases have been reported to the board.

Physicians are not furnished printed blanks for reporting diseases.

A record has been kept of communicable diseases.

No gratuitous vaccination.

No house-to-house inspection.

Water-supply is very short just now.

Each member of the board receives \$2 for each meeting, and the inspector \$25 per year, and secretary \$2 for each meeting. Amount appropriated for use of board, \$300.

A. C. PROTZMAN,
Secretary.

HARDWICK TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

James L. Lanterman, Chairman, Palinna; David R. Numman, Blairstown; Benjamin Linnabury, Blairstown; Philip S. Savercool, Assessor, Hardwick.

We have no organized board, as the committee deem it not necessary in a township situated as ours is. We have no villages. No practicing physician in our township. Our township is mountainous and well watered with springs and running streams. The health of our citizens has been very good. We have had no contagious diseases the past year, and comparatively few deaths. Our township has an area of fifteen square miles, with a population of less than five hundred.

PHILIP S. SAVERCOOL,
Assessor.

WARREN COUNTY—Continued.

HARMONY TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Henry Metz, Harmony; James W. Dewitt, Harmony; Ralph Rush, Montana; James D. Dewitt, M.D., Health Inspector, Harmony; Cornelius Pittenger, Clerk, Harmony.

There is nothing to report from this township different from last year.

Have had no epidemics nor contagious diseases during the year.

No complaints to the board of health.

Vaccination continues to be neglected.

HOPE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Miller, M.D., Hope; A. A. Van Horn, Hope; John O. Dill, Hope; Samuel Wildrick, Buttzville; Henry Whitsell, Townsbury.

INDEPENDENCE TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

F. W. Haggerty, M.D., Vienna; C. H. Albertson, Assessor, Vienna; A. B. Leigh, Danville; Geo. F. Martenis, Danville; John N. Linaberry, Hackettstown.

In northern part of Warren county. Population, 960.

Limestone, clay sub-soil. Drained by Pequest creek; surface rolling and hilly.

Springs and wells; no public supply.

Cesspools and out-houses not very well attended to.

School-houses well ventilated and in good condition.

Local board of health met August 19th and ordered a strict quarantine over the premises where a family had diphtheria. Five deaths from that disease occurred in this household. The isolation was made complete, the premises disinfected, and there was no spread of the disease.

C. H. ALBERTSON,
Secretary.

WARREN COUNTY—Continued.

KNOWLTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Albert Ammerman, Delaware; Wesley Linaberry, President, Knowlton; Peter J. Young, Hainesburg; Woodley Brugler, Secretary, Columbia.

We are located about three miles south of the Delaware Water Gap, and the township is about eight miles long, bounded all along the west side by the Delaware river.

Population, 1,294.

We have no slaughter-houses in the township.

We have seven school-houses in the township, all in a good, healthful condition.

The health of the residents of the township since our last report has been good. There have been no diseases of a contagious or malignant nature except one case of diphtheria. We have no diseases among our domestic animals. We have adopted a code of health regulations, and this very fact has made our people careful, and therefore the board of health has had but little to attend to. The board organized at the spring meeting of our town committee and appointed the annual meeting for the hearing of complaints, &c., as required by the act of 1892, to be held at Hainesburg, July 25th. At this meeting there were no complaints made.

WOODLEY BRUGLER,
Assessor.

NOTE.—A copy of the code accompanied the above report.—M.

LOPATCONG TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

John Hamlin, John H. Amey, Edwin H. Paulus, Isaac Barber, M.D.; Rowland Firth, Assessor. Post-office address of all, Phillipsburg.

The board of health of this township does not pay much attention to health work. This year they did not even organize. We have a very healthful township, and are scarcely ever troubled with anything like epidemics, and consequently we are a little lax in attention

WARREN COUNTY—Continued.

to our duties. There are some nuisance cases reported to the board, notably several cases where people haul swill from town and feed it to hogs.

ROWLAND FIRTH,
Assessor.

MANSFIELD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

William H. Thompson, Beattystown; Fred. Dellicker, Rockport; Benjamin C. Perry, Karreville; James Beaty, Assessor, Stephensburg.

OXFORD TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

L. B. Hoagland, M.D., Secretary, Oxford; David Trimmer, Assessor, Oxford; Samuel Sheridan, Oxford; Wm. Miller, Oxford; Elijah Mackey, Belvidere.

Our township has been very healthy during the past year, there having been only a few sporadic cases of scarlet fever and of whooping-cough; neither disease being represented by half a dozen cases in all. During September there were four cases of diphtheria in one house in Butzville, and one case in Bridgeville, with one death in each place. At present there does not seem any likelihood of the disease becoming epidemic, as no new cases have been reported in eighteen days, and both of the houses have been thoroughly disinfected.

PAHAQUARRY TOWNSHIP.

No report received.

PHILLIPSBURG.

No report received.

WARREN COUNTY—*Continued.*

POHATCONG TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Rutledge T. Crouse, Assessor, Finesville; Dr. Charles Boyer, Riegelsville; Joseph C. Weller, Phillipsburg; Wm. Butler, Phillipsburg; John R. Seigle, Finesville.

TEWKSBURY TOWNSHIP.

No report received.

BOROUGH OF WASHINGTON.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

Dr. F. McKinstry, President; Dr. William Stites, Inspector; John Hornbaker, Treasurer; George Campble, John Bigler, William Vannata; Minor Beatty, Secretary. Post-office address of all, Washington.

We take pleasure in reporting that the health of our town has been exceedingly good during the past year.

We have had no indication of any disease becoming epidemic at any time.

There has been some improvement in our water reservoir, by having a new guard-wall built around it, and a concrete bottom.

There have been but few complaints of existing nuisances reported within the past year. We serve notices on all parties complained of as maintaining nuisances, and order the nuisance removed within a certain time.

Printed reports for communicable diseases are furnished by the board to all practicing physicians. Action is taken on all reports.

Our public school building was inspected in the early part of this year, and the primary department was found to be very much overcrowded, and the board recommended an addition to the building. Four rooms were added and new teachers employed, thus relieving the primary department. The janitor of the school building has a system of fumigating, whereby a certain number of rooms are fumigated each week.

WILLIAM STITES, M.D.,
Inspector.

WARREN COUNTY—*Continued.*

WASHINGTON TOWNSHIP.

NAMES AND POST-OFFICE ADDRESS OF MEMBERS AND HEALTH INSPECTOR.

R. Q. Bowers, President, Washington; Christopher Dalrymple, Secretary, Washington; David Wise, Washington; William Cowell, New Hampton; Chas. B. Smith, M.D., Health Inspector.

We have had a quiet year, and but very few complaints have come before the board.

At our last meeting, August 3d, a complaint was presented to the board from the owner of the mill-pond below the borough, into which the sewage of the town empties. After carefully looking over the field, and with the advice of the State inspector, we decided that there was no cause for complaint. But when more dwellings are attached to the sewer the board think it best that the place of emptying the sewer shall be below the dam.

We have had no epidemics during the year.

C. B. SMITH, M.D.,
Inspector.

CIRCULARS AND LAWS.

Circulars have been issued by this board at short intervals during the past eighteen years, and the more important questions in hygiene have been by this means presented to the local boards of health and to the citizens of this State.

Following is a list of circulars now in print and ready for distribution :

- Circular 7.—Protection to Bathers.
- Circular 39.—To Local Boards of Health, Their Duties.
- Circular 42.—Kerosene Oil.
- Circular 44.—How to Prevent the Spread of Small-pox, Scarlet Fever, Diphtheria and all other Communicable Diseases.
- Circular 45.—Cholera.
- Circular 47.—Prevention of Injury to the Mind, the Eyes and the Ears.
- Circular 50.—Contagious Diseases of Animals.
- Circular 53.—Pure Drinking Water—How to Secure it.
- Circular 59.—Laws and Regulations Concerning Adulteration of Foods and Drugs.
- Circular 60.—Public Health Laws.
- Circular 61.—Care of Household Wastes.
- Circular 63.—Farmers' Houses and Their Peril.
- Circular 65.—Plumbing, Drainage and Ventilation of Buildings.
- Circular 66.—Marriage, Birth and Death Returns.
- Circular 67.—Care and Burial of the Dead.
- Circular 69.—Meat, Poultry, Game and Fish as Foods. How to Judge Quality.
- Circular 70.—Occasional Bulletin (No 1).
- Circular 72.—Vital Statistics.
- Circular 73.—Cities.
- Circular 75.—Health Inspectors' Guide.
- Circular 77.—Diphtheria.
- Circular 78.—Institutional Sanitary Inquiry.
- Circular 79.—Laws Concerning Marriage.
- Circular 81.—Occasional Bulletin (No. 2).
- Circular 82.—Isolation Hospitals.
- Circular 83.—Tuberculosis.
- Circular 84.—Bulletin, Series 3.
- Circular 85.—Bulletin, Series 4.
- Circular 86.—Bacteriological Diagnosis.

Copies of these circulars may be obtained by addressing the State Board of Health, Trenton, N. J.

CIRCULAR 84.

NEW JERSEY STATE BOARD OF HEALTH.

RECENT LEGISLATION.

CHAPTER CCLX., LAWS OF 1895.

AN ACT for the protection of the public health.

1. BE IT ENACTED by the Senate and General Assembly of the State of New Jersey, That every physician shall, within twelve hours after his first professional attendance upon any person who is suffering from cholera, yellow fever, typhus fever, leprosy, plague, trichinosis, small-pox, varioloid, enteric (or typhoid) fever, diphtheria, membranous croup, scarlet fever, or any other contagious, infectious or communicable diseases which hereafter may be publicly declared by the state board of health to be preventable and specially dangerous to the public health, report such sickness to the clerk of the local board of health having jurisdiction over the territory within which such sickness may be, or if such local board of health shall have designated some other officer thereof to receive such reports, then to such officer, which report shall be in writing, signed by such physician, and shall set forth the name, age and precise location of the person suffering from such disease; and every house-owner or householder who knows that any person living, dwelling or being in any building under his control is affected by any of the contagious, infectious or communicable diseases hereinabove specified or referred to shall, when no physician has professionally attended such sick person, within twelve hours after discovering the same report the fact in writing to the same person and in the same manner as any physician attending such sick person would be required to do as hereinabove set forth; and on the thirtieth day of June and the thirty-first day of December in each and every year every physician, house-owner and householder making any report or reports as in this section required, shall be entitled to receive from the officer to whom such report or reports shall have been made during the preceding six months, a certificate in writing under the hand of such officer, setting forth the number of names of persons reported to have been affected with any of the diseases hereinabove specifically named or referred to, which certificate when presented by such physician, house-owner or householder to the proper disbursing officer of the city, borough, town or other local municipal government or township within which such affected person may have been, shall entitle such physician, house-owner or householder to receive from such disbursing officer the sum of ten cents for each and every name by such certificate certified to have been reported, unless such notification shall be found to have been erroneous; and any physician, house-owner or householder who shall refuse or neglect to perform the duty hereinabove required of him shall be liable to a penalty of fifty dollars.

2. *And be it enacted*, That the facts contained in every report filed with the clerk or other officer of any local board of health, pursuant to the provisions of the first section

of this act, shall be entered by the officer to whom the same shall be delivered in a book kept exclusively for that purpose, which book shall be subject to the inspection of the local board of health and its proper officers, and to the state board of health and its officers only; the officers of the local board of health to whom such report shall be delivered, and whose duty it is to make record of the same, as in this section above set forth, shall also, at least once in each week, and daily when required by the state board of health, transmit the facts stated therein by mail to the board of health of the state of New Jersey, at Trenton, and shall further keep the said state board of health constantly informed concerning the measures which are employed by the local board of health to prevent the spread of the diseases in such reports mentioned which facts and information shall be conveyed to the said state board of health in writing, and upon such blank forms as may be furnished by the said state board of health; any officer whose duty it is to make any report to said state board of health, as in this section above provided, and who neglects or fails to perform such duty, shall be liable to a penalty of fifty dollars for each and every such neglect or failure of duty.

3. *And be it enacted*, That it shall be unlawful for any common carrier to accept for transportation, or to transport or carry within this state any person affected with any of the contagious, infectious or communicable diseases named or referred to in the first section of this act, or any infected article or articles of clothing, bedding or other property whatsoever, or the body of any person who shall have died of any of said contagious, infectious or communicable diseases, except the same be enclosed in an hermetically sealed casket, and except a license for such transport be first obtained in writing from the local board of health of the municipality or township in which the said infected person, infected articles or dead body may be located; and any common carrier knowingly violating any of the provisions of this section shall be liable to a penalty of one hundred dollars.

4. *And be it enacted*, That if the board of health of the state of New Jersey shall ascertain any vaccine virus, antitoxin or other animal product sold or offered for sale, or held for sale or use within this state for prophylactic or remedial purposes, to be dangerous to human health, or so impure or inert as to be inefficacious in rendering immune or less susceptible to disease any person in whom such product may be used, it shall be lawful for the said board of health of the state of New Jersey to prohibit the further sale or use within this state of any vaccine virus, antitoxin or other animal product, as aforesaid, manufactured or produced by the party who shall have manufactured or produced such dangerous, inert, impure or inefficacious product; any person who shall, after such prohibition, and with knowledge thereof, sell, or offer for sale or use, or offer for use within this state any such prohibited product, shall be liable to a penalty of one hundred dollars.

5. *And be it enacted*, That any penalty incurred under any of the provisions of the first, second, third or fourth sections of this act may be recovered in an action upon contract, in any court of record within this state, for the use of the state of New Jersey.

6. *And be it enacted*, That this act shall take effect immediately.

Approved March 22d, 1895.

Section 1 of this act provides that certain communicable diseases shall be reported to the clerk or other designated officer of the local board of health.

In localities where this requirement is already in operation it is customary, for the convenience of physicians, to furnish blanks for making returns.

After these forms have been filled out by physicians they are to be forwarded by messenger or mail to the clerk of the local board of health.

Section 2 provides that the clerk or secretary, or other officer of the local board of health, shall transmit by mail to the office of the State Board of Health, Trenton, upon blanks which will be furnished by the State Board, a statement of the number of cases of preventable diseases which have been reported to the local board.

Section 3 is intended to prevent the spread of disease from the dead bodies of persons who have died from contagious or infectious diseases.

Section 4 provides that the sale and use of vaccine virus and all other animal products which may be found to be inert, impure or harmful, shall be prohibited.

Reference to Laws of 1895 Having Relation to the Public Health.

CHAPTER XIV.

A Further Supplement to "An act for the construction, maintenance and operation of water works for the purpose of supplying cities, towns and villages of this state with water," approved April twenty-first, one thousand eight hundred and seventy-six.

Approved February 14th, 1895.

CHAPTER XVI.

An Act to provide for the purchase of water works and water-supply plants and the operation of the same, and to provide the money necessary for the purchase thereof in townships of this state.

Approved February 15th, 1895.

JOINT RESOLUTION NUMBER 1.

Joint Resolution relating to epileptic persons and the care and treatment of the same.

Approved February 19th, 1895.

CHAPTER XXXIV.

A Supplement to an act entitled "An act respecting coroners" (Revision), approved March twenty-seventh, one thousand eight hundred and seventy four.

Approved February 19th, 1895.

CHAPTER XL.

An Act concerning the cremation of garbage, and authorizing the acquisition of lands and the erection of crematories thereon, in the cities of this state.

Approved February 20th, 1895.

CHAPTER LVIII.

An Act to regulate and control private insane asylums, retreats and institutions for care or treatment of persons of unound mind.

Approved February 26th, 1895.

CHAPTER LXIV.

An Act to repeal an act entitled "An act concerning nurses, attendants and other employes in any charitable or penal institution of any township, county or other municipality in this state."

CHAPTER LXXIII.

An Act relating to townships in this state now or hereafter having a population of twelve thousand and five hundred, and within the territorial limits of which there is no incorporated city, town or borough and providing for certain municipal officers and powers therein.

Approved March 5th, 1895.

CHAPTER LXXIX.

An Act relating to boards of health in cities of this state containing a population of over one hundred thousand.

Approved March 5th, 1895.

CHAPTER LXXXVI.

An Act to authorize cities of the second class to erect and make additions to hospitals for contagious diseases, and to provide for the maintenance thereof.

Approved March 5th, 1895.

CHAPTER XCI.

An Act to establish public parks in certain counties in this state, and to regulate the same.

CHAPTER XCII.

A Supplement to the act entitled "An act respecting sewerage and drainage," approved March twentieth, one thousand eight hundred and eighty, and to provide for the payment of the cost of sewers heretofore constructed, without authority of law, in or by and for towns and townships.

Approved March 6th, 1895.

CHAPTER CIX.

An Act to amend the act entitled "An act to enable the owners of the tide swamps and marshes to improve the same, and the owners of meadows already banked in and held by different persons to keep the same in good repair," passed November twenty-ninth, one thousand seven hundred and eighty-eight.

Approved March 7th, 1895.

CHAPTER CX.

An Act to amend the act entitled "A supplement to an act entitled 'An act to enable the owners of the tide swamps and marshes to improve the same, and the owners of meadows already banked in and held by different persons to keep the same in good repair,' passed November twenty-ninth, one thousand seven hundred and eighty-eight," which supplement was passed November twenty-seventh, one thousand eight hundred and six.

Approved March 7th, 1895.

CHAPTER CXI.

An Act to amend the act entitled "A further supplement to an act entitled 'An act to enable the owners of the tide swamps and marshes to improve the same, and the owners of meadows already banked in and held by different persons to keep the same in good repair,' passed November twenty-ninth, one thousand seven hundred and eighty-eight," which supplement was passed January twenty-second, one thousand eight hundred and twenty nine.
Approved March 7th, 1895.

CHAPTER CXII.

An Act to amend the act entitled "A further supplement to an act entitled 'An act to enable the owners of the tide swamps and marshes to improve the same, and the owners of meadows already banked in and held by different persons to keep the same in good repair,' passed November twenty-ninth, one thousand seven hundred and eighty-eight," which supplement was approved March nineteenth, one thousand eight hundred and seventy-eight.
Approved March 7th, 1895.

CHAPTER XCIV.

An Act to enable towns, villages and municipalities governed by boards of commissioners, or improvement commissions, to construct sewers through tide-water creeks or water courses within their corporate limits.
Approved March 6th, 1895.

CHAPTER CXVIII.

An Act for the prevention of blindness in the state of New Jersey.
Approved March 11th, 1895.

CHAPTER CXXX

An Act to prevent the adulteration of candy.
Approved March 14th, 1895.

CHAPTER CXXXVII.

An Act to enable cities of the second class to purchase land and construct and operate water works for the purpose of supplying their inhabitants with pure and wholesome water.

CHAPTER CNL.

A Further Supplement to an act entitled "An act to provide for drainage and sewerage in cities of this state," approved April seventh, one thousand eight hundred and ninety.
Approved March 14th, 1895.

CHAPTER CNLI

An Act to amend an act entitled "An act to provide for drainage and sewerage in cities of this state," approved April seventh, one thousand eight hundred and ninety.
Approved March 14th, 1895.

CHAPTER CXLVI.

An Act to provide for the repaving, repairing and improving of paved streets and reconstruction of sewers in cities of this state.
Approved March 14th, 1895.

CHAPTER CLX.

An Act concerning the qualification of commissioners appointed to assess benefits conferred by the construction of sewers and drains in certain cases.

CHAPTER CLXVI.

An Act concerning registrar of vital statistics in cities of the second class in this state.
Approved March 18th, 1895.

CHAPTER CLXXX.

An Act respecting local boards of health in cities of this state.
Approved March 19th, 1895.

CHAPTER CCXXXVIII.

A Supplement to an act entitled "An act to regulate the practice of medicine and surgery, to license physicians and surgeons, and to punish persons violating the provisions thereof," approved May twenty-second, one thousand eight hundred and ninety-four.
Approved March 22d, 1895.

CHAPTER CCLIV.

An Act to prevent deception in the sale of cakes and biscuits and to preserve the public health.
Approved March 22d, 1895.

CHAPTER CCLIX.

An Act concerning boards of health in cities of the first class.
Approved March 22d, 1895.

CHAPTER CCLXXXVI.

An Act relating to the supply of water for public uses in townships of counties of the first class.
Approved March 22d, 1895.

List of Circulars of the New Jersey State Board of Health Now in Print.

Circular 7.—Protection to Bathers.

Circular 27.—Sanitary Instruction in Schools (No. 1).

Circular 23.—School and Health Circular, No. 2, for Parents, Children, &c.

- Circular 29.—Charitable and Penal Institutions.
- Circular 31.—Sanitary Survey and Topography.
- Circular 37.—School and Health Circular, No. 3.
- Circular 39.—To Local Boards of Health—Their Duties.
- Circular 40.—Health Counsels for Working People. Industrial Circular, No. 1.
- Circular 41.—Health Counsels for Working People. Industrial Circular No. 2.
- Circular 42.—As to Petroleum, Kerosene, &c.
- Circular 44.—How to Prevent the Spread of Small-pox, Scarlet Fever, Diphtheria and all Communicable Diseases. As to Vaccination.
- Circular 45.—Cholera.
- Circular 47.—Prevention of Injuries to the Mind, the Eyes, the Ears.
- Circular 50.—The Contagious Diseases of Animals.
- Circular 52.—Blanks for House Inspection (Check-book Form).
- Circular 53.—Pure Drinking Water—How to Secure it.
- Circular 54.—Sanitary Inquiry as to Schools (Check-book Form).
- Circular 57.—To the Physicians of the State.
- Circular 59.—Laws and Regulations as to the Adulteration of Foods or Drugs.
- Circular 60.—Laws Relating to Public Health.
- Circular 61.—Care of Household Wastes.
- Circular 62.—Drainage for Health
- Circular 63.—Farmers' Houses and Their Perils.
- Circular 64.—Disinfectants, and How to Use Them.
- Circular 65.—Construction, Plumbing, Ventilation and Drainage of Buildings.
- Circular 66.—Laws and Directions as to Marriage, Birth and Death Returns.
- Circular 67.—To Funeral Directors, &c., as to Care and Burial of the Dead.
- Circular 68.—To Local Boards (Spring Circular).
- Circular 69.—Meat, Poultry, Game or Fish as Foods. How to Judge Quality.
- Circular 70.—Occasional Bulletin Series—Laws, Health Inspectors, &c.
- Circular 71.—As to Sanitary Inspection of Hotels, &c., at Resorts.
- Circular 72.—Vital Statistics—Their Uses.
- Circular 73.—Cities—Their Needs and Their Regulations for Promoting the Health of Their Inhabitants.
- Circular 74.—October Circular as to Annual Report of Local Boards.
- Circular 75.—Health Inspectors' Guide (Book Form).
- Circular 76.—Protection of Schools from Communicable Diseases (No. 4)
- Circular 77.—Diphtheria.
- Circular 78.—Institutional Insanity Inquiry (Check-book Form).
- Circular 79.—Laws as to Marriage.
- Circular 80.—Traps and Vents in House Soil-pipes. Testing of Pipes.
- Circular 81.—Occasional Bulletin (No. 2).
- Circular 82.—Isolation Hospitals.
- Circular 83.—Tuberculosis.
- Circular 84.—Bulletin No. 3.

REPORTS AND RECORDS OF COMMUNICABLE DISEASES.

Only a few minutes each day is needed in which to write the morbidity records of local boards of health, but no effort should be spared to minimize this labor and to simplify the method employed.

Once having adopted a suitable system for keeping the records and becoming accustomed to the routine, the work is no longer irksome, and, as the recording officer becomes interested in the facts with which he is dealing, the duty becomes pleasurable.

Without an orderly system, however, all record-keeping is drudgery, and if mistakes and errors are allowed to creep in, the whole subject assumes a most distasteful character.

The following forms for reports and records of communicable diseases are in use by one local board, and they are published here to bring out criticisms and suggestions and thus perhaps in a future issue of this series of circulars other and more convenient blank forms may be presented:

Blank to be Filled by the Attending Physician.

	BOARD OF HEALTH OF..... .....189... The following is an extract from the Sanitary Code of the Board of Health of..... SECTION 6. Every physician shall report to this board in writing the name, age and address of every person having scarlet fever, diphtheria, membranous croup, dysentery, measles, small-pox, varioloid, cholera, typhoid fever, typhus fever, yellow fever or any other contagious, infectious or communicable disease publicly declared by this board to be dangerous to the public health, whom such physician shall have professionally attended or prescribed for; said report to be made within twelve hours after such physician has first professionally attended such sick person. Said report shall be written on blank forms provided by said board. Any person or persons offending against any of the provisions of this section shall forfeit and pay a penalty of one hundred dollars. 1. Full name of patient..... 2. Age..... 3. Sex..... 4. Color..... 5. Place of residence (give street and number).... 6. Name of disease..... 7. Date of attack..... 8. Remarks..... M.D.
STUB OF REPORT OF COMMUNICABLE DISEASES. Name..... Age..... Sex..... Color..... Disease..... Date of attack..... Date of report..... Remarks.....	

These blanks are furnished by the local board of health to all physicians practicing in the vicinity. They are bound into books of fifty each, so that the stub may be kept by the physician for convenient reference.

Copies of these circulars will be sent upon application to the State Board of Health, Trenton.

Blank for Use of Clerk of Local Board of Health.

Record of Communicable Diseases Occurring in.....During Year ending.....

No.	Date of Attack.		NAME OF PATIENT.	Sex.	Color.	Age.	NAME OF DISEASE.	PLACE OF RESIDENCE.	PERSON REPORTING.	Result.		REMARKS.
	No.	Day.								Recovered.	Died.	

These blanks are printed on sheets ten inches long and twenty inches wide, and one hundred sheets are strongly bound in book form. For the purpose of making the records quickly available in tracing a few of the more prevalent diseases, colored inks are used. Diphtheria is recorded in blue ink, and scarlet fever in red.

To add to the facility of keeping constantly before the eye of the proper officer the number and location of all cases of communicable disease, the board of health of the city of Newark records all such cases upon a chart or map by the use of colored pins.

It is hoped that a friendly rivalry may arise among local health officers to improve and perfect the methods above described.

MORTALITY FROM THE TEN CHIEF PREVENTABLE DISEASES IN NEW JERSEY.

	Year Ending June 30, 1893.	Year Ending June 30, 1894.
Consumption.....	3,429	3,433
Diarrhoeal Diseases of Children.....	3,951	3,893
Diphtheria and Croup.....	1,677	1,294
Enteric Fever.....	506	485
Scarlet Fever.....	445	272
Whooping Cough.....	237	328
Erysipelas.....	74	97
Measles.....	73	257
Small-pox.....	43	11
Malarial Fever.....	145	162
Total.....	10,613	10,232

If in every sanitary district in the State the local health authorities had faithfully applied the well-established methods (isolation, disinfection and vaccination) for preventing the spread of the diseases named in the foregoing table, at least fifty per cent, or more than five thousand human lives, could have been saved.

The hearty co-operation of the relatives, friends and attendants, in cases of preventable disease, to restrict it as far as possible, would still further diminish the death rate from these pestilences.

CLEANSING SCHOOL-HOUSES.

Recent observation has shown that diphtheria is less prevalent during vacation periods than during the school terms, and the facts brought out tally with the opinions and conclusions heretofore entertained concerning the mode of communicating this terrible disease. It is spread through short distances only, and mainly by contact between infectious particles and the mucous membranes. When children are massed together in large numbers in school buildings the danger is great that some one of them may be carrying the bacilli of diphtheria about in throat and nose, and that the infectious material may be smeared upon door knobs, hand-rails, slates, books, lead pencils, desks and floors.

Assuming that no child will catch the disease unless the bacilli are actually planted directly upon the lips or tongue, it is not difficult to believe that such transfer from door-knob, slate, desk, &c., does in each case occur. The fingers and the mouth are in very intimate relation in the case of nearly every school child, and herein lies a

suggestion for hygienic instruction. No child of school age is too young to receive with advantage the gospel of cleanliness.

There is little dissent from the opinion that enteric fever never occurs until fecal material from an infected individual shall first have been swallowed by the new victim of the disease, and the world-wide prevalence of this affection shows to what an extent the most revolting of substances finds its way into our mouths.

Can we expect less frequent and extensive contamination in the case of diphtheretic discharges? The best and safest protection against the spread of this disease seems to lie in the following measures:

1. Bacteriological examinations in the case of convalescents, and in the cases of persons known to have been exposed to the infection, to learn when the bacilli have ceased to be present

2. Isolation of all affected persons during the infective period.

3. The immediate destruction or efficient disinfection of all discharges from the nose and throat of infected persons and the thorough disinfection of infected articles and premises.

Until the first and second of these measures shall have been more effectually applied than yet is possible, school boards can do something toward staying the spread of this disease by applying the third of the above enumerated methods as far as it is practicable in the care of school buildings.

Not only diphtheria, but also scarlet fever and the great white plague itself (consumption), would be restricted to some extent by carrying out the following simple rules:

Suggestions for Cleansing School Buildings.

1. Each day after the school is dismissed the janitor is to scrub with hot water, soap and a stiff scrubbing brush, all parts of doors, casings and other woodwork which can be touched by the hands of the children, including seats and desks.

2. The floor should be in good repair and without open cracks or crevices; it should be sprinkled daily before being swept.

3. Lead pencils (there should be no slates) should every day be immersed in a five per cent. solution (1 to 20) of carbolic acid, and wiped dry.

4. The difficulty attending the cleansing of books should cause great care to be taken by teachers to prevent books from being passed from hand to hand, or touched by anyone except the child to whom they belong or to whom they may be assigned. Books which have been used by a pupil who is suffering from any one of the communicable diseases should be destroyed by fire.

5. During each vacation the walls and woodwork, including doors, desks and floors, should be sprayed or sprinkled with a solution of bichloride of mercury (1 to 1,000) applied with a garden pump and sprinkling pot, and the windows should be kept open to admit great floods of sunlight and pure air. Finally, scrub with clean water.

6. Water coolers are unclean and unnecessary. They should not be allowed in school buildings. Teachers should instruct children how to cleanse drinking cups before use.

7. Individual seats and desks should be provided in every school.

8. Light and airy cloak-rooms should always be provided, and hooks should be so separated that the garments of different pupils will not come into contact.

LEGAL DIFFICULTIES IN SANITARY WORK.

The enforcement of health ordinances has been attended with much difficulty in some localities in New Jersey, and many suits instituted by local boards to secure the abatement of nuisances have been lost. These failures have not occurred because of any fault in the law, but have generally been due to some error in framing the local ordinance, or to some oversight in the manner of bringing the suit. Each local board seems to be buying its own experience in this direction, and, although the mistakes which continue to trip up the legal proceedings of health boards have probably all previously been discovered in some other locality at more or less cost to the public treasury, yet there has apparently been little communication between the three hundred and eighty-six sanitary districts of the State concerning the pitfalls which lie in the way of obtaining judgments for the violation of ordinances.

In this series of circulars will be published facts relating to this subject when they are reported to the State Board of Health, and which may seem to have a general bearing.

The subjoined letter may be of service to some other board than the one which found itself in the helpless position described.

The necessity for a suit in this case was owing to the introduction of a latrine thirty feet long into the cellar of a new public school building.

OFFICE OF
DAVID HARVEY, JR.,
ATTORNEY-AT-LAW.

December 3d, 1894.

To the Board of Health of the.....

GENTLEMEN—Your communication directing me to bring suit against the Board of Education of the Township of..... for a violation of Section 2 of the ordinance governing plumbing and drainage was duly received, and after a careful examination into the matter I am constrained to advise you that, in my opinion, such action cannot be maintained. By reference to the law under which the ordinance in question was prepared and adopted (P. L. 1888, p. 80), it will be found that your board has ample authority to pass an ordinance which will govern and regulate the plumbing, ventilation and drainage of all buildings; but, by reference to the section of the ordinance in question, you will observe that it is not broad enough to cover the action that you now desire to institute.

First. The section does not designate who shall sign the plan or drawing and description thereof, which is required to be filed in your office, where the owner is other than an individual, it seems to me that it would be impossible for the Board of Education to comply with this part of the section, hence it could not be enforced against it.

Second. The ordinance is so drawn that it does not permit you to designate or control the particular system of heating and ventilation sought to be used in a building. This will be apparent by the most cursory glance at the section, so that further detail is unnecessary.

There is no doubt, however, of your right to control these subjects under the law, and I would advise that you so amend the present ordinance that it shall cover these and other defects that might be found.

Respectfully submitted,

DAVID HARVEY, JR.

THE BUCKET SYSTEM IN PRISONS.

A recent inspection of the Hudson county penitentiary has again drawn attention to the advantages of a well conducted bucket system for use in the cells of prisons. In the Snake Hill institution, many of the cells have been fitted up with water-closets, yet in one wing of the prison buckets are still used. After an experience of many years, and the employment of buckets of various sizes, shapes and material, brass kettles have finally been adopted by the warden as the most suitable receptacles for

the purpose. Each kettle has a capacity of about two gallons, and is provided with a brass cover. As the prisoners march to their cells at night, each one picks up a clean kettle and places it in his cell. In the morning, when the cells are first unlocked, each prisoner takes his kettle and marches with his squad to the river, where the kettles are emptied. The kettles are then carried to the cleaning-house, where two or three prisoners are constantly employed in washing and scouring the kettles and covers. When the cleaning process is finished the kettles are odorless, and they shine like mirrors.

Compare this system with the plan in operation in the New Jersey State Prison, in Trenton. In the old wing of the State Prison a line of sewer pipe runs beneath each tier of cells, and in each cell is placed a hopper-closet, with no trap and without any flushing device. A rude wooden cork or plug is used by the prisoners to keep out the sewer gas. Water is brought in pails to flush the hoppers after use.

But even when a properly constructed and well flushed hopper water closet is placed in a small unventilated room, it is sure to give offense, as every experienced person knows, and plumbing ordinances generally require that every apartment containing a water-closet shall have a window opening to the outer air or to a ventilating shaft. No matter how well constructed a water-closet may be, it will create a nuisance if it is placed in a prison cell.

The same may be said of all drainage fixtures, and neither wash-bowls nor sinks should be placed in cells. There should be no drain-pipe nor water-service pipe either in or near to any such cell.

Have no water in the cells except drinking water, but provide a wash-room in a suitable location, and for use during the day time supply water-closets in an annex, if possible.

SANITARY INSPECTION.

Schedule for the Use of State Health Officers in the Inspection of Local Sanitary Districts.

- A. Location, population and government.
- B. Topography and geology.
- C. Water-supply.
- D. Drainage and sewerage.
- E. Streets and public grounds.
- F. Houses and their tenancy.
- G. Modes of lighting.
- H. Refuse and excreta: how managed.
- I. Markets.
- J. Diseases of animals.
- K. Slaughter-houses and abattoirs.
- L. Manufactories and trades.
- M. Schools and school and other public buildings.
- N. Almshouse, hospitals and other charities.
- O. Police and prisons.
- P. Fire guards.
- Q. Cemeteries and burial.
- R. Public health laws and regulations.
- S. Registration and vital statistics.
- T. Quarantine or care over contagious diseases.
- U. Sanitary expenses.
- V. Heat and ventilation for dwellings.
- W. Diseases of the year.

A.—Location, Population and Government.

1. Name of the sanitary district.
2. Location.
3. Area.
4. When founded.
5. When incorporated.
6. Form of government.
7. If a township, give names and population of all villages and hamlets;.
8. Population in 1860, 1870, 1880, 1885, 1890, 1895.
9. Density of population.
10. Population under 5 years.
11. Population: native, foreign, colored.
12. Number of dwellings.
13. Average number of families in each dwelling.

B.—Topography and Geology.

1. Altitude: highest and lowest elevations.
2. Surrounding country: hilly or level.
3. Marshes or low lands near.
4. Any filled or made lands.
5. Is site of city level?
6. Any covered water courses?
7. Any overflow lands?
8. Ponds and stagnant water.
9. Distance to tide-water.
10. Character of soil; sub-soil.
11. Does disturbance of soil cause malaria?
12. Lakes, rivers, canals.
13. Geological formation.
14. Ground water level.

C.—Water-Supply.

1. Sources of water-supply.
2. Purity of the water-supply.
3. Analysis (obtain copy).
4. Has water taste, color odor?
5. Capacity of pumps and conduits.
6. Reservoir: capacity, elevation, when cleaned.
7. Pressure: is it uniform?
8. Number of gallons pumped daily.
9. Number of fire hydrants.
10. Number of public fountains.
11. Number of connections.
12. Relation of wells to cesspools, &c.
13. Has water caused sickness?
14. Usual depth of surface wells.

D.—Drainage and Sewerage.

1. Is surface drainage good?
2. Any sub-soil drainage?
3. Any basins?
4. Show above on local map.
5. Sewers: sizes, grades, length.
6. Diameter at outlet.
7. Ventilation of sewers.
8. Number of sewer connections.
9. Manner of connecting with house drains.
10. Does storm-water enter sewers?
11. Any map of sub-surface works?
12. Are cellars generally dry?
13. Private drains.
14. Plumbing.
15. Cesspools.
16. Other methods of disposal for waste fluids.

E.—Streets and Public Grounds.

1. Total length of streets.
2. Width.
3. Roadways paved, macadamized, graveled.
4. Sidewalks.
5. Do streets differ in relation to health?
6. Any streets unduly wet?
7. Cleaned and sprinkled.
8. Shade trees.
9. Parks: number and size.
10. Parks cared for.
11. Size of lots.
12. Public commode.
13. Lives lost at railroad crossings.
14. Lives lost from street car accidents.

F.—Houses and Their Tenancy.

1. Number of dwellings.
2. Number occupied by owners.
3. Number of tenements.
4. Any building regulations (obtain copy).
5. Number of dwellings connected with sewer.
6. Wells or cisterns in cellars.
7. Water-closets in basements.
8. Any buildings with special ventilation.
9. Are cellars dry or damp?
10. Cellar floors cemented.
11. Depth of cellars in ground.
12. Usual height of buildings.
13. Relation of stables and hog-pens to dwellings.
14. Yards and grounds neatly kept.
15. Number of transient residents.
16. Railroad stations.

G.—Modes of Lighting.

1. Gas.
2. Plant owned by municipality or by private parties.
3. Location of gas works.
4. Any nuisance from gas works.
5. Process used: quality.
6. Price, per 1,000 cubic feet.
7. Electricity.
8. Ownership of plant.
9. Capacity of plant.
10. Price compared with gas.
11. Streets well lighted.
12. Number of street lamps.
13. Any accidents from kerosene, gas and electricity.

H.—Refuse and Excreta.

1. Is garbage removed by municipality?
2. Cost of removal.
3. Removed at private expense.
4. Any rules governing removal of garbage.
5. Final disposal.
6. Disposal of dead animals.
7. Any cesspools: number.
8. Construction of cesspools.
9. Ventilation of cesspools.
10. Privy vaults: construction and ventilation.
11. Privy vaults: location.
12. Any ordinance governing location, construction and cleaning of cesspools and privy vaults.
13. Excreta: when deposited.
14. Mode of excavating cesspools and privy vaults.

I.—Markets.

1. Any public markets.
2. Number and size.
3. Facilities for cleansing.
4. Any rules for cleansing.

J.—Diseases of Animals.

1. Does your board inquire as to?
2. Have any cases occurred during past year?

K.—Slaughter-Houses and Abattoirs.

1. Source of meat-supply.
2. Number of slaughter-houses.
3. Any municipal regulations concerning slaughter-houses.
4. Location of slaughter-houses.
5. Drainage and water supply of slaughter-houses.
6. Disposal of offal.
7. Is nuisance caused by these establishments?
8. Any fat tending carried on.

L.—Manufactories and Trades.

1. Is there any establishment within the sanitary district, or near its borders, where any nuisance is made by any distillery, chemical works, tannery, glue factory, or by bone-boiling, fat-rendering, carpet-beating or other offensive operation?
2. Any ordinances restricting manufactories and trades.
3. Any manufactories and trades which pollute the water-supply.
4. Any which produce noxious vapors.
5. Any which create noise nuisance.
6. Has any disease originated among rag dealers or their employes?

M.—School-Houses and Public Buildings.

1. Number of school district, name of clerk, name of superintendent.
2. Number and location of school buildings, area of lot, nature of soil, drainage, water-supply, water analysis, surroundings.
3. Material of building, date of erection, cost, number of stories, number of rooms, and seating capacity and size of each, height of ceilings.
4. Heating: describe apparatus, fuel consumed.
5. Ventilation and heating:
 - a. Cold-air intake: describe its situation with relation to near-by sources of air pollution. State its area, and if it is covered by wire cloth state size of wire and size of mesh, and also actual size of opening remaining.
 - b. Material and construction of cold-air flue.
 - c. Hot-air flues: material and construction; number, size and total area.
 - d. Total area of actual openings of all registers.
 - e. Cubic feet of space in auditorium.
 - f. Number of persons in building when house is full.
 - g. Foul-air exits: state the total area.
- h. Cold air entering at intake: cubic feet (shown by anemometer).
- i. Hot air entering at registers: cubic feet.
- j. Total air leaving at exits: cubic feet.
6. Lighting: relation of windows to desks.
7. Cloak-rooms.
8. Basement: how floored, lighted, ventilated; used for what purpose.
9. Water-closet or privy arrangements.
10. Total number of pupils registered for each school.
11. Average number attending: number of teachers.
12. Is vaccination a pre-requisite for attendance?
13. Has the district rules concerning contagious diseases?
14. State observations concerning—
 - a. Affections of the eye.
 - b. Headache, epistaxis.
 - c. Diseases of the spine.
 - d. Diseases of the respiratory organs.
 - e. Diseases of the digestive organs.
 - f. Communicable diseases.
15. Theatres, halls, churches and other public buildings: name, location and capacity of each.
16. Exits and fire escapes.

N.—Almshouses, Hospitals and Other Charities.

1. Name and location and number of beds of almshouses, hospitals, infirmaries, asylums.
2. Governing authority of each.
3. Dispensaries.
4. Number of physicians for the poor: salaries.
5. Is there an ambulance service.
6. The buildings and premises: water-supply, lighting, heating, ventilation, drainage.
7. Terms of admission to each institution.
8. Number of inmates.
9. Any overcrowding?
10. Clothing, bathing, food, cleanliness of wards.

O.—Police and Prisons.

1. Number of police.
2. Are policemen also sanitary inspectors?
3. Is there night patrol: how many on duty?
4. How many lock ups or station-houses?
5. Average daily number of inmates.
6. Maximum occupancy.
7. Are vagrants kept separated from other inmates?
8. Air space per capita: dimensions of cells.
9. Ventilation, heating, water-supply.
10. Water-closet accommodation.
11. Bathing facilities.
12. Jail, penitentiary and other prisons.
13. Police surgeon: ambulance service.
14. Any epidemics in any prison?
15. Number and causes of death of inmates during past year.

P.—Fire Guards and Escapes.

1. Any ordinance requiring their construction (obtain copy).

Q.—Cemeteries and Burial.

1. Number and location of cemeteries and graveyards.
2. Any graveyards in which no burials are now made.
3. Soil; ground water-level.
4. Depth of graves.
5. Are records kept of all burials?
6. Any reasons why burials should be discontinued.

R.—Health Laws and Ordinances.

1. Names of board of health and dates of appointment.
2. Date when term of each member expires.
3. Names of all employers; salaries.
4. Obtain copies of ordinances, rules and regulations.
5. Obtain copy of ordinance of governing body creating board of health.
6. Methods of the board.
7. Are inspections made without complaint?
8. How often does board meet?
9. Is a permanent record kept of inspections?
10. Is plumbing law enforced?

S.—Vital Statistics.

1. Are vital statistics transcribed?
2. Are all births reported?
3. Is the law conformed to concerning reports of marriages and deaths?

T.—Quarantine, Communicable Disease and Vaccination.

1. Is quarantine provided for by ordinance?
2. Is isolation of cases generally resorted to? With what success?
3. Are reports invariably received in cases of communicable diseases?
4. What is the procedure of the board in such cases?
5. Is free vaccination offered by board?
6. How many persons have been vaccinated gratis by the board during past five years?
7. Is there a hospital for communicable diseases?

U.—Sanitary Expenses.

1. Date of beginning of fiscal year.
2. Total appropriation for sanitary purposes.
3. Expended by municipality for sewerage to date.
4. Expended by municipality during past year for paving streets.
5. Expended by municipality annually for street cleaning.
6. Expended by municipality annually for street sprinkling.
7. Expended by municipality annually for removal of ashes.
8. Expended by municipality annually for removal of rubbish.
9. Expended by municipality annually for removal of garbage.
10. Expended by municipality annually for care of public parks and fountains.
11. Expended by municipality annually for commodes and urinals.
12. Total sum appropriated for use of the board of health.
13. Expenditures of board of health.
 - a. Salaries.
 - b. Quarantine and disinfection.
 - c. Chemical analysis.
 - d. Stationery and printing.
 - e. Miscellaneous.

V.—Heating and Ventilation.

W.—Diseases of the Year.

1. Have any diseases become epidemic during the year?
2. If so, name them, and state number of cases reported and number of deaths.
3. Has malarial fever prevailed?
4. Is any disease endemic in the locality?
5. Is any disease prevailing now?

SPITTING ON THE FLOOR
OF THIS CAR
POSITIVELY PROHIBITED

The above notice has become familiar to the patrons of street cars in Philadelphia, and it has worked a revolution in the spitting habit in that city. The neat little signs are seen in nearly all of the cars of the trolley lines, and considering the short time during which they have been posted, it is encouraging to sanitary reformers that there is already general compliance with the requirement.

If any person does break the rule the eyes of the other passengers all turn toward the new sign, and the violator is not likely to repeat the act.

The car companies of New Jersey can render valuable service in the protection of the public health by the adoption of this simple and inexpensive method for preventing the deposit upon slats and mats of diseased sputa, and at the same time put an end to a disgusting practice, and thereby gratify every respectable patron.

PERIODS OF INCUBATION AND DURATION OF INFECTIOUSNESS IN COMMUNICABLE DISEASES.

In the diagnosis and management of communicable diseases, especially in determining the periods of isolation, it becomes essential to know as accurately as possible the duration of the initiatory and infective periods of each disease. The following tables are founded on numerous recorded statistics, and may be regarded as the most reliable statements thus far presented on this subject :

Vacher's Table.

DISEASES.	Time from inception to beginning of eruption.	Time from first precursory symptom to beginning of eruption.	Time from beginning of eruption to cessation of pyrexia.	Time from beginning of eruption till patient ceases to be infective.
Small pox.....	13 days (range 7 to 21 days.)	2 days (range a few hours to 7 days.)	14 days.....	56 days.
Modified Small-pox.....	13 days (range 7 to 21 days.)	2 days (range a few hours to 7 days.)	14 days.....	35 days.
Chicken-pox.....	13 days (range 4 to 17 days.)	2 days (range a few hours to 3 days.)	5 days (range, 3 to 7 days.)	17 days.
Measles.....	14 days (range 7 to 21 days.)	1 day (range 1 day to 9 days.)	6 days.....	27 days.
German Measles.....	14 days (range 10 to 20 days.)	1 day (range nil to 3 days.)	7 days.....	14 days.
Scarlatina.....	4 days (range a few hours to 14 days.)	1 day.....	7 days.....	40 days.
Diphtheria.....	5 days (range 1 day to 14 days.)	2 days (range a few hours to 4 days.)	14 days.....	28 days.
Idiopathic Erysipelas.....	5 days (range 2 to 14 days.)	1 day.....	14 days.....	35 days.
Typhus Fever.....	19 days (range a few hours to 28 days.)	7 days (range 3 to 7 days.)	7 days (range 7 to 14 days.)	21 days.
Typhoid Fever.....	21 days (range 1 day to 28 days.)	2 days (range 7 to 12 days.)	21 days (range 14 to 21 days.)	28 days.
Mumps.....	18 days (range 5 to 25 days.)	6 days.....	7 days.....	21 days.

Whittlegge's Table.

	Quarantine to be required after exposure to infection.	Earliest date of return to school after an attack.
Small-pox.....	18 days.	When all scabs have fallen off.
Chicken-pox.....	18 days.	When all scabs have fallen off.
Scarlet Fever.....	14 days.	Six weeks, and then only if no desquamation or sore throat.
Diphtheria.....	12 days.	Three weeks, if convalescence is complete, and no bacilli remain.
Measles.....	16 days.	Three weeks, if all desquamation and cough have ceased.
Whooping Cough.....	21 days.	Six weeks from the commencement of the whooping, if the characteristic spasmodic cough and whooping have ceased. Earlier, if all cough be gone.
Rotheln, or Rubella.....	16 days.	Two to three weeks, according to the nature of the case.
Mumps.....	24 days.	Four weeks, if all swelling has subsided.

This table assumes that a person who has been exposed may himself convey the infection from the time of exposure.

THE STORAGE AND COLLECTION OF GARBAGE.

The following ordinance has been in successful operation during the past year in a municipality having about five thousand inhabitants, and its execution has not been attended by much difficulty. Some patience was required to break up the habit of pouring upon the ground the fluids from the garbage receptacles before the garbage was placed in the carts, and some bother was caused by sly incursions by farmers who came irregularly to get a few loads of garbage, leaving all fluids and carrying away only the solid portions for food for cattle and hogs:

AN ORDINANCE to regulate the storage and collection of garbage and offal.

Be it ordained by the Board of Health of the Borough of.....

Section 1. That all garbage and offal which shall accumulate anywhere in the Borough of....., or which is stored, kept or retained therein, shall be kept in galvanized iron receptacles.

Section 2. Said receptacles shall be water-tight, and they shall be kept tightly covered with closely-fitting galvanized iron covers. The capacity of said receptacles shall not exceed twenty gallons, nor shall it be less than five gallons. Said receptacles shall have metallic handles.

Section 3. The contents of said receptacles shall be emptied only by depositing it in vehicles licensed by the board of health for the transportation of garbage. The owner of each of said garbage receptacles shall cause the same to be kept clean, and no rain water nor any other fluid shall be allowed to enter said garbage receptacles.

Sec. 4. No person shall collect, transport or carry, or cause to be transported or carried through the streets of....., any garbage or offal, nor any decomposing solid or fluid substance whatsoever, except in conformity with the requirements of a written permit or license therefor first received from the board of health.

Sec. 5. Every receptacle from which garbage is removed by any licensed collector shall be wholly and entirely emptied of its contents, and none of said contents shall be permitted to fall upon the ground. All covers of garbage receptacles shall be replaced upon said receptacles by said collectors after the garbage has been removed.

Sec. 6. In the case of fish markets, no fish refuse or other offal shall be emptied from the receptacle in which it is stored, but both offal and receptacle shall be removed from the premises and transported together outside of the borough, and the said receptacle shall not be brought back into the borough until it has been made clean and odorless.

Sec. 7. All wagons used for transporting garbage and offal shall be supplied with a box or body which is water-tight. Said wagon-boxes shall be tightly covered by wooden covers, and the covers shall be kept closed at all times except when garbage is being placed in the box. The garbage wagons shall be kept clean. The owner, contractor or other party in charge of said wagons shall cause them to be thoroughly washed inside and outside every day, and he shall not permit them to become offensive. No garbage wagon shall be allowed to stand or remain anywhere in this borough longer than is absolutely necessary for the rapid collection of garbage. No garbage wagon shall be brought into the borough of nor used therein, unless it shall be numbered with painted figures six inches high and one inch wide, placed on both sides of its box or body. Garbage wagons shall be used singly, and they shall not be worked nearer to each other than six hundred feet in the same street.

Sec. 8. All ordinances, or parts of ordinances, in conflict herewith are hereby repealed in so far as they conflict with this ordinance.

Sec. 9. Any person, or persons, who shall violate any of the provisions of this ordinance shall, upon conviction, forfeit and pay a penalty of twenty-five dollars.

Adopted.

....., Clerk.

....., President.

A CORPSE WITHHELD FROM BURIAL.

Bayonne was recently the scene of an occurrence which has interest for health officers.

The history of the case is as follows: The body of a young man, Franklin M. Lockman, aged twenty-four, was found at the foot of a stairway leading to the cellar of the hardware store of J. Levitch, No. 470 Avenue D. The first inference as to cause of death was that there had been foul play, but the county physician decided that death was due to a fractured skull caused by a fall. The body was removed to Routh & O'Brien's Morgue, but afterward was taken to the home of Howard L. Lockman, the father.

For the purpose of performing an autopsy, the body was taken back to the morgue. The father made some arrangement with Routh as to burial, and the undertaker began preparations. As there was an existing obligation on the part of Howard Lockman, the undertaker asked for security, which could not be obtained.

A purse was made up by friends of the deceased, but the amount was not sufficient for as expensive a funeral as had been ordered of Routh. The father then ascertained that another undertaker would bury the body for a sum within the amount raised by the friends. He therefore went to Routh and countermanded the original order and offered fifteen dollars to pay for expenses already incurred, but the undertaker refused, as he averred that the expense had been much greater.

Acting on Lockman's orders, Undertaker Dempsey sent two men to Undertaker Routh for the corpse. The latter refused to surrender it.

Counselor Van Buskirk served an order on Routh, but, as it was not official, it was ignored. Judge Hudspeth issued an order that if Routh was holding the body as a morgue-keeper, he should give it to Lockman. This order was also ignored. The matter was again brought to the attention of the court, but it was decided that the court had no jurisdiction.

The city health officer was then notified that the body was being retained in violation of Article VIII., section 114, of the sanitary code, which reads as follows: "That no person shall allow to be retained, unburied, the dead body of any human being for a longer time than four days, or, where death has been caused by a contagious disease, for a longer time than twenty-four hours after the death of such person, without a permit from this board, which permit shall specify the length of time such body may be retained unburied, * * * and any person or persons violating any of the provision of this section shall be liable to a penalty of forty dollars." The officer thereon made complaint in the recorder's court. This case was adjourned, but was argued later, when the decision was in favor of the undertaker, as the health officer had not visited the morgue and could not swear that the body was there.

Routh & O'Brien then offered to bury the body, but the father refused. Finally they notified him that they were ready to surrender the body, and, accordingly, it was delivered to Daniel Dempsey. The body was held by Messrs. Routh & O'Brien for nine days. They finally delivered it on advice of counsel, because they could not keep it indefinitely, nor could they bury it without the consent of the parent.

In addition to this there is no property in a dead body, and it cannot be held for debts.

The history of this case shows that until the Legislature shall take some further action in reference to this subject the only control which can lawfully be exercised over the burial of the dead, under circumstances similar to those above related, is to be found in Chapter 68 of Laws of 1887, Section 12, Sub-section 15. This act permits local boards of health to make ordinances "to regulate the burial and disinterment of human bodies." The Bayonne ordinance above quoted gave all necessary authority to cut short the objectionable proceedings, but the attempt to enforce it proved abortive because of irregularity in presenting testimony.

LABORATORY OF HYGIENE.

The trustees of the College of New Jersey have authorized the erection and equipment of a laboratory of hygiene. By an arrangement with the Board of Health of the State of New Jersey, the facilities which this department of the college will afford for bacteriological diagnosis can be made available to local boards of health and to practitioners of medicine throughout the State.

The advantages which will be placed within the reach of the citizens of New Jersey by such an establishment can hardly be overestimated. Diphtheria is most often spread by persons who are not known to be carriers of the Loeffler bacillus, and medical men are to-day in accord in the opinion that true diphtheria and some of the milder affections of the throat cannot be positively distinguished in the earlier stages, except by the aid of bacteriological methods.

If every physician could have the ready assistance of a competent bacteriologist in making diagnoses in doubtful cases, he would, as a routine precaution, isolate cases of sore throat which at all resemble diphtheria and await a report from the laboratory. Such a course would undoubtedly result in saving a large number of lives annually. It is estimated that in New Jersey not less than nine hundred persons, or about two-thirds of those who die from this disease, might be saved. In cases of incipient consumption, early diagnoses, which can only be made with

certainly by the help of the laboratory, would greatly conduce to the lowering of the death rate.

In several states the diagnosis of germ diseases is conducted gratuitously under governmental direction, and the good results already attained give promise that, with wider applications of the methods of this department of knowledge, comparative immunity from these hitherto intractable diseases will be secured.

ITEMS.

THE ACT APPROVED MARCH 22, 1895, provides that every physician shall report to the local board of health certain communicable diseases. Local boards are requested to send to the State Board of Health the name of the local officer (usually the clerk or secretary) who is designated to receive and record such reports.

LOCAL HEALTH OFFICERS are requested to notify the State Board of Health whenever any practicing physician dies, removes from the district or retires from professional business. This information is needed for the correction of the mailing list.

REPORTS FROM LOCAL BOARDS to the State Board of Health, provided for in Section 2 of Chapter CCLX., Laws of 1895, will not be expected when no cases of communicable disease have occurred.

THE BLANK FOR USE BY LOCAL BOARDS in sending reports to the State Board of Health, in relation to cases of communicable disease, will be ready to send out in the course of a few days. In form it will be as follows:

4, 4, '95, 107.

REPORT OF PREVENTABLE DISEASES FOR WEEK ENDING SATURDAY.....189

[Name of Place].....

To the BOARD OF HEALTH OF THE STATE OF NEW JERSEY:

Following is a report in accordance with the provisions of Chapter 260, of Laws of 1895 showing the number of cases of communicable diseases which occurred in this Sanitary District during the period above named;

DISEASES.	New Cases.	Existing Cases Previously Reported.	Deaths from Preventable Diseases.	PRECAUTIONS TAKEN
Cholera.....				
Yellow Fever.....				
Typhus Fever.....				
Leprosy.....				
Plague.....				
Trichinosis.....				
Small-pox.....				
Varioloid.....				
Typhoid Fever.....				
Diphtheria.....				
Membraneous } Croup..... }				
Scarlet Fever.....				

Total Deaths from all causes..... Signature of Clerk or other designated officer.....

NOTE.—When no communicable diseases occur, no report will be expected from local boards to the State Board of Health.

DANGEROUS KEROSENE OIL was driven out of New Jersey by the enforcement of the law of 1883, and few accidents now occur in this State except as a result of the breaking of lamps or the use of kerosene for lighting fires. We urge, however, that local boards shall keep careful watch of reports of explosions, and carefully inquire into such occurrences. When the co-operation of the State Board is needed samples of oil will be examined free of cost.

ISOLATION HOSPITALS are soon to be constructed in the cities of Newark and Paterson.

CEMETERY RECORDS are generally very loosely kept, notwithstanding the provisions of Section 9 of Chapter XXXIX of Laws of 1888, which reads as follows:

9. *And be it enacted*, That it shall be the duty of the keeper of every cemetery within this State, owned by any cemetery company organized under any law of this state, to keep a record of all interments made in such cemetery, which record shall include the name of the person interred, last place of residence and the name of the undertaker, or person acting as undertaker; said record shall be a public record and at all times open to the inspection of any persons who, under the laws of this state, shall have duties imposed upon them relating to the procurement or tabulation of vital statistics.

ALL OFFICIAL CORRESPONDENCE should be addressed to Henry Mitchell, M.D., Secretary State Board of Health, State House, Trenton, N. J.

CIRCULAR 85.

NEW JERSEY STATE BOARD OF HEALTH.

SHOULD THE UNITED STATES MAILS BE USED FOR CONVEYING SPECIMENS FOR BACTERIOLOGICAL EXAMINATION?

About the 1st of April, 1895, an item was printed in the *New York Medical Record* which drew attention to a rule of the Post-Office Department which excludes from the mails "disease germs, discharges of any kind from diseased persons, or other things of like character, no matter how securely put up."

The New Jersey State Board of Health was then just ready to proceed with the establishment of a laboratory for bacteriological diagnosis, for the purpose of assisting physicians, local boards of health and school officers, in the early detection and positive identification of suspected cases of diphtheria and consumption.

The following letter of inquiry was therefore sent to the Postmaster-General:

STATE BOARD OF HEALTH, }
TRENTON, N. J., April 8th, 1895. }

To the Postmaster-General, Washington, D. C.:

DEAR SIR—This board has voted to establish a laboratory for bacteriological diagnosis, and the erection of a building for that purpose has been authorized by the Trustees of the College of New Jersey, in Princeton. It is intended to provide for the examination of solid and semi-solid tissues in cases of suspected diphtheria and tuberculosis. This service is to be performed gratis, and the privilege of sending specimens is to be extended to every physician in New Jersey. The use of the mails for conveying specimens is an essential feature of this undertaking, and our attention has just been called to a statement to the effect that a rule has been made by the Post-Office Department forbidding the use of the mails for carrying tissues from diseased persons. We desire to learn if such an order has in fact been made,

and if that be the case, to respectfully ask for the further consideration of the matter.

We believe that a mailing case can be devised which will admit of the transportation of solid or semi-solid animal tissues in the mails without risk of contaminating other mail matter, even if the mail pouch should be crushed.

Very respectfully,

HENRY MITCHELL,
Secretary.

In reply to this letter a statement was received showing that the order referred to was made June 1st, 1893, and that it is still in effect.

In the May number of *Public Health* (London), page 239, the following item appears:

"**DIPHTHERITIC MEMBRANES BY POST.**—The French postal authorities have recently published regulations for the transmission of false membranes, &c., by post in France. They may only be sent in a thick glass bottle, tightly corked and sealed, surrounded with wadding and put into a solid metal box, which in its turn is to be inclosed in a well fitting wooden box. This must be legibly addressed and labeled 'Diphtheritic false membranes,' and may only be sent to the Institute Pasteur or to one of the recognized provincial laboratories."

Believing that no danger whatever will attend the proper handling of these tissues, and encouraged by the action of the French postal authorities, the New Jersey State Board of Health has caused a specimen mailing package to be prepared for the consideration of the Postmaster-General.

The following resolution was adopted by the Medical Society of New Jersey, June 26th, 1895:

WHEREAS, An order of the U. S. Postal Department provides that the mails shall not be used for the transmission of diseased tissues; and whereas, specimens suitable for bacteriological examination can, when inclosed in proper packages, be transported in the mails without endangering the health of persons who may handle them; and whereas, bacteriological examinations in cases of diphtheria and certain other infectious diseases constitute an invaluable defense against the spread of communicable affections by providing an exact method for early and accurate diagnosis; therefore, be it

Resolved, That the Medical Society of the State of New Jersey hereby respectfully requests the Postmaster-General to so modify the order now in force that specimens of diseased tissues, when properly inclosed in approved mailing packages, may be admitted to the mails for transportation to State and municipal laboratories.

This resolution was forwarded to the Postmaster General, and the following reply was received:

POST-OFFICE DEPARTMENT,
OFFICE OF THE THIRD ASSISTANT POSTMASTER-GENERAL,
WASHINGTON, D. C., July 24, 1895. }

Wm. Pierson, M.D., *Secretary Medical Society of New Jersey:*

SIR—The Postmaster-General directs me to acknowledge receipt from you of a copy of certain resolutions passed at a recent meeting of your society, asking that specimens of diseased tissue may be allowed transmission through the mails, and in reply to inform you that he does not deem it expedient to modify the present rule in regard to this matter.

Respectfully yours,
KERR CRAIG,
Third Assistant Postmaster-General.

It will be seen that the subject has not yet been clearly presented to the Post-Office Department, and that better arguments and perhaps even demonstrations must be added to bring out the fact that no danger exists that disease will be spread by admitting these substances, properly packed, to the mails. If all of the persons who are engaged in bacteriological study would join in an effort to make the subject clear to the postal officials, there is little reason to doubt that a more liberal view would soon be entertained in reference to this matter, and the present unreasonable prohibition would be withdrawn.

At a meeting of the New Jersey Sanitary Association, held December 6th and 7th, 1895, a resolution was adopted expressing the opinion that specimens for bacteriological examination can safely be transmitted through the mails. At a meeting of the American Public Health Association, held in Denver, Colorado, October 4th to 7th, 1895, a similar resolution was adopted, and the following committee was appointed to bring the subject to the attention of the postal authorities of the United States, Canada and Mexico: Dominion of Canada, E. P. Lachappelle; Republic of Mexico, Domingo Orvanaos; United States, Henry Mitchell.

The following communication and memorandum was sent to the Postmaster-General at Washington:

January 10th, 1896.

Hon. W. L. Wilson, *Postmaster-General, Washington, D. C.:*

DEAR SIR—Permit me to submit for your consideration the inclosed memorandum of particulars concerning an order which I yesterday had the honor to request in the name of the American Public Health Association that you should promulgate for the purpose of affording increased facilities for the early diagnosis and consequent restriction of the pestilential diseases.

Also please find inclosed specifications for the construction of a mailing case, which, it is suggested, shall be employed by persons who desire to avail themselves of the use of the mails for sending specimens of diseased tissue.

By the employment of these safeguards the postal employes and the public will be wholly protected against the careless and ignorant use of the mails for the purpose in question, and the cause of public hygiene will be greatly advanced.

Very respectfully,

HENRY MITCHELL,
Secretary.

OFFICE OF THE STATE BOARD OF HEALTH,
TRENTON, N. J., Oct. 1st, 1895. }

MEMORANDUM.

After experimental construction of receptacles suitable for conveying specimens of diseased tissues through the mails, the one here described has been selected by this board as being appropriate for this purpose. This package consists of,

(I.) A strong glass bottle having a capacity of three drams. The bottle is provided with a metal screw cap, made water tight by means of a rubber washer.

(II.) The bottle is packed in absorbent cotton, in a tin box two inches in diameter and four inches long.

(III.) The whole is then inserted, top first, into a second box lined with heavy paper felt. Both boxes have metal screw caps, with rubber washers to render them water tight. The outer box is covered on its outside with paper felt, one quarter of an inch in thickness. The whole package weighs twelve ounces, and the postage upon it will therefore be twelve cents. The cost of these packages by the thousand will be ten cents each. If the bottle is filled with water and placed uncovered, in its box, and the package is then inverted, the cotton at once absorbs all of the water, and not a

drop can be poured out of the box. If the bottle is filled with water and placed in the package and the package is then struck with a hammer until it is completely broken down no water escapes. If the package is crushed by placing it beneath a moving car wheel, no water escapes.

HENRY MITCHELL.
Secretary.

In an interview with the Postmaster-General, January 8th, 1896, the advantages to be derived from the use of the mails for forwarding specimens to public laboratories for bacteriological examination was presented, and letters from the following gentlemen, favoring such use of the mails, were submitted: George M. Sternberg, M.D., Surgeon-General, U. S. A.; W. H. Welch, M.D., Johns Hopkins College, Baltimore; T. W. Prudden, M.D., College of Physicians and Surgeons, New York; R. Mead Bolton, M.D., Health Department, Philadelphia; A. C. Abbott, M.D., University of Pennsylvania, Philadelphia; R. H. Park, M.D., Health Department, New York; G. T. Swartz, M.D., Secretary State Board of Health, Rhode Island.

The following letter has been received, but the terms of the modifying order have not yet come to hand:

OFFICE OF THE POSTMASTER-GENERAL,
WASHINGTON, D. C., February 3, 1896.

Dr. Henry Mitchell, Committee American Public Health Association, Trenton, N. J.:

DEAR SIR—The modification of the order of Postmaster-General Bissell, to which you called my attention when you were in Washington, has been reached by me to-day, and I have so modified the order as to make it conform to the suggestions of your personal communications.

Very truly yours,

WM. L. WILSON,
Postmaster-General.

NEW BOARDS OF HEALTH.

One of the results of the school law of 1894 has been to cause many new municipalities to spring into existence, not less than twenty-five new boroughs having been established in Bergen county alone. Each of these newly-incorporated boroughs becomes at once a separate sanitary district, and the organization of a local board of health is one of the duties devolving upon the mayor and council.

This procedure is authorized and required by Section 9 of Chapter LXVIII. of Laws of 1897.

The following form for an ordinance is suggested for adoption by the governing body of the municipality, and it is the first step to be taken in the creation of a local board of health:

AN ORDINANCE relating to the board of health of the (here name the place).

1. BE IT ENACTED by the (name of governing body) of the (name of place), That there shall be in and for this (borough or other municipality) a board of health in accordance with "An act to establish in this state boards of health and a bureau of vital statistics, and to define their respective powers and duties," approved March thirty-first, one thousand eight hundred and eighty-seven, and the several supplements thereto.

2. And be it enacted, That the said board of health shall consist of (five or seven) members, and that (here name each member who is to serve) are hereby appointed to constitute the said board of health of this (borough or other municipality); thatand.....shall hold said office for one year; that.....shall hold said office for two years; that.....shall hold said office for three years; that..... shall hold said office for four years; all members of said board hereafter appointed shall hold said office for the term of four years, except in the case of vacancies; vacancies shall be filled for the unexpired term.

3. And be it enacted, That said board of health shall adopt rules and regulations for its own government, and shall elect a president from among its own members.

4. And be it enacted, That said board of health shall appoint a registrar of vital statistics, clerk and sanitary inspector, and they may also appoint such other officers or assistants as said board of health may deem necessary; all appointees of said board of health shall be governed by the rules of said board, and they may be removed for cause by said board; the police officers of this (borough or other municipality) shall be special sanitary inspectors, and they shall promptly report to the board of health every violation of the health ordinances of this (borough or other municipality) which may come within their observation or knowledge.

5. And be it enacted, That the said board of health shall not contract any debts of any kind beyond the amount of the appropriations first made for its use by the (here name governing body).

6. And be it enacted, That this ordinance shall go into effect on the (here name day of week and month and the year).

Passed....., 189....

....., Clerk.

Approved....., 189....

....., Mayor.

Attest—

....., Clerk.

FORM OF AFFIDAVIT.

State of New Jersey, County of....., ss.—....., being duly sworn, on his oath deposes and says that he will faithfully and impartially discharge the duties imposed upon him as a member of the Board of Health of

Sworn and subscribed to before me thisday of....., 189....
....., Notary Public.

The board of health may now proceed to elect a president from among its own members, and also a clerk (or secretary), medical officer, sanitary inspector and registrar of vital statistics.

One of the first steps for the local board to take is to make rules for the direction of the work of the inspector. The best service which can be performed by this officer is to systematically observe and record all conditions affecting health which exist on every premises in the sanitary district which is under the local board's jurisdiction. One street after another should be taken up in turn, and every building should be examined sufficiently to learn all that relates to its sanitary history and condition. These facts should be recorded on blanks conveniently arranged for the purpose. On page 658 of this circular will be found suggestions for making these records.

Ordinances should be prepared and adopted by the board, for, although action can be taken for the abatement of nuisances, &c., under the law, without regard to ordinances, yet very many matters of great importance to the health of every community can be reached only through the enforcement of suitable ordinances. By sending to the clerks of the old-established boards in the State, copies of the ordinances which have been found to be useful can be obtained.

CITY CLERKS AS REGISTRARS OF VITAL STATISTICS.

Section 4, of Chapter XXXIX, Laws of 1883, provides that "every certificate of marriage or birth required to be made by the first and second sections of this act shall, in any city, borough, town and other local municipal government, be transmitted to the registrar of vital statistics, if there be such officer, and if not, then to the clerk of the city," &c. Section 12, Sub-section VII., of Chapter LXVIII., Laws of 1887, authorizes local boards of health to make ordinances "to compel the return of all births, deaths and marriages by physicians, midwives, nurses, clergymen, magistrates and other persons professionally officiating at such death, birth or marriage."

Section 31 of the act last referred to (viz, Chapter LXVIII., Laws of 1887) provides that local boards of health may appoint officers to carry into effect the ordinances which they may make (including a registrar of vital statistics).

Chapter CCLX., Laws of 1895, provides that no dead body of any person who shall have died of any communicable disease shall be transported or removed by any common carrier until a permit therefor shall be first obtained from the local board of health.

Chapter LXVIII., Laws of 1887, Section 12, Sub-section XIV., empowers local boards of health to make ordinances "to regulate the burial and disinterment of human bodies."

The foregoing references show that the laws place upon local boards of health the duty of regulating the burial, disinterment and transportation of the bodies of the dead, and it is clear that city clerks have only a chance relation to these matters. But when boards of health neglect to appoint a recorder or registrar of vital statistics, then the law says the city clerk shall perform this service.

RECORDING REPORTS OF COMMUNICABLE DISEASES.

A map of the State of New Jersey, four feet wide and six feet long, mounted on a thin backing of soft wood, has been provided in the office of the State Board of Health, and celluloid pin-tags are used to indicate upon this map the localities in the State in which infectious diseases are prevailing.

The tags are colored and figures are stamped upon them, so that each disease is indicated by the color and number of the tag.

Thus, a red tag having the number 15 stamped upon it shows that fifteen cases of scarlet fever have been reported from the sanitary district into which the pin is thrust.

Reports of infectious diseases are now received regularly every Saturday from the clerks of local boards of health, and the map is corrected as fast as the reports come in. The facts stated upon the report cards are also recorded in the record-book, and in one column is noted the action taken in each case by the State Board of Health. A glance at the map shows every reported case of diphtheria, typhoid fever, scarlet fever and small-pox which exists in the State, and the increase or decline of every outbreak is at all times plainly presented.

THE PREVENTION OF BLINDNESS.

At the annual meeting of the Medical Society of New Jersey in 1893, a committee, consisting of Drs. W. B. Johnson, C. J. Kipp and P. A. Harris, was appointed to obtain legislation for the prevention of blindness. The following statute is the result of their labors:

CHAPTER CXVIII., LAWS OF 1895.

AN ACT for the prevention of blindness in the state of New Jersey.

1. BE IT ENACTED by the Senate and General Assembly of the State of New Jersey, That should one or both eyes of an infant become inflamed, swollen or reddened, or show any unnatural discharge at any time within two weeks after its birth, and no legally-qualified practitioner of medicine be in attendance upon the infant at the time, it shall be the duty of the midwife, nurse, attendant or relative having charge of such infant to report the fact in writing within six hours, to the local board of health of the city, township or other municipality in which the parents of the infant reside.

2. *And be it enacted,* That the said local board of health shall direct the parents or person having charge of such infant suffering from such inflammation, swelling, redness or unnatural discharge of the eyes to immediately place it in charge of a legally-qualified practitioner of medicine, or in charge of the physician of the city, township or other municipality if unable to pay for medical services.

3. *And be it enacted,* That every local board of health in the state of New Jersey shall furnish a copy of this act to every legally-qualified practitioner of medicine, and to each person who is known to act as a midwife or nurse, in the city, township or other municipality for which such board of health is appointed; and the secretary of state shall cause a sufficient number of copies of this act to be printed, and to supply the same to such officers for distribution.

4. *And be it enacted,* That any failure to comply with the provisions of this act shall be punished by a fine not to exceed two hundred dollars, or imprisonment not to exceed six months, or both, upon conviction, under prosecution proceedings to be brought by any local board of health.

5. *And be it enacted,* That this act shall take effect and be in force on the first day of May, one thousand eight hundred and ninety-five.

LIST OF SANITARY DISTRICTS IN THE STATE OF NEW JERSEY,

With the name and address of the secretary, clerk or other officer to whom correspondence should be addressed, and also the name and address of the registrar of vital statistics.

Representatives of boards are requested to notify the Secretary, Dr. Henry Mitchell, if any errors appear in the list of names, and where names are omitted to state the correct name for insertion in its proper place.

NOTE.—A star (*) in the column "Name of Registrar of Vital Statistics," indicates that the name and address is the same as that which appears under the heading "Name of Clerk, Secretary or Health Officer."

List of Sanitary Districts in the State of New Jersey—Continued.

SANITARY DISTRICT.	COUNTY.	NAME OF CLERK, SECRETARY OR HEALTH OFFICER, ALSO ADDRESS.	NAME OF REGISTRAR OF VITAL STATISTICS.	ADDRESS OF REGISTRAR.
Abscon Township.....	Atlantic.....	John R. Steedman, Secretary.....	*	
Aquackanonk Township.....	Passaic.....	Chas. F. Hemmingway, Secretary, Clifton P. O.....	*	
Alexandria Township.....	Hunterdon.....	John C. Davis, Assessor, Little York.....	*	
Allamuchy Township.....	Warren.....	Benj. A. Hendershot, Clerk, Allamuchy.....	E. J. Hardin.....	Allamuchy.
Allendale Borough.....	Bergen.....	J. F. Ayres, Assessor, Alloway.....	*	
Alloway Township.....	Salem.....	George C. Cook, Andover.....	*	
Andover Township.....	Cape May.....	Harry McGinley, Clerk.....	*	
Angelsea Borough.....	Atlantic.....	D. C. Bowen, Clerk.....	*	
Asbury Park Borough.....	Monmouth.....	H. S. Scull, Secretary.....	A. T. Glenn.....	Atlantic City.
Atlantic City.....	Atlantic.....	E. H. Cook, Secretary.....	*	
Atlantic Highlands Town.....	Monmouth.....	Levi Scooby, Inspector, Scoobyville.....	*	
Atlantic Township.....	Monmouth.....	C. Garrabrant, Health Officer, New Gretna.....	Chalkley S. Cramer.....	New Gretna.
Bas River Township.....	Burlington.....	Dr. E. F. Hawley, Health Officer.....	Julius Foster.....	Jersey City.
Bay Head Borough.....	Ocean.....	Geo. F. Schmidt, Secretary.....	C. J. Rooney, Jr.....	
Bayonne City.....	Hudson.....	G. S. Butler, Assessor.....	*	
Beach Haven Borough.....	Ocean.....	H. L. Kennedy, Secretary, Gladstone.....	Wm Connolly.....	Belleville.
Bedminster Township.....	Somerset.....	Dr. D. M. Skinner, Health Officer, Belleville.....	F. P. Philbrick, Borough Clerk.....	Belmar.
Belleville Township.....	Essex.....	N. H. Miller, Clerk.....	*	
Belmar Borough.....	Warren.....	W. G. Purcell, Clerk.....	*	
Bevidere Town.....	Bergen.....	Adolph Kruger, Secretary, Carlstadt.....	Jake J. Linaherry.....	Blairstown.
Bergen Township.....	Bergen.....	J. Z. Demarest, Secretary.....	Wm. L. Johnson.....	Bloomfield.
Bergen Fields Borough.....	Bergen.....	J. A. Whittenack, Jr., Secretary, Mine Brook.....	*	
Berlins Township.....	Somerset.....	Henry Williams, Assessor, Bayville.....	*	
Berkley Township.....	Ocean.....	W. W. Swayze, Secretary, Glen Gardner.....	Wm H. Toir.....	
Bethlehem Township.....	Hunterdon.....	John Faux, Vineyard.....	H B Ford.....	
Beverly City.....	Burlington.....	Dr. B. F. Soby, Secretary.....	Chas McNabb.....	
Beverly Township.....	Burlington.....	Joseph B. Carter, Assessor, Delanco.....	Frank Herbert.....	
Blairstown Township.....	Warren.....	W. B. Slight, Clerk, Blairstown.....	Frank L. Hewitt.....	
Bloomfield Borough.....	Somerset.....	Dr. C. H. Bailey, Health Officer.....	*	
Bloomfield Township.....	Essex.....	R. C. Lybcker, Clerk, Hackensack.....	*	
Bogota Borough.....	Bergen.....	Geo H. Fitzpatrick, Secretary.....	*	
Boonton City.....	Morris.....	Joseph Stevenson, Assessor, Boonton.....	*	
Boonton Township.....	Morris.....	Dr. W. H. Shilps, Health Officer.....	*	
Bordentown City.....	Burlington.....	Wm Warrack, Secretary.....	*	
Bordentown Township.....	Burlington.....	W. S. Negin, Secretary.....	*	
Bound Brook Borough.....	Somerset.....	I. T. Schenck, Secretary, Readington.....	*	
Brackley Township.....	Somerset.....	Dr. W. K. Bradner, Health Officer.....	*	
Bradley Beach Borough.....	Monmouth.....	A. W. Pease, Assessor, Bursville.....	*	
Brandywine Township.....	Monmouth.....	Theo B Woodruff, Secretary.....	*	
Brick Township.....	Ocean.....	C. L. Vachon, Assessor, Somerville.....	*	
Bridgeport City.....	Cumberland.....	D. J. Lawrence, Clerk.....	*	
Bridge-water Township.....	Somerset.....			
Briarcliff Borough.....	Atlantic.....			

List of Sanitary Districts in the State of New Jersey—Continued.

SANITARY DISTRICT.	COUNTY.	NAME OF CLERK, SECRETARY OR HEALTH OFFICER, ALSO ADDRESS.	NAME OF REGISTRAR OF VITAL STATISTICS.	ADDRESS OF REGISTRAR.
Burlington City.....	Burlington.....	Dr. J. S. Adams, Secretary.....	J. F. Cline.....	Andover.
Burlington Township.....	Burlington.....	Elsworth Mount, Public Health Officer, Stanhope.....	D. W. Goble.....	Caldwell.
Byram Township.....	Sussex.....	Dr. C. C. Davison, Health Officer, Caldwell.....	Theodore Vincent.....	
Caldwell Borough.....	Essex.....	John F. B. Whitehorn, Health Officer, Verona.....	T. P. Varney.....	
Caldwell Township.....	Essex.....	Dr. W. B. Mesland, President.....	J. Ashton Williams.....	
Camden City.....	Camden.....	John W. Stevens, Secretary.....	Herman Foth.....	
Cape May City.....	Cape May.....	John August Richter, Health Officer.....	H. W. Young.....	Afton.
Cape May Point Borough.....	Cape May.....	John H. Jackson, Secretary, Magnolia.....	*	
Carlsbad Borough.....	Bergen.....	E. F. Snyder, Clerk.....	*	
Centerville Borough.....	Camden.....	Dr. G. W. Swaine, Health Officer, Chatham.....	Timothy Morton.....	Parry.
Cherry Hill Borough.....	Morris.....	Chas B. Hallaway, Assessor.....	E. S. Costello.....	
Chester Township.....	Burlington.....	Benj Rogers, Secretary, Moorestown.....	J. H. Martland.....	Annandale.
Chester Township.....	Burlington.....	H. P. Drake, Secretary, Chester.....	Austin Cramer.....	Annandale.
Chlor Township.....	Morris.....	Alex. Marcy, Jr., M.D., Secretary, Riverton.....	F. A. Brown.....	Mauricetown.
Chlor Township.....	Burlington.....	F. B. Bullman, Secretary, Railway.....	Wm. A. Frazer.....	Mauricetown.
Clark Township.....	Gloucester.....	H. G. Buckingham, M.D., Secretary.....	F. B. Whittle.....	Doerfield street.
Clark Township.....	Gloucester.....	H. G. Buckingham, M.D., Secretary.....	Elisah R. Parvin.....	Ellisburg.
Cliffside Park Borough.....	Bergen.....	J. H. Raas, Clerk, Edgewater.....	Wm. Graf.....	
Clinton Borough.....	Hunterdon.....	Chas. L. Crampton, Secretary.....	*	
Clinton Township.....	Hunterdon.....	C. Blake, Secretary, Irvington.....	*	
Clinton Township.....	Hunterdon.....	W. E. Berkaw, Secretary, Annandale.....	*	
Collingswood Borough.....	Camden.....	D. McElma, Mauricetown.....	*	
Commercial Township.....	Cumberland.....	Dr. J. L. Whitaker, Health Officer, Cranbury.....	*	
Cranbury Township.....	Middlesex.....	Edw. S. Crane, Secretary, Cranford.....	*	
Cresskill Borough.....	Union.....	J. B. Lansing, M.D., Secretary, Tenally.....	*	
Deerfield Township.....	Bergen.....	Jas M. Martin, Secretary, Deerfield Street.....	Wm. A. Frazer.....	
Deerfield Township.....	Sussex.....	Dr. C. C. Phillips, Secretary, Deerfield Street.....	F. B. Whittle.....	
Delaware Township.....	Camden.....	W. B. Jennings, M.D., Haddonfield.....	Elisah R. Parvin.....	
Delaware Township.....	Camden.....	Hiram D. Hoppock, Assessor, Sergeantsville.....	Wm. Graf.....	
Delran Township.....	Hunterdon.....	Robt. W. Babington, Riverside.....	*	
Delran Township.....	Burlington.....	Learnig M. Rice, Jr., Dennisville.....	*	
Dennis Township.....	Cape May.....	Wm. C. Cattel, Secretary, Wenonah.....	*	
Dempford Township.....	Morris.....	Jos V. Baker, Secretary.....	*	
Dover City.....	Ocean.....	Thos. B. Irons, Secretary, Toms River.....	*	
Downe Township.....	Ocean.....	Geo. E. Butcher, Secretary, Dividing Creek.....	Wm A. Sutes.....	Newport.
Dunellen Borough.....	Cumberland.....	P. W. Brakeley, M.D., Secretary.....	Chas. A. Cortell.....	West Creek.
Dunellen Borough.....	Middlesex.....	M. W. Reeves, M.D., Medical Officer, Tuckerton.....	Samuel P. Cramer.....	
Eagleswood Township.....	Ocean.....			

SANITARY DISTRICT.	COUNTY.	NAME OF CLERK, SECRETARY OR HEALTH OFFICER, ALSO ADDRESS.	NAME OF REGISTRAR OF VITAL STATISTICS.	ADDRESS OF REGISTRAR.
Easton town Township.....	Monmouth	Dr. E. W. Crater, Health Officer, Easton town.....	Frank Herbert.....	Bradley Beach.
Eastampton Township.....	Burlington	Jos. Powell, Jr., Smithville.....	Levi Holcombe.....	Ringoes.
East Amwell Township.....	Burlington	F. C. Young, M. D., Ringoes.....	*	
East Greenwich Township.....	Middlesex	Daniel Herbert, Secretary, Jamesburg.....	*	
East Orange Township.....	Essex	Charles Haines, Assessor, Mickleton.....	Geo. Hagelweide.....	
East Rutherford Borough.....	Bergen	Israel L. Dodd, East Orange.....	*	
East Windsor Township.....	Bergen	Martin Tyger, M. D.....	*	
Eastwood Borough.....	Bergen	Adolphus Messier, Hightstown.....	*	
Egg Harbor City.....	Atlantic	V. P. Hoffman, Secretary.....	A. R. Vickers.....	Bakersville.
Egg Harbor Township.....	Atlantic	W. H. Leeds, Bakersville.....	Jas. J. Manning.....	
Elizabeth City.....	Union	E. G. Putnam, Inspector.....	Hiram Van Meter.....	
Elk Township.....	Gloucester	Wm. H. Brown, Hardingville.....	*	
Englewood Township.....	Bergen	F. Wanzel, Secretary.....	G. C. Mulford.....	Fairton.
Englewood Cliff Borough.....	Bergen	Hesekiah Birtwhistle, Secretary.....	John Robison.....	Fanwood.
Englewood Township.....	Bergen	James W. Smith, Assessor, Salem.....	*	
Essex Township.....	Salem	Wm L. Brown, Assessor, Marton.....	*	
Evans Township.....	Burlington	James M. Matthews, Clerk, Trenton Junction.....	*	
Fairfield Township.....	Cumberland	H. B. Bamford, Fairton.....	*	
Fieldsboro Borough.....	Union	W. W. Westcott, M. D., Secretary, Fanwood.....	*	
Frankford Township.....	Burlington	William L. Furch, Clerk.....	*	
Florence Borough.....	Burlington	Geo. W. Phillips, Assessor, Branchville.....	*	
Franklin Township.....	Sussex	John W. Ackerman, Oakland.....	*	
Franklin Township.....	Bergen	Henry B. Munger, Nutley.....	Joshua C. Richman.....	Malaga.
Franklin Township.....	Gloucester	A. Smith, Malaga.....	*	
Franklin Township.....	Hunterdon	G. W. Snyder, Quaker town.....	W. F. Pursel.....	New Village.
Freehold Town.....	Somerset	Samuel Snyder, Assessor, East Millstone.....	R. V. Lawrence.....	
Freehold Township.....	Monmouth	J. O. Hurt, Secretary.....	E. W. Bloom.....	
Freehold Township.....	Warren	O. R. Cook, Nutley.....	David Paulin.....	
Frenchtown Borough.....	Warren	H. I. Cook, Parkboro.....	H. K. Benson.....	
Galloway Township.....	Hunterdon	O. K. Keger, Secretary.....	*	
Gloucester Township.....	Atlantic	Anthony Klotz, Secretary, Egg Harbor City.....	C. J. Rooney, Jr.....	Jersey City.
Glen Ridge Borough.....	Gloucester	M. J. Luffbar, M. D., Secretary, Glassboro.....	J. M. D. Gainwell.....	
Glen Rock Borough.....	Essex	J. Alexander Brown, Secretary.....	*	
Gloucester City.....	Bergen	John J. Storms, Clerk, Bridgewater.....	*	
Gloucester Township.....	Bergen	Daniel F. Lane, Secretary.....	*	
Green Township.....	Camden	M. J. Brown, Kirkwood.....	*	
Greenwich Township.....	Sussex	M. W. Northrop, Hunnsville.....	*	
Greenwich Township.....	Cumberland	Wm. H. French, Greenwisch.....	*	
Greenwich Township.....	Gloucester	Jacob Ballanger, Paulsboro.....	*	
Greenwich Township.....	Warren	Wm. Sherer, Secretary, Bloomsbury.....	*	
Guttenberg Town.....	Hudson	D. F. Jeffers, Secretary.....	*	
Hackensack City.....	Bergen	A. C. Postman, Secretary.....	*	
Hackettstown.....	Warren	Wm. H. Harrison, Secretary, Haddonfield.....	*	
Haddon Township.....	Camden	Wm. B. Jennings, M. D., Secretary, Haddonfield.....	*	
Haddonfield Borough.....	Camden	H. C. James, M. D., Mayor, Landing.....	*	
Hamilton Township.....	Atlantic		L. W. Fraimer.....	Maya Landing.

List of Sanitary Districts in the State of New Jersey—Continued.

SANITARY DISTRICT.	COUNTY.	NAME OF CLERK, SECRETARY OR HEALTH OFFICER, ALSO ADDRESS.	NAME OF REGISTRAR OF VITAL STATISTICS.	ADDRESS OF REGISTRAR.
Hamilton Township.....	Mercer	Geo. R. Robbins, Hamilton Square.....	J. Lewis O'Donnell.....	
Hamorton Town.....	Atlantic	Dr. Edward North.....	*	
Hamorton Township.....	Atlantic	Dr. Edward North.....	*	
Hampton Township.....	Sussex	Frank Emmans, Newton.....	*	
Hanover Township.....	Morris	Jos. H. Basdeo, Boonton.....	*	
Hardwick Township.....	Warren	Phillip S. Savercool, Assessor, Hardwick.....	Cornelius Pittenger.....	Harmony.
Hardyston Township.....	Sussex	Horace Rude, Secretary.....	*	
Harmony Township.....	Warren	J. D. Dewitt, Inspector, Harmony.....	*	
Harrington Township.....	Hudson	R. N. Sneed, Northvale.....	*	
Harrison Town.....	Hudson	Peter J. Goodman, Secretary.....	A. D. Baird.....	Frankfort.
Harrison Township.....	Gloucester	Ed Heritage, Secretary, Richwood.....	*	
Hatsonek Heights Borough.....	Bergen	John De Kean, Clerk.....	*	
High Bridge Township.....	Hunterdon	I. H. Hummer, Secretary, High Bridge.....	*	
Hightstown Borough.....	Mercer	Fred B. Applegate, Inspector.....	*	
Hightown Township.....	Warren	Dr. W. H. Merrill, Secretary, South Branch.....	*	
Hoboken City.....	Somerset	James Harrison, Clerk.....	*	
Hoboken Township.....	Hudson	John Ackerman, Secretary, Wyckoff.....	*	
Hockanigton Township.....	Hudson	Wm. A. Strawn, Assessor, Reidsville.....	Martin L. Harrison.....	Keyport.
Holly Beach Borough.....	Cape May	Peter Farrell, Secretary.....	Anton Longstaffe.....	Hope.
Honick Township.....	Warren	H. G. Cook, M. D., Health Officer, Hope.....	*	
Hopewell Township.....	Warren	Dr. John Miller, Health Officer, Hope.....	*	
Hopewell Township.....	Mercer	P. Phelan, Secretary.....	*	
Hopewell Township.....	Cumberland	Walter U. Minch Shiloh.....	*	
Hopewell Township.....	Hudson	W. D. Hunt, Secretary, Harborton.....	*	
Hopewell Township.....	Monmouth	James H. Butcher, Ardens.....	*	
Hopewell Township.....	Hudson	C. J. Rooney, Jr., Clerk, Jersey City.....	*	
Independence Township.....	Warren	C. H. Albertson, Vienna.....	*	
Irington Village.....	Essex	Wm. Laird, Secretary.....	*	
Jackson Township.....	Ocean	A. R. Crammer, Assessor.....	*	
Jackson Township.....	Ocean	W. S. Hendrickson, Assessor, Jackson's Mill.....	*	
Jefferson Township.....	Morris	Chas Chamberlain, Milton.....	*	
Jersey City.....	Hudson	D. J. Benjamin.....	C. J. Rooney, Jr.....	Jersey City.
Junction Borough.....	Hunterdon	F. E. Riddle, Clerk.....	*	
Kearny Township.....	Hudson	J. A. Epton, M. D., Arlington.....	C. J. Rooney, Jr.....	Jersey City.
Keystone Town.....	Hudson	Abraham Huyler, Secretary.....	*	
Kingswood Township.....	Monmouth	S. J. Snyder, Secretary, Locktown.....	*	
Knowlton Township.....	Hunterdon	Woodley Bruger, Secretary, Columbia.....	B. F. Holmes.....	Forked River.
Lacey Township.....	Ocean	B. F. Matthews, Secretary, Forked River.....	*	
Lafayette Township.....	Sussex	Nelson Ackerson, Lafayette.....	R. B. Robbins.....	Lakewood.
Lakewood Township.....	Ocean	Dr. H. M. Cate, Lakewood.....	*	
Lambertville City.....	Hunterdon	M. W. Robinson, Clerk.....	*	

SANITARY DISTRICT.	COUNTY.	NAME OF CLERK, SECRETARY OR HEALTH OFFICER, ALSO ADDRESS.	NAME OF REGISTRAR OF VITAL STATISTICS.	ADDRESS OF REGISTRAR.
Landis Township.....	Cumberland.....	O. H. Adams, M.D., Vineland.....	Ellen H. Foote.....	Vineland.
Lavallette Borough.....	Ocean.....	Geo. F. Willis, Clerk.....	Chas. C. Foster.....	Cedarville.
Lawrence Township.....	Cumberland.....	F. M. Bateman, M.D., Cedarville.....	.....	.....
Lebanon Township.....	Mercer.....	J. B. Baker, Secretary, Lawrence Station.....	.....	.....
Leesburg Borough.....	Hunterdon.....	A. S. Banghart, Secretary, Glen Gardner.....	.....	.....
Leonia Borough.....	Cumberland.....	H. M. Thompson, Secretary, Leonia.....	J. T. Wyckoff.....	Leonia.
Linden Borough.....	Union.....	John A. Ehrig, Secretary, Linden.....	J. C. Jenson.....	Linden.
Linnwood Borough.....	Union.....	Jas. Farish Clerk, Secretary, Linden.....	.....	.....
Little Egg Harbor Township.....	Atlantic.....	Theo. T. Price, M.D., Tuckerton.....	Alfred Palmer.....	Tuckerton.
Little Ferry Borough.....	Passaic.....	Elmore W. Mohr, of Secretary.....	R. W. Furbeck.....	Little Falls.
Livingstone Township.....	Bergen.....	G. E. De Camp, Secretary, Roseland.....	.....	.....
Lodi Borough.....	Bergen.....	Jacob Vanhook, Secretary, Lodi.....	.....	.....
Lodi Township.....	Bergen.....	J. Priest, Woodridge.....	.....	.....
Logan Township.....	Gloucester.....	E. T. Olyphant, M.D., Secretary, Bridgeport.....	J. Clark Helms.....	Repaupo.
Lopatcong Township.....	Warren.....	E. B. Blaisdel, Secretary.....	.....	.....
Lower Alloways Creek Township.....	Warren.....	Francis B. Harris, Canton.....	.....	.....
Lower Penns Neck Township.....	Salem.....	Wm. H. James, M.D., Pennsville.....	Edward F. Brown.....	Canton.
Lower Township.....	Cape May.....	Dr. R. W. Lake, Green Creek.....	Sphraim Fowler.....	Pennsville.
Lumberton Borough.....	Burlington.....	Wm. C. Parry, M.D., Hainesport.....	Wm. C. Rutherford.....	Hainesport.
Madison Borough.....	Middlesex.....	C. E. Cook, Secretary.....	H. D. Cullin.....	.....
Madison Township.....	Middlesex.....	D. H. Brown, Secretary, Brownstown.....	.....	.....
Manalapan Township.....	Monmouth.....	W. H. Reid, Chairman, Tenent.....	Samuel C. Brown.....	Tennot.
Manasquan Town.....	Monmouth.....	Edwin P. Longstreet, Tenent.....	.....	.....
Manchester Township.....	Passaic.....	Frank Brover, M.D., Inspector, Manchester.....	O. C. Johnson.....	Manchester.
Manchester Township.....	Salem.....	Dr. S. Uiter, Inspector, North Paterson.....	Wm. B. Herduth.....	Paterson.
Mansfield Township.....	Burlington.....	Samuel P. Allen, Assessor, Salem.....	.....	.....
Mansfield Township.....	Warren.....	E. A. Ingling, Columbus, Salem.....	Thomas A. Keeler.....	Columbus.
Martha Township.....	Gloucester.....	James Beaty, Assessor, Stephensburg.....	D. S. Fancoust.....	Pittman Grove.
Marlboro.....	Monmouth.....	E. Z. Hillegas, M.D., Inspector, Manuia.....	.....	.....
Matawan Township.....	Monmouth.....	Wm. Corson, Secretary, Matawal.....	Chas. A. Gran.....	Matawan.
Maurice River Township.....	Cumberland.....	S. M. Wilson, M.D., Leesburg.....	Henry Reeves.....	Leesburg.
Meywood Borough.....	Bergen.....	Phillip Thomas.....	.....	.....
Medford Township.....	Burlington.....	Dr. J. Reeves, Secretary, Medford.....	Wm. M. Potts.....	Medford.
Mendham Township.....	Morris.....	J. R. Stiger, M.D., Inspector, Mendham.....	Wm. B. Bowman.....	Mendham.
Merchawille Borough.....	Camden.....	D. H. Hartline, M.D.....	.....	.....
Middle Township.....	Cape May.....	S. H. Townsend, Secretary, Burleigh.....	W. B. Stewart, Borough Clerk.....	.....
Middletown Township.....	Monmouth.....	Geo. Brannin, Secretary, Atlantic Highlands.....	.....	.....
Middle Township.....	Bergen.....	H. S. Jones, M.D., Oradell.....	Nicholas G. Hopper.....	Ridgewood.
Milford Township.....	Bergen.....	John D. Parkhurst, Inspector, Millburn.....	John M. Drake.....	Millburn.
Millburn Township.....	Essex.....	Geo. J. Ely, Secretary, Ferritville.....	.....	.....
Millstone Township.....	Camden.....	P. H. Hogate, Secretary.....	.....	.....
Millville City.....	Gloucester.....	Clayton B. Tice, Secretary, Williamsburg.....	.....	.....
Monroe Township.....	Middlesex.....	Chas. G. Hoffman, Assessor, Jamesburg.....	.....	.....
Montague Township.....	Sussex.....	Wm. P. Hornbeck, Montague.....	.....	.....

List of Sanitary Districts in the State of New Jersey—Continued.

SANITARY DISTRICT.	COUNTY.	NAME OF CLERK, SECRETARY OR HEALTH OFFICER, ALSO ADDRESS.	NAME OF REGISTRAR OF VITAL STATISTICS.	ADDRESS OF REGISTRAR.
Montclair Town.....	Essex.....	Dr. R. P. Francis.....	Harrie Trippett.....	Harlingen.
Montgomery Township.....	Somerset.....	John S. Houghland, Griggstown.....	A. S. Dixon.....	.....
Montvale Borough.....	Bergen.....	Edward Brown, Clerk.....	.....	.....
Monville Township.....	Morris.....	B. A. W. Van Dyne, Glenview.....	.....	.....
Moorestown Borough.....	Burlington.....	Benj. Rogers, Secretary.....	.....	.....
Morrisown City.....	Morris.....	Thomas Ward, Clerk, Morrisown.....	.....	.....
Morris Township.....	Morris.....	Wm. J. L. Taylor, Health Officer.....	Cyrus E. Cook.....	Bartley.
Mount Arlington Borough.....	Burlington.....	W. J. L. Tancock, Assessor, Hartford.....	.....	.....
Mount Laurel Township.....	Morris.....	C. N. Miller, M.D., Flinders.....	Aug. H. Bartley.....	.....
Mount Olive Township.....	Morris.....	Chas. E. Fisher, Secretary.....	.....	.....
Mount Labor Borough.....	Atlantic.....	John F. Irving, Elwood.....	W. W. Phillips.....	Elwood.
Mullica Township.....	Monmouth.....	S. A. Oliver, Secretary, Asbury Park.....	.....	.....
Newark City.....	Essex.....	Dr. Chas. Lehbach, Health Officer.....	Lewis J. Wendell.....	.....
New Barbadoes.....	Essex.....	Howard McFadden, Hackensack.....	George J. Litterest.....	Wrightstown.
New Brunswick City.....	Middlesex.....	Dr. A. V. N. Baldwin, Health Officer.....	Benjamin Romaine.....	.....
New Brunswick Township.....	Burlington.....	Amos Shaw, M.D., Jacobstown.....	.....	.....
New Market Borough.....	Middlesex.....	A. M. Cory, M.D., Inspector, New Providence.....	.....	.....
New River Township.....	Union.....	Geo. Hardin, Assessor, Newton.....	M. H. Grohn.....	Mount Holly.
New York Township.....	Sussex.....	H. B. Dill, Secretary, Mount Holly.....	C. J. Rooney.....	Jersey City.
Northampton Township.....	Burlington.....	F. E. Riva, M.D., Inspector, Milltown.....	John A. Wines.....	Milltown.
North Bergen Township.....	Hudson.....	Dr. J. H. Carnan, Secretary.....	.....	.....
North Plainfield Borough.....	Middlesex.....	J. H. Cooley, M.D., Plainfield.....	.....	.....
North Plainfield Township.....	Somerset.....	John Middleton, President.....	.....	.....
North Spring Lake Borough.....	Monmouth.....	Harvey B. Duncan, Secretary, Nutley.....	E. A. Burgeos.....	.....
Nutley Borough.....	Essex.....	Wm. Lake, Secretary.....	.....	.....
Ocean City Borough.....	Cape May.....	Dr. J. H. Alday, Health Officer.....	.....	.....
Ocean Township.....	Monmouth.....	J. H. Wilkins, Assessor, Waretown.....	H. A. Brinley.....	Long Branch.
Ocean Township.....	Monmouth.....	W. E. Newing, M.D., Inspector, Pedricktown.....	Levi C. Justice.....	Pedricktown.
Oldmans Township.....	Salem.....	John P. Richards, Secretary, Pedricktown.....	Garret F. Herring.....	Riverdale.
Old Tappan Borough.....	Bergen.....	Dr. F. J. E. Tetreault, Health Officer.....	Alpheus Struble.....	.....
Orville Township.....	Bergen.....	Chas. W. Badeau, Allendale.....	George E. Halstead.....	Saddle River.
Oxford Township.....	Bergen.....	L. B. Hoagland, M.D., Secretary, Oxford.....	David Trimmer.....	Oxford.
Palaquary Township.....	Warren.....	Fletcher Fuller, Calno.....	.....	.....
Palmers Borough.....	Bergen.....	D. D. Blauvelt, Schraalenburg.....	.....	.....
Park Ridge Borough.....	Burlington.....	Lewis Sharp, M. D., Palmyra.....	F. Blackburn.....	.....
Passaic City.....	Passaic.....	Dr. Eugene Tehl, President.....	A. M. Crotty.....	.....
.....	.....	W. J. Van Schot, M.D., Secretary.....	Cornelius Vander Ploog.....	.....

SANITARY DISTRICT.	COUNTY.	NAME OF CLERK, SECRETARY OR HEALTH OFFICER, ALSO ADDRESS.	NAME OF REGISTRAR OF VITAL STATISTICS.	ADDRESS OF REGISTRAR.
Passaic Township.....	Passaic.....	F. L. Hendrickson, Secretary, New Vernon.	John T. Pollitt.....*	New Market.
Paterson City.....	Passaic.....	Jos. B. Mills, Secretary.....	.....	.....
Pemberton Borough.....	Burlington.....	J. B. Henkins.....	.....	.....
Pemberton Township.....	Burlington.....	Jos. L. Budd, Pemberton	.....	.....
Pennsauken Borough.....	Camden.....	H. E. Hornor, Assessor, Merchantville.	.....	.....
Pennsauken Township.....	Camden.....	Geo. Kelley, Borough Clerk.....	.....	.....
Perth Amboy City.....	Morris.....	Robert C. Getty, Assessor, Butler.	.....	.....
Phillipsburg City.....	Warren.....	Dr. G. W. Tyrrell, Health Officer.....	Wm. King, Jr.....*	.....
Pilesgrove Township.....	Middlesex.....	Frank Kneadler, Secretary.....	.....	.....
Piscataway Township.....	Salem.....	C. H. Richman, Secretary, Woodstown.	Chas. E. Kelly.....*	.....
Pittsgrove Township.....	Salem.....	W. J. Wilford, M. D., New Market.....	.....	.....
Plainfield City.....	Union.....	Lewis Whitaker, Assessor, Centerton.	.....	.....
Plainfield Township.....	Union.....	H. O. Newman, Secretary.....	.....	.....
Plainfield Township.....	Union.....	R. M. Sooy, M. D.....	Samuel Bartlett.....*	.....
Pohatcong Township.....	Ocean.....	Daniel W. Bussam, Assessor, New Egypt.	.....	.....
Point Pleasant Borough.....	Warren.....	R. T. Crouse, Assessor, Finesville.	.....	.....
Pompton Borough.....	Ocean.....	James T. Havens, Assessor.....	.....	.....
Pompton Township.....	Passaic.....	John O. Walls, Borough Clerk, Pompton Lakes.	.....	.....
Princeton Borough.....	Passaic.....	John F. Cisco, Butler.....	.....	.....
Princeton Township.....	Mercer.....	Dr. H. E. Wright, President.....	A. A. Peam.....*	Pompton.
Princeton Township.....	Mercer.....	Wm. L. Bringer, Clerk, Princeton.....	H. H. Farr, Borough Clerk.....*	.....
Quinton Township.....	Salem.....	John F. Anderson, Assessor, Quinton.....	.....	.....
Rahway City.....	Union.....	S. R. Kyno, Secretary.....	.....	.....
Randolph Township.....	Morris.....	F. H. Tipton, Assessor, Dover.....	.....	.....
Raritan Borough.....	Somerset.....	Wm. Killiger, Secretary.....	.....	.....
Raritan Township.....	Hunterdon.....	Dr. John H. Ewing, Health Officer, Flemington.....	.....	Flemington.
Raritan Township.....	Middlesex.....	Benj. Kelly, Assessor, Menchen.....	.....	.....
Raritan Township.....	Monmouth.....	A. F. Bodie, Assessor, Keyport.....	.....	.....
Readington Township.....	Hunterdon.....	Dr. W. W. Purcell, White House.....	.....	Barley Sheaf.
Red Bank Town.....	Monmouth.....	Samuel Sabath, Secretary.....	.....	.....
Ridgefield Borough.....	Bergen.....	Samuel E. Stohr, Secretary.....	.....	.....
Ridgefield Park Village.....	Bergen.....	Dr. Hungerfort J. Lee.....	.....	.....
Ridgefield Township.....	Bergen.....	Thomas Terhune, H. Hokkus.....	.....	.....
Ridgewood Township.....	Bergen.....	Geo. M. Ockford, M. D.....	.....	.....
Riverside Borough.....	Bergen.....	Frederick Crum, Secretary.....	.....	.....
Rockaway Borough.....	Burlington.....	Dr. Alex. Macy, Jr.....	.....	.....
Rockaway Township.....	Morris.....	Wm. May, Secretary.....	.....	.....
Roselle Borough.....	Morris.....	F. W. Flisage, M. D., Rockaway.....	.....	.....
Roxbury Township.....	Union.....	Dr. W. C. Person, M. D., Rockaway.....	.....	.....
Rutherford Township.....	Morris.....	F. M. Flowers, Assessor, Landing.....	G. A. Rawlins.....	.....
Saddle River Borough.....	Bergen.....	S. E. Armstrong, M. D., Dayton.....	.....	.....
Saddle River Township.....	Bergen.....	T. Nelson Woodruff, Clerk.....	.....	.....
Salem City.....	Salem.....	Peter J. Smith, Secretary, Rochelle Park.....	.....	.....
Sayreville Borough.....	Middlesex.....	Union Bowen, Secretary.....	.....	.....
Schrambach Borough.....	Middlesex.....	John J. Van Sickle, Assessor, Layton.....	.....	.....
Sea Isle City Borough.....	Bergen.....	Dr. J. H. Beckman.....	.....	.....
.....	Calx. May.....	Dr. J. H. Beckman.....	.....	.....
.....	Calx. May.....	Jos. D. Norwom, Secretary.....	.....	.....

List of Sanitary Districts in the State of New Jersey—Continued.

SANITARY DISTRICT.	COUNTY.	NAME OF CLERK, SECRETARY OR HEALTH OFFICER, ALSO ADDRESS.	NAME OF REGISTRAR OF VITAL STATISTICS.	ADDRESS OF REGISTRAR.
Shamong Township.....	Burlington.....	W. S. Haines, Tabernacle.....	.....	.....
Shrewsbury Township.....	Monmouth.....	A. C. Harrison, Secretary, Red Bank.	.....	.....
Somers Point Borough.....	Atlantic.....	N. D. Vaughan.....	.....	.....
Somerville Borough.....	Somerset.....	Dr. A. L. Stillwell, President.....	.....	.....
South Amboy Borough.....	Middlesex.....	J. T. Fulton, Clerk.....	.....	.....
Southampton Township.....	Burlington.....	G. S. Woolman, Vincentown.....	.....	.....
South Atlantic City Borough.....	Atlantic.....	Chas. Hart.....	.....	.....
South Brunswick Township.....	Middlesex.....	Edgar Carroll, M. D., Dayton.....	.....	.....
South Harrison Township.....	Gloucester.....	S. F. Stanger, M. D., Harrisonville.....	.....	.....
South Orange Village.....	Essex.....	Theo. C. Baker, Maplewood.....	.....	.....
Sparta Township.....	Sussex.....	Dr. Andrus Sparta.....	.....	.....
Springfield Township.....	Burlington.....	Aaron H. Burtis, Assessor, Mt. Holly.....	.....	.....
Springfield Township.....	Union.....	T. W. Harris, M. D., Springfield.....	.....	.....
Spring Lake Borough.....	Monmouth.....	J. Stults, Secretary.....	.....	.....
Stafford Township.....	Ocean.....	John B. Courtney, Assessor, Manakawken.....	.....	.....
Stillwater Township.....	Sussex.....	J. S. Odyke, Secretary, Stillwater.....	.....	.....
Stockton Town.....	Camden.....	Dr. Grumbrecht, Health Officer, Stockton.....	.....	.....
Stow Creek Township.....	Cumberland.....	E. B. Sharp, M. D., Roadstown.....	.....	.....
Summit Township.....	Union.....	Dr. W. H. Risk, Health Officer, Summit.....	.....	.....
T-aneck Borough.....	Bergen.....	J. B. W. Lansing, M. D.....	.....	.....
Tenafly Borough.....	Bergen.....	Dr. Theo. Miller, Califon.....	.....	.....
Tewksbury Township.....	Hunterdon.....	Wm. Cloke, Secretary.....	.....	.....
Trenton City.....	Bergen.....	Alex. J. Davis, Secretary, Kingsland.....	.....	.....
Union Township.....	Hudson.....	Morris Stockton, Secretary, Patenburgh.....	.....	.....
Union Township.....	Hunterdon.....	E. R. Willis, Assessor, Barnegat.....	.....	.....
Union Township.....	Ocean.....	D. Hobart Sayre, Secretary, Union.....	.....	.....
Union Township.....	Monmouth.....	Dr. F. C. Price, Secretary, Imaysstown.....	.....	.....
Upper Freehold Township.....	Salem.....	Geo. W. Hewitt, Secretary, Pennsgrove.....	.....	.....
Upper Pennus Neck Township.....	Salem.....	G. W. H. Fitch, M. D., Secretary.....	.....	.....
Upper Pittsgrove Township.....	Bergen.....	John J. Hopper, Clerk, Saddle River.....	.....	.....
Upper Saddle River Borough.....	Essex.....	F. V. Diefenthaler, Secretary.....	.....	.....
Upper Township.....	Essex.....	Carlos Allen, M. D., Vernon.....	.....	.....
Vailsburg Borough.....	Sussex.....	H. R. Whitehorn, M. D., Inspector, Verona.....	.....	.....
Vernon Township.....	Essex.....	John S. Hulse, Secretary.....	.....	.....
Vineyard Borough.....	Cumberland.....	Conrad Kruger, Clerk, Passaic.....	.....	.....
Wallington Township.....	Bergen.....	Dr. W. W. Trout, Health Officer, Spring Lake.....	.....	.....
Wall Township.....	Monmouth.....	.....	.....	.....

Walpack Township.....	J. W. Bunnell, Assessor, Walpack Centre.	Warrenville.
Wantage Township.....	S. M. Purcell, Assessor, Deckertown.	Peter Newmiller.
Warren Township.....	F. J. Zeglio, M.D., Warrenville.	Minor F. Beatty.
Washington Borough.....	Wm. Sittes, M.D.	
Washington Township.....	W. W. Banta, Hillsdale.	
Washington Township.....	A. E. Koster, Green Bank.	Chas. D. Nicholson.
Washington Township.....	C. B. Phillips, M.D., Secretary, Hurfville.	
Washington Township.....	J. E. Hutchinson, Secretary, Windsor.	
Washington Township.....	Edward Sutton, Inspector.	Jacob Hahn.
Washington Township.....	C. B. Smith, M.D., Inspector, Washington.	Chas. S. Dairympic.
Washington Township.....	M. D. Beckley, Assessor, Berlin.	
Wayne Township.....	G. V. Zelf, Secretary, Paterson.	
Westawten Township.....	J. B. Hilyard, Rancocas.	C. J. Rooney, Jr.
Weston Township.....	J. B. Silvaria, M.D., Kingoes.	Jersey City.
West Amwell Township.....	W. G. Blattner, Clerk, Cape May City.	Relo Lake.
West Cape May Borough.....	Mark Clement, Secretary, Woodbury.	West Orange.
West Deptford Township.....	J. M. C. Marsh, Secretary, Westfield.	
Westfield Township.....		
West Haddon Township.....	Celestine Tittle, Secretary.	
West Milford Township.....	Wm. M. Brien, M.D., West Orange.	
West Orange Township.....	Chas. H. Mather, Assessor, Princeton Junction.	
West Windsor Township.....	J. M. Planck, Clerk.	
Westwood Township.....	Wm. H. Campbell, Scullyville.	
Weymouth Township.....	C. Ernest Fox, Clerk, Trenton.	
Wilbur Borough.....	Wm. R. Prentiss, Borough Clerk, Wildwood.	
Willowbrook Township.....	James E. Stokes, Rancocas.	
Windsor Township.....	M. G. Burdall, Wilton.	
Woodbridge Township.....	S. F. Freeman, M.D., Woodbridge.	Woodbridge.
Woodbury Township.....	T. E. Parker, M.D., Inspector.	
Woodcliff Borough.....	Richard Storms, Clerk.	James V. Freeman.
Woodland Township.....	George Bozarth, Buchanan.	D. T. Mathers, City Clerk.
Wood Ridge Borough.....	W. H. White.	
Woodstown Borough.....	C. H. Richman.	W. H. White, Registrar.
Woodwith Township.....	H. F. Buzby, M.D., Secretary, Swedesboro.	Samuel A. Va.
		Swedesboro.

LICENSING MILK DEALERS.

An act approved March 10th, 1882, provides that the Common Council, or other governing body of any city, borough or seaside resort, may require that all persons who are engaged in the business of selling milk shall pay an annual license fee for the privilege of conducting said business, and a penalty not exceeding fifty dollars may be fixed for selling milk without having first obtained a license.

The law further provides that at least two-thirds of the sum collected from said license fees shall be expended in paying the salary of a competent milk inspector. The duties of the milk inspectors appointed under this act shall be to keep a record of all daily doings or proceedings as inspector, giving a full account of each inspection or examination of milk made by him, including the name of the person, firm or corporation owning or claiming to own the milk inspected, the name of the agent in charge, the place and manner in which the said milk was offered for sale, together with the result of each test and analysis, and such other duties as the municipal corporation by which he was appointed may require. He should know the quantity of milk sold by each dealer, and where the milk is produced. His records should show how the milk is stored in each depot, whether the cans and utensils are sufficiently washed and scalded to thoroughly cleanse them, and whether the water supply of the depot is wholesome or polluted.

Few municipalities have availed themselves of the benefits which may be derived from the enforcement of this law, and this fact may be accounted for by the fact that its execution is placed in the hands of the governing body of municipalities instead of being intrusted to local boards of health. But doubtless the health board of any of the specified municipalities can secure the operation of the law in their own district by bringing the matter to the attention of the mayor and council, board of commissioners or other proper authority.

TO PREVENT THE SPREAD OF DISEASE BY MILK.

Local boards of health have authority, under Chapter LXVIII, Laws of 1887, to make ordinances to prevent the sale of milk which is contaminated by exposure to the infection of disease, and heretofore this authority has been resting altogether in the hands of local boards.

During the year 1894 an outbreak of typhoid fever occurred in Essex county which could have been arrested after the appearance of the first case if the local health board had been prepared to act, but no suitable action was taken and as a consequence one hundred and fifteen cases of the disease developed in the locality, one hundred and seven of these persons having partaken of milk which was produced on the farm where the disease first appeared. Fifteen deaths attended this epidemic.

During the past winter the Legislature passed the following act, which gives coordinate authority to the State Board of Health:

CHAPTER CCLXXIV.

A FURTHER SUPPLEMENT to an act entitled "An act to establish in this state boards of health and a bureau of vital statistics, and to define their respective powers and duties," approved March thirty-first, one thousand eight hundred and eighty-seven.

1. BE IT ENACTED by the Senate and General Assembly of the State of New Jersey, That when the state board of health, or any officer thereof, duly authorized in writing by such board to act for or on behalf of said board, shall have reason to believe that

any milk has been contaminated by the emanations, exhalations or discharges of any person sick with communicable disease, it shall be lawful for the said state board of health, or the officer so authorized to act in the premises, to prohibit the transportation or sale of any milk suspected to be contaminated as aforesaid, and also to prohibit the transportation or sale of any milk which may be produced, stored, kept or found upon any premises infected by such disease; such prohibition shall continue until the state board of health, or the officer authorized to act in the premises as aforesaid, shall in writing remove such prohibition.

2. *And be it enacted*, That any person or persons who shall transport or sell any milk the sale and transportation of which has been prohibited, pursuant to the provisions of the first section of this act, shall be liable to a penalty of fifty dollars, to be recovered by the state board of health in an action upon contract for the uses of the state of New Jersey in any court of record within said state.

3. *And be it enacted*, That this act shall take effect immediately.

Approved March 28th, 1895.

This act does not lessen the responsibility of local boards of health nor in any respect relieve them of the duty of making and executing ordinances to prevent the spread of disease by milk. It only provides a method whereby the citizens of the State may be protected in cases where local boards fail to take advantage of the privileges accorded them by the laws.

MILK INSPECTION.

The State Dairy Commissioner, Mr. George W. McGuire, has recently conducted a series of inspections on different lines from any heretofore undertaken by his department. His agents have visited various towns, and in each case the following course has been pursued:

The name of each milk dealer is obtained and the cleanliness of his depot, wagons, cans and utensils is noted. The source of the water-supply for the washing of cans is also observed, and if it is suspicious a sample is sent to the chemist for examination.

All sources of the milk-supply are then inquired into. Each premise where milk is produced, for sale in the town, is visited.

The following blank is used in making the report of these inspections:

NEW JERSEY DAIRY COMMISSION.

INSPECTION OF DAIRIES.

Date 189 Name of place.....
 County..... Township.....
 1. Name of owner or manager.....
 2. Number of cows..... 3. Breed.....
 4. Condition of cows.....
 5. Food.....
 6. Condition of stable.....
 7. How is manure stored?.....
 8. Condition of stable-yard.....
 9. Quantity of milk produced.....
 10. Where is milk stored?.....
 11. How is milk cooled?.....
 12. Temperature of milk when sold to customers.....
 13. Water-supply for watering stock.....
 14. Water-supply for washing cans and utensils.....
 15. Location of wells and springs.....
 16. Distance from well to stable-yard.....; to cesspool.....; to privy-vault.....
 17. Was sample of water taken for analysis?..... No.....
 18. Is there any sickness among the persons dwelling or employed on the premises?.....
 Signature of Inspector.....

Copies of all reports are sent to the State Board of Health, and in cases where the sanitary conditions on any depot or dairy premises are found to be defective, or where polluted water is in use, or where diseased animals are discovered, the remedy provided for by law is applied. After ten days a re-inspection is made to learn whether the dangerous conditions have been removed.

COMMUNICABLE DISEASES.

Incubation Periods and Duration of Infectiousness.*

DIPHTHERIA.

Incubation period.—Least, unknown; average, two days; greatest, seven days.

Duration of quarantine for observation.—Seven days from last exposure to infection.

Infective period.—From the commencement of symptoms during the whole period of the illness and convalescence, and until repeated bacteriological examinations show that the specific bacillus has disappeared. The bacillus persists in the mouth and throat for a considerable time after the false membrane has vanished. It is not safe, therefore, to permit patients who have recovered, even although their tonsils appear healthy, to mingle with other persons until at least fourteen days shall have elapsed since disappearance of the membrane.

Sources of infection—

1. From a previous case of diphtheria.
2. From a case of apparently simple tonsillitis or sore throat.
3. From a case of apparently simple nasal ulceration.
4. From domestic animals (cats, pigeons, fowls) suffering from a throat affection.
5. From infected cow's milk.
6. From infected bedding, clothes, carpets, curtains, books, toys, drinking cups, spoons, forks, lead pencils, &c.
7. From a person who has been in contact with a diphtheria patient, but who has not himself contracted the disease.

SCARLET FEVER.

Incubation period.—Least, less than twenty-four hours; average, one to three days; greatest, seven days.

Duration of quarantine for observation.—Seven days from last exposure to infection.

Infective period.—From the earliest appearance of symptoms (usually sore throat) until all desquamation has ceased.

Sources of infection—

1. From a previous case of scarlet fever.
2. From a case of sore throat without discoverable rash, but really a mild form of the disease.
3. From infected milk.
4. From infected books, toys, dishes, garments, &c.

* Compiled mainly from "Infectious Diseases," by Louis C. Parks, M.D., London, 1894.

† The incubation period is the period between the exposure to infection and the first appearance of symptoms of illness.

MEASLES.

Incubation period.—Least, four days; average, nine to ten days; greatest, fourteen days.

Quarantine.—Fifteen days from last exposure to the infection.

Infective period.—From the earliest appearance of symptoms until convalescence is well established. The catarrhal stage preceding the eruption is very infectious.

Sources of infection—

1. From a previous case of measles.
2. From infected bedding, clothes, carpets, curtains, books, toys, &c.

MUMPS.

Incubation period.—Least, fourteen days; average, twenty-one days; greatest, twenty-five days.

Quarantine.—Twenty-five days from last exposure to infection.

Infective period.—From the onset of the prodromal stage (which may last three or four days) and for two or three weeks subsequent to the appearance of the parotitis. The chance of the infection being propagated diminishes progressively from the onset of the parotitis.

Sources of infection—

1. From a previous case of mumps.
2. From infected articles.

GERMAN MEASLES.

Incubation period.—Least, five days; average, eighteen days; greatest twenty-one days.

Quarantine.—Twenty-one days from last exposure to infection.

Infective period.—From the onset of the prodromal or pre-eruptive stage until the cessation of desquamation.

Sources of infection—

1. From a previous case of German measles.
2. From infected articles.

INFLUENZA.

Incubation period.—Least, less than twenty four hours; average, three to four days; greatest, five days.

Quarantine.—Five days from last exposure to infection.

Infective period.—From the earliest onset of the symptoms until convalescence is well established.

Sources of infection—

1. From a previous case of influenza.
2. From infected articles.

WHOOPIG-COUGH.

Incubation period.—Least, seven days; average, not determined; greatest, twenty-one days.

Quarantine.—Twenty-one days from last exposure to the infection.

Infective period.—During the whole of the illness from the onset of the earliest catarrhal symptoms.

Sources of infection—

1. From a previous case of whooping-cough.
2. From infected articles.

SMALL-POX.

Incubation period.—Least, nine days; * average, twelve days; greatest, fifteen days.

Quarantine.—Fifteen days from date of last exposure to infection.

Infective period.—From the onset of initial symptoms until all scabs have been removed. The period of greatest infectivity is during the acute stage (vesicular and pustular). During the initial illness, and until the appearance of the rash, the liability to impart infection is not great; therefore, isolation of a case very shortly after the appearance of the eruption, when associated with measures of vaccination, re-vaccination and disinfection, is very commonly effective in preventing further spread of the disease.

Sources of infection—

1. From a previous case of the disease.
2. From infected articles.

CHICKEN-POX.

Incubation period.—Least, thirteen days; average, fourteen days; greatest, nineteen days.

Quarantine.—Nineteen days from date of last exposure to infection.

Infective period.—From the appearance of the eruption until this has entirely disappeared.

Sources of infection—

1. From a previous case of the disease.
2. From infected articles.

ENTERIC FEVER.

Incubation period.—Least, eight days; average, twelve to fourteen days; greatest, twenty-three days.

Quarantine.—Twenty-three days from last exposure to infection.

Infective period.—The excreta are infectious throughout the whole course of the disease and until convalescence has been established for at least a fortnight.

Sources of infection.—Water, food or air contaminated by the specific virus contained in the excretions of an enteric fever patient.

Polluted well waters may remain infective or retain the infection latent for long and unknown periods after the original mode of infection has ceased to operate.

The food most often implicated in the production of enteric fever is cows' milk which has acquired its infectiveness by the addition to it of water polluted by excreta, or by contact with cans and utensils which have been infected by polluted water, or by contact with unclean hands. Outbreaks of enteric fever have been traced to ice cream, herb beer and other drinks manufactured on premises where enteric fever has existed.

* In hemorrhagic small-pox there is some evidence that the incubation period is shortened to seven days.

Oysters, mussels and other shell-fish grown in waters receiving sewage have also appeared to cause enteric fever.

The attendants upon enteric fever patients may become infected by taking meals with unwashed hands.

The air of privies, cesspools, drains and sewers which have become the receptacles for the discharges from typhoid patients, is capable of imparting infection to persons who are exposed to concentrated emanations from these sources.

The air of the sick-room occupied by an enteric fever patient may possibly be the means of transmitting the illness to persons long present in the room, but not where the cleanliness and ventilation of the room are daily attended to. Enteric fever very rarely spreads in the wards of clean and well-regulated hospitals.

Instances are known where washerwomen have contracted the disease from handling infected clothing or bedding of enteric fever patients. The infection may persist for several weeks in infected clothing and bedding shielded from contact with light and air.

TYPHUS FEVER.

Incubation period.—Average, seven days.

Quarantine.—Fourteen days from date of last exposure to infection.

Infective period.—From the commencement of illness until convalescence.

Source of infection.—From a previous case of the disease. The virulence of the contagion is rapidly destroyed by fresh air and free ventilation combined with cleanliness, so that the spread of the infection is generally observed only in the overcrowded and insanitary quarters of the poorest class of the population in industrial towns. It is usually held that fomites do not propagate the infection, but that actual contact or close proximity to a typhus patient is necessary to impart the disease.

DISINFECTION OF ROOMS.

Rooms which have been occupied by persons affected by small-pox, diphtheria, scarlet fever, typhus fever, or any other dangerous infectious disease, may be treated as follows:

1. In localities where a sterilizing chamber as been provided, the entire contents of the infected apartments should be removed to the disinfecting station, and be subjected for thirty minutes to contact with live steam under a pressure of thirty pounds.

2. In cases where no disinfecting plant is available, carry to the rooms one or more wash-boilers filled with water. Immerse in the water all handkerchiefs, sheets, pillow-cases, garments and other articles which boiling will not injure. Boil these goods for two hours.

3. All infected books and other articles which would be ruined by being subjected to high temperatures or to immersion in the bichloride solution, should be destroyed by fire.

4. Apply to walls, woodwork, floors, carpets, furniture, mattresses, pillows, bric-a-brac and all other portions of the interior of the rooms, and to all other articles which may remain therein, a solution of the bichloride of mercury, 1 to 1,000.

This solution may be conveniently applied by spraying it upon the walls, &c., by aid of a garden-pump. The wooden pail or tub containing the solution should be placed upon the floor near the middle of the room, and the solution should be forced

through a hose so that it can be discharged from the spray-nozzle directly upon the infected surfaces.

The solution should be applied freely to carpets, rugs, &c., and for this purpose it can best be distributed by using a sprinkling pot.

5. Twenty four hours after the application of the mercurial solution, all of the infected surfaces should be thoroughly washed with water. Repapering of walls is not necessary under these circumstances as a sanitary measure, but only to replace paper which may have been damaged by the treatment.

The apartments should remain unoccupied for at least one week after treatment, and fresh air and sunshine should be admitted to the fullest extent.

SCHEDULE FOR INQUIRY CONCERNING EPIDEMIC OUTBREAKS.

1. Name of sanitary district.
2. Area, location and topography.
3. Population, number and character of dwellings.
4. Chief industries.
5. Drainage and sewerage.
6. Collection and removal of rubbish, garbage and ashes.
7. Infectious diseases during past year.
8. Isolation hospital.
9. Disinfecting chamber.
10. Disinfecting and cleansing of premises after infectious disease.
11. Milk-supply.
12. Water-supply.
13. Number, names, ages, addresses and disease of persons sick.
14. Source of infection.
15. Conditions affecting health upon premises where infectious disease exists.
16. Measures in operation to prevent spread of the disease.
17. Number of deaths during present epidemic.

HOUSE-TO-HOUSE INSPECTION RECORDS.

House-to-house inspections furnish the basis for almost every sanitary improvement which is required in any community, but unless a clear and trustworthy record is made of the conditions observed the inspections are valueless. The purpose of sanitary inspection is to inform the board of health concerning all conditions on premises which may affect the health of the occupants, and to furnish the facts pertaining to those conditions in such form that they may be used in securing improvement—perhaps in court as evidence.

A detailed, written record of inspection, prepared by a correct and wide-awake inspector, places a board of health in a masterly relation to the premises in hand, and is often more convincing than any verbal statement can be, for inasmuch as the facts are recorded on the spot there is reason to believe that they are accurately stated, while the use of diagrams assist greatly in conveying the desired impression.

The following blank is in use in Asbury Park. These blanks are bound into books, one book for each street, and one blank for each lot or separate premises. Each blank has four pages, and the books measure seven inches by eight and one half inches. The printing and binding (twenty-seven books) of these blanks cost \$30 per 1,000. This sum is paid out of the appropriation received by the local board of health from the municipal authorities.

SCHEDULE FOR INQUIRIES CONCERNING INSTITUTIONS.

1. Name of institution.
2. Location and post-office address.
3. Name and post-office address of chief officer.
4. Name and post-office address of physician.
5. Date of inspection.
6. Name of inspector.
7. Name and post-office address of all directors or managers.
8. Surrounding land and height above sea-level.
9. Character of soil in vicinity of buildings.
10. How many acres of land?
11. Is there a topographical map, and a plan of all sub-surface drains and other structures?
12. Have natural water-courses been turned or changed in any way?
13. Is there any damming-up of water for ponds, and if so, how near to buildings?

Water-Supply.

14. Give place, size, depth, character and locality of any springs and wells.
15. Are they open or closed, and what is the mode of getting water therefrom?
16. Are any slops spilled or vessels rinsed about wells, or is the ground near in any way foul?
17. Any other sources of water-supply.
18. Is water introduced into buildings?
19. If so state each place and each floor. Is it by pump or by faucet?
20. Is it through lead pipes?
21. Is there a cistern, and if so, where? Describe its construction.
22. Is the water used for both drinking and general purposes and handy in case of fire?
23. Is the supply of drinking-water abundant and satisfactory, and if not, state objection.

Buildings.

24. How many buildings are attached to the institution? (Show them on diagrams.)
25. Size of buildings and material. Estimated value.
26. Date of erection. Who owned by.
27. What additions since, and when?
28. Describe basement or cellar:
 - a. How much above ground?
 - b. Is it dry?
 - c. Is it well lighted?
 - d. How used?
 - e. Is there kitchen or laundry in it?
 - f. Does anyone sleep in basement?
 - g. If so, how many and who?
29. Size of rooms and height of ceiling on first floor.
30. Size of rooms and height of ceiling on second floor.
31. Size of rooms and height of ceiling on third floor.
32. Describe attic.
33. What is the finish of walls?
 - a. Are any rooms wainscoted?

Buildings—Continued.

34. Is the number and size of windows enough for air and light?
 - a. How near to ceilings are windows?
 - b. Do the windows let down from the top?
- c. How is admission of sunlight regulated—by shutters, blinds or curtains?
- d. Does the sun shine into all rooms sometime in the day?

Plumbing and Drainage.

35. Number, location and description of all drainage fixtures.
36. Are all water-closet apartments well lighted and ventilated?
37. What is the method of disposal for waste fluids?
38. How are the drain pipes and sewers ventilated?
39. Is there a trap and cold-air inlet on main drain?
40. State the material, size and mode of laying of all terra cotta drains?
41. Sizes and construction of iron drain pipes?
42. Is the flow ever sluggish?
43. Is there a grease-trap on the premises?
44. Is each drainage fixture adequately trapped?
45. Describe traps.
46. Describe trap ventilation.
47. Any earth closets?
48. Any privy vaults?
 - a. Location.
 - b. Size.
 - c. Construction.
 - d. When excavated.
 - e. Condition.
49. Any cesspools?
 - a. Location.
 - b. Size.
 - c. Construction.
 - d. Ventilation.
 - e. When excavated.
 - f. Frequency of excavation.
 - g. Disposal of contents.
50. Do water-closets discharge into cess-pool?
51. Are any waste fluids cast upon the surface of the ground?

Ventilation and Heating.

52. What is the system of ventilation?
53. Is there any provision for changing the air of rooms during cold weather?
54. What is the method of heating?
55. Are all rooms sufficiently heated?

Inmates.

56. How many inmates are there in all?
 - a. How many males over sixteen?
 - b. How many females over sixteen?
 - c. How many inmates from twelve to sixteen?
 - d. How many inmates between five and twelve?
 - e. How many inmates under five years of age?
 - f. How many of the inmates were born in the institution?
 - g. How many the last year?
 - h. How many of all these have been vaccinated within five years?
- i. Have all adults been vaccinated within ten years?
57. What are the facilities for usual hand and face washing of inmates?
58. What are the towel arrangements?
59. What for bath-tub bathing with warm water?
60. What are the regulations as to baths, and how fully are they carried out?
61. Is a list kept of who have had full baths, and how often, and of those who are washed by others?

Inmates—Continued.

62. Is the hair of inmates kept properly cut and cleansed?
63. Is there a regular system of changing under-clothing?
64. How and where is laundry and ironing work done?
65. Is there any system by which new suits of plain outside clothing are furnished to inmates, and by which clothing long worn is cleansed by airing or heating?
66. Is there a separate place or hospital for those taken sick, or are persons attended in their rooms?
 - a. Describe hospital and asylum arrangement.
67. When a new inmate is presented, what facilities are there for thorough cleansing before admission to the general rooms, or for separation for a few days, in case of any suspected sickness?
68. Have there been any accidents since last report? If so, what?
69. Are inmates fed at a common table?
70. Is there a regular dietary for each day?
 - a. If so, append it to this report.
71. Are the bedsteads wood or iron?
 - a. Size of bedsteads.
72. What form of mattress is used, and how often aired or changed?
73. Does each inmate have a separate bed?
74. Is bed-linen changed each week?
75. How often are all contents of rooms, and especially bed-rooms, moved out and rooms scrubbed and white-washed, as in general house-cleaning?
76. What system, besides ordinary house-cleaning, is provided for cleansing and varnishing furniture?
77. What fire-escapes, buckets, extinguishers or other provision in case of fire?
78. What is the method of lighting?
79. Is any register kept of inmates as to habits, cause of dependence, mental condition, &c.?
80. What is the allotted cubic space per inmate?
81. Is there any oversight of or inquiry into the physical condition of inmates?
82. Is there a record of causes or history of the cases of those bed-ridden or fully incapable of labor?
83. What was the per capita expense of maintenance last year?
84. What is the plan of outdoor relief, if any?
85. What was its cost last year?
86. Any insane paupers?
87. How many are demented or foolish or epileptic?
 - a. How many such are harmless?
 - b. How many are violent?
 - c. How many should be separately kept?
88. What are the arrangements for separation of males and females?
89. What are the nursing arrangements?
90. What is the medical attendance?
91. Does the physician come at stated times, or only when sent for?
92. How much is paid him per year?
93. How are medicines furnished?
94. What changes are needed in any present arrangements?
95. What was the number of deaths and their causes last year?
96. Is there any system of employment for inmates?
97. What is the discipline and oversight of attendants?
98. Is any special industry followed?
 - a. If so, give particulars.
 - b. Is it profitable, or merely for occupation?
99. How many inmates have tobacco furnished them?

Inmates—Continued.

100. How many have opium furnished them?
101. What was the tobacco bill last year?
102. What was the liquor bill?
103. What was the quinine bill?
104. What are the arrangements for schooling for children?
105. Are any apprenticed out, and at what age?
106. Are homes sought for any not apprenticed?
107. What provisions are there for amusements and for reading-matter for inmates?

Inquiries Especially for Jails.

108. Have any been detained as witnesses during the past year, and how long? Give particulars.
109. What system have you for receiving excretions of the body during the night?
 - a. What in cases of sickness?
110. What are the chances for sunlight to enter cells and corridors?
111. Are prisoners allowed to smoke and wash in the cells?
112. Cubic space of each cell.
113. What chance for change of air in cells?
114. If prisoners are taken ill in the night, how may they summon assistance?
115. Size of windows in cells.
116. Size of doors.
117. Number of deaths during past year.
118. Number of cases of sickness during past year.

"SANITARY DISTRICT" is a convenient expression which is used to indicate the territory within the jurisdiction of a local board of health. Thus, the city of Newark is a sanitary district; the township of Clinton is a sanitary district; the village of South Orange is a sanitary district; the borough of Caldwell is a sanitary district. Each municipality and each township outside of the boundaries of municipalities separately constitute sanitary districts.

IF THE NAME OF THE CLERK, SECRETARY or other officer of any local board of health is not correctly written on the wrapper of this Circular, or if the official communications from the State Board of Health are incorrectly addressed, notice should be sent to the office of the State Board of Health, Trenton.

A PATHOLOGICAL MUSEUM containing specimens showing the characteristic lesions of the dangerous communicable diseases would be of great assistance to physicians in making diagnoses. Such a collection would be invaluable in the study of post-mortem conditions in doubtful or disputed cases of typhoid fever and yellow fever.

THE ACT APPROVED MARCH 22D, 1895 (see page 603 of Circular 84), provides that every physician shall report to the local board of health, in writing, the name, age and precise location of every person suffering from any dangerous communicable disease. The law does not compel local boards to furnish blanks to physicians for this purpose, but doubtless physicians would be much accommodated if blanks were supplied to them. On page 611 of Circular 84 a form is suggested for the consideration of local boards. If blanks of this description are printed, they should be ordered and be paid for by the local board. The State Board of Health is not authorized by law to furnish blanks for this purpose.

THE NEW BLANK FOR USE BY LOCAL BOARDS in sending reports to the State Board of Health in relation to cases of communicable disease is in form as follows :

5, 25, '95, 113.

REPORT OF PREVENTABLE DISEASES FOR WEEK ENDING SATURDAY189

[Name of Place].....

To the BOARD OF HEALTH OF THE STATE OF NEW JERSEY :

Following is a report in accordance with the provisions of Chapter 260, Laws of 1895, showing the number of cases of communicable diseases which occurred in this Sanitary District during the period above named :

DISEASES.	New Cases.	Existing Cases Previously Reported.	Deaths from Preventable Diseases	PRECAUTIONS TAKEN.
Diphtheria.....				
Membranous } Croup..... }				
Scarlet Fever.....				
Typhoid Fever..				
Small Pox.....				
.....				
.....				
.....				
.....				
.....				

NOTE—When no communicable diseases occur, no report will be expected from local boards to the State Board of Health.

Total Deaths from all causes Signature of Clerk or other designated officer.....
P. O. Address.....

On the back of this card the following is printed :
These cards are for the use of local boards of health in making the weekly reports to the State Board.
Blanks for the use of physicians are not supplied by the State. All such blanks, and also any books needed for recording the reports of communicable diseases should be furnished by local boards.

RECORDING DEATH-RATES.—When the population and the total number of deaths for a stated period are given, the annual death-rate per thousand is readily obtained by use of the following formula: Population : 1,000 :: Number of deaths : Annual rate.

Illustration.—The number of deaths which occurred in Jersey City during the year ending June 30th, 1894, was 4,320. The population for that year was estimated to be 170,595. The following proportion may then be stated:

$$\begin{array}{r}
 170595 : 1000 :: 4320 : \text{Annual death-rate.} \\
 1000 \times 4320 = 4320000. \\
 170595) 4320000 \text{ (25.32} \\
 \underline{341190} \\
 908100 \\
 \underline{852975} \\
 551250 \\
 \underline{511785} \\
 394650 \\
 \underline{341190}
 \end{array}$$

The annual death-rate per thousand is thus shown to be 25.32.

If the number of deaths is given for one week only, the fourth term in the proportion should be multiplied by 52.

To SPRINKLE CARBOLIC ACID about the house, or to burn a sulphur candle, or to suspend sheets and towels wet with some proprietary liquid, may be excused in the case of untrained attendants, but it is about time that health officers should cease to countenance and advise the employment of such methods in the disinfection of houses.

"ALL NECESSARY PRECAUTIONS HAVE BEEN TAKEN" is a very common expression. It is used by physicians, nurses, health officials, school officers and by house owners after an outbreak of one of the dangerous communicable diseases. When uttered by some persons it signifies (when small-pox has prevailed, for instance) that the patient is securely isolated; that all exposed persons have been vaccinated; that all infected baggage, clothing and household goods have been treated in a steam disinfecting chamber, or subjected to prolonged boiling, or destroyed by fire; that all infected apartments, carpets, furniture and vehicles have been thoroughly wetted with a solution of the bichloride of mercury (1 to 1,000), and afterward well washed with pure water.

When the same words are spoken by some other persons, they may be intended to cover up the true conditions and to lead to a belief that no danger need be feared that the disease will spread, while in reality the precautions taken may be, perhaps, as follows: A few live coals are placed upon a shovel, and upon these is placed a teaspoonful of powdered sulphur. This is hastily carried through the house by the coughing and half-suffocated operator. A dollar or two is then expended in buying some advertised "disinfectant," and with this liquid the floor is sprinkled. Perhaps a dozen saucers containing carbolic acid or chloride of lime may be placed about the house, and a lot of old rags may be buried in the back yard, for some vagabond to disinter and appropriate to his own personal use, or to sell to a junk dealer. A washerwoman will than be paid an extra sum to go into the house and clean up.

Instead of saying that "all precautions have been taken," let us fall into a habit of stating definitely just what has been done.

VACCINATE TRAMPS before admitting them as lodgers in lock-ups and jails.

VACCINATION IN GERMANY is almost altogether done with animal lymph. Eight insertions are usually made in primary vaccination; five or six in re-vaccination.

THE TERM DISINFECTION signifies the destruction of the bacteria which cause infectious diseases, by the use of chemicals. Sterilization is employed to indicate the destruction of bacteria by heat.

ALL OFFICIAL CORRESPONDENCE should be addressed to State Board of Health, State House, Trenton, N. J.

CIRCULAR 86.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

BACTERIOLOGICAL DIAGNOSIS.

In view of the important position which the science of bacteriology has attained in relation to the causation of disease, the New Jersey State Board of Health has placed at its command a laboratory for bacteriological research, where all subjects of this character will be investigated so far as present knowledge will permit.

The practical value of bacteriology has thus far been most clearly demonstrated in its relation to the diagnosis of some of the communicable diseases, and in affording a certain means by which we can determine when a patient has ceased to be a source of danger to others. Thus, in cases of suspected diphtheria, a positive diagnosis can almost always be made by the bacteriological method in from eighteen to twenty four hours and by this method it is possible to learn the precise time when the patient may be allowed to again mingle with his fellows with safety to them.

The study of bacteria, as related to disease, with view to speedy diagnosis, will be the principal feature of the laboratory, and all physicians in the State can have examinations made free of charge. It is believed that one of the greatest benefits to be conferred by this service will be the restriction of the spread of diphtheria in the schools, and school officers and teachers are urged to avail themselves of the advantages afforded by the laboratory, and thus obtain evidence in each case showing that pupils who have been affected by diphtheria have fully recovered before they are readmitted to the schools.

SCOPE OF THE WORK.

Diphtheria.—Examinations will be made for diagnosis in cases of suspected diphtheria, and when negative results are obtained, re-examination of fresh specimens will be made when they are furnished. Secondary examinations for the purpose of learning when the throat is free from the diphtheria bacilli will be made after the disappearance of the membrane.

DIRECTIONS FOR TAKING CULTURES.

The patient should be placed in a good light, and, if a child, be properly held. In cases where it is possible to get a good view of the throat, depress the tongue and rub the cotton swab gently, but freely, against any visible exudate. In other cases, including those in which the exudate is confined to the larynx, pass the swab far back, and rub it freely against the mucous membrane of the pharynx and tonsils. Without laying the swab down, replace it in the glass tube and plug the tube with the cotton stopper. Place the tube in the box and carefully close up the package.

Fill out the following blank, which is sent with each diphtheria culture outfit:

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

LABORATORY OF HYGIENE, PRINCETON, N. J.

This blank to be accurately filled out and placed inside of the package, and returned therewith to the laboratory.

Name of sender of specimen

Address

Date..... Time.....

Name of patient..... Age.....

Address.....

Duration of disease.....

How contracted.....

Location of membrane.....

Clinical diagnosis.....

Send the package at once to the *Laboratory of Hygiene, Princeton, N. J.*

A report stating the result of the examination will be forwarded the following morning by mail.*

Mailing packages containing culture outfits will soon be placed at accessible points throughout the State. Meantime, these packages may be obtained by physicians and health officers upon application by telegram or letter addressed to Laboratory of Hygiene, Princeton, N. J. No specimen for the laboratory should be sent by mail unless it is inclosed in one of these packages.

DIRECTIONS FOR COLLECTING SPUTA IN SUSPECTED CASES OF PULMONARY TUBERCULOSIS.

Bronchial and not pharyngeal secretions should be collected. The sputa should be received in a perfectly clean receptacle, and be transferred to the vial furnished for this purpose by this laboratory. When the cover of the vial has been securely screwed down, the outside of the vial and cover should be thoroughly and repeatedly washed in clean water. The vial should then be inclosed in the package and be forwarded at once to the *Laboratory of Hygiene, Princeton, N. J.*

The following blank will accompany each package, and it should be filled out in every case:

NEW JERSEY STATE BOARD OF HEALTH.

LABORATORY OF HYGIENE, PRINCETON, N. J.

This blank is to be filled out and returned to the laboratory with the package.

Sputum from a Case of Suspected Tuberculosis.

Date.....

Name of sender of specimen.....

Address.....

Name of patient.....

Age..... Sex..... Color.....

Address of patient.....

Duration of disease.....

How contracted.....

* Report will be sent by telegraph at the expense of those interested, when a request to this effect is forwarded with the specimen.

Cholera.—Discharges from the bowels of persons suspected to be affected by cholera should be collected in the manner already described for the collection of sputa in cases of consumption.

DISEASES OF ANIMALS.

Anthrax and *Glanders* can be identified by the bacteriological method. Specimens for examination should be sent only in the packages provided by this laboratory.

Hydrophobia—The poison of this disease is found most readily in the brain of affected animals, and it is this organ which is selected for examination. As soon as possible after the death of the suspected animal, the brain should be removed, with aseptic precautions, wrapped in moist bichloride gauze, placed in a water-tight vessel (a glass preserve jar is convenient for this purpose), packed in ice, and forwarded to the laboratory. (These specimens should, in every case, be sent by messenger.)

Tuberculosis.—Milk from suspected herds or from individual cows may be packed in ice and sent to the laboratory by express or by messenger.

Epidemic outbreaks of whatever character, whether of diseases peculiar to man or to the lower animals, will be investigated, and a diagnosis given when possible.

Inquiries will be made into the character and purity of the animal products in use in this State for prophylactic and remedial purposes; concerning the causes of wholesale poisoning due to unwholesome food, and into the germicidal value of the various substances employed in sanitary operations.

Water-supplies will be examined when they are for public use.

Under no circumstances will investigations of a private nature be undertaken, and physicians are requested not to send sections of tumors, &c., to the laboratory, as the Board will not make examinations of such substances.

The laboratory has been located in Princeton, upon the University grounds, and it will be wholly devoted to the advancement of the public health interests of the State. The Board has secured the services of Mazÿck P. Ravenel, M.D., as director, and it is confidently expected that the quality of the work performed will be excellent.

Dr. Ravenel has for several years been connected with the Laboratory of Hygiene of the University of Pennsylvania, and has also pursued the study of bacteriology in the Pasteur Institute, in Paris, and in the laboratory of Prof. Carl Fränkel, in Germany.

A cordial welcome will be extended at all times to physicians and health officers who may wish to visit the laboratory.

INQUIRIES CONCERNING CHARITABLE AND PENAL INSTITUTIONS.

In 1892 Circular 73, in book form, was sent to the various institutions in the State. The circular contained questions bearing upon the sanitary conditions existing, together with plans of buildings, &c.

Answers were received from nearly all of the institutions.

In Circular 85, page 338 of this report, will be found an improved form of blank which has been recently prepared, and in the examination of institutions in the future this will be used.

It is customary to visit the asylums, jails and almshouses from time to time for the purpose of ascertaining what sanitary defects exist and to suggest remedies.

The visits are always made without previous appointment, so that there may be no preparation by the authorities in charge.

Where defects are found the proper authorities are notified.

We are pleased to state that in most instances where suggestions have been made improvement has followed.

We present below some details as to four of the larger institutions which have been examined recently.

ESSEX COUNTY ASYLUM, NEWARK. Visited September 16th, 1895.

A new bacteriological laboratory has been introduced.

The closets in ward No. 1, male, and in fact the closets and bath-rooms in all of the old part, could be much improved by putting in new fixtures and by thorough renovation.

The dark hall on the first floor seems unavoidable, and, although it has been improved very much by additional light on the north end, is still somewhat objectionable.

The system of management of the institution and the general care and cleanliness deserve high commendation.

NEWARK CITY ALMSHOUSE. Visited September 16th, 1895.

A well of water located near the kitchen is in such a position as to be, in all probability, polluted, and we are informed that the water will be no longer used.

New water-closets have been built outside in the yard.

The old closets in the yard are in a filthy condition.

Nearly all the closets in the building are showing need of repair, and, as they are inclosed with wood-work, it would be an improvement to replace them with more modern fixtures.

Some of the floors in the building are worn out and need replacing.

A complete plan of the sub-surface pipes and conduits, together with the house-drainage system, should be prepared and preserved for future reference.

The old people's part in the building, separate from the main building, is not well fitted for occupancy.

The new building added to the main building, for the use of the men, is well lighted and seems well fitted to relieve the crowded condition of the institution during the winter months.

Number of inmates at the time of visit: males, 110; females, 58. Under five years, 7; five to eight years, 3.

There is a general appearance of cleanliness, although some structural defects render this condition difficult to maintain.

PATERSON CITY ALMHOUSE. Visited September 13th, 1895.

Inspection of this institution called attention to several needed changes.

The outlet of the sewer from the almshouse enters a small brook east of the buildings. This stream empties into the Passaic river at a point above the intake of the city water-supply of Paterson.

Such a condition is unwarranted, and other means of disposal should be adopted, so that the health of the citizens may not be endangered.

The closets in the yards were filthy, and not only needed cleaning, but should be replaced by new devices.

The closet and bath-tub on the woman's insane ward are out of repair.

An improved closet fixture and bath-tub should replace those now in use.

Some portions of the laundry floor were in bad condition, owing to wide cracks, and a partition inclosing an unventilated closet in the laundry should be removed.

The system of keeping insane persons in an institution of this character has many objectionable features, and if possible they should be cared for elsewhere.

The smoking room is badly lighted and poorly ventilated.

It is at times much overcrowded.

A cell located under the smoking room and used as a dark cell is without ventilation, and should never be used.

It is noted that a new contagious disease hospital is being erected on the grounds, which will be of great service to the city in controlling such affections.

The water-supply is from a well located near the barn, and on account of the inconvenience the inmates are apt to use the brook-water, which is, to say the least, suspicious.

A proper water-supply should be introduced.

Number of inmates at the time of visit: adults, 175; children, 40.

The general condition of this institution was fair, but the objectionable features mentioned should be remedied.

As a committee of the board of freeholders was visiting the institution at the time this inspection was made, attention was called to the defects above noted.

PASSAIC COUNTY JAIL. Visited September 13th, 1895.

The size of the cells in the main jail is smaller than is customary.

The lack of ventilation is such that the air on a level with the third tier of cells in both the men and women's department is rendered foul and unwholesome.

The water closets in the cells should be removed.

The buildings throughout were cleanly and well kept.

Number of inmates at the time of visit, 78: males, 54; females, 24.

LIST OF PHYSICIANS OF NEW JERSEY.

ARRANGED BY COUNTIES, WITH POST-OFFICE ADDRESSES.

An effort has been made in the collection of the names and addresses in this list to avoid errors as far as possible.

From some districts no reports were received and we were obliged to refer to former reports.

As it is very essential that the list be perfected, we earnestly request that where errors are noticed in the spelling of names, in the addresses, or where physicians have removed or deceased, that corrections be sent to us.

Some names appear on the list with addresses in bordering states attached.

In such cases the names are placed in the county's list in New Jersey nearest the place of residence in other states. As for example where the address is New York City, the name of the physician will be found in Hudson county.

Physicians living in adjacent states and whose names are given have registered in New Jersey and practice at times within the limits of the State.

Atlantic County.

L. H. Armstrong	Atlantic City.	Joseph F. Edwards.....	Atlantic City.
A. W. Bailey.....	"	J. U. Elmer	Egg Harbor City.
Lorenzo D. Balliet	"	John R. Fleming.....	Atlantic City.
William H. Bennett.....	"	George H. Fletcher.....	"
Theodore G. Bieling	Hammonton.	Joseph F. Griggs.. ..	.....
T. H. Boysen.....	Egg Harbor City.	G. M. Harris	Port Republic.
W. H. H. Bull.....	Atlantic City.	Nelson Ingram.. ..	Atlantic City.
E. C. Chew	"	George F. Jahncke.....	Hammonton.
George W. Crosby	"	H. James.....	Mays Landing.
Godfrey M. Croole	Hammonton.	J. A. Joy	Atlantic City.
Charles Cunningham.....	"	Eva W. Lake	Pleasantville.
A. D. Cuscaden	Atlantic City.	M. S. Lyon.....	Abzecon.
Garrett De Mill.....	Pleasantville.	E. H. Madden.....	"
Samuel E. Edmonds.....	Linwood.	Joseph C. Marshall.	Tuckahoe.

Atlantic County—Continued.

Randolph Marshall.....Tuckahoe.	Charles E. Roop.....Atlantic City.
Philip Marvel.....Atlantic City.	E. A. Sibley....."
Mary Miller....."	H. W. Smith.....Elwood
M. L. Munson....."	Richard M. Sooy.....Pleasantville.
Edward North.....Hammonton.	W. C. Sooy.....Atlantic City.
J. H. North.....Pleasantville.	Louis K. Souder....."
B. C. Pennington.....Atlantic City.	Philip S. Steelman.....Linwood.
J. K. Pitney.....Absecon.	W. Blair Stewart.....Atlantic City.
W. M. Pollard.....Atlantic City.	Samuel Stille....."
William M. Powell....."	J. B. Thompson....."
Boardman Reed....."	Charles E. Ulmer....."
Talbot Reed....."	W. R. Wales.....Mays Landing.
Ella Reed....."	T. B. Waters.....Absecon.
E. L. Reed....."	E. P. Williams.....Atlantic City.
Louis Reed, Sr....."	C. W. Wales.....Mays Landing.
Thomas K. Reed....."	W. Wright.....Atlantic City.
E. A. Reilly....."	M. D. Youngman....."

Bergen County.

H. C. Abel.....Ridgewood.	Dr. Harris.....Hackensack.
Dr. Ackerman.....Oradell.	H. H. Hollister.....Rutherford Park.
Chas. F. Adams.....Hackensack.	Joseph Huger.....Fort Lee.
Dr. Armstrong.....Rutherford Park.	Eugene Jehl.....Park Ridge.
Dr. Ardennis.....Hackensack.	L. P. Knapp.....Hackensack.
M. S. Ayres.....Fairview.	J. B. Lansing.....Tenafly.
D. A. Baldwin.....Englewood.	Wm. Lasker.....Fort Lee.
Hardy M. Banks....."	C. H. Mastin.....Sparkill, N. Y.
C. Beadue.....Allendale.	Howard McFadden.....Hackensack.
Geo. B. Best.....Englewood.	Dr. Mcak.....Garfield.
Chas. D. Brooks.....Rutherford.	Dr. Mohn.....Carlstadt.
G. E. Brown.....Hackensack.	P. H. Morris.....Englewood.
Dr. Collins.....Ramsays.	Henry C. Nees.....Park Ridge.
E. E. Conover.....Hasbrouck Heights.	Dr. Ockford.....Ridgewood.
E. Conrad.....Hackensack.	Wm. Ogden.....Lyndhurst.
Jas. E. Cosgrove.....Fort Lee.	J. W. Proctor.....Englewood.
C. Cropsey.....Rutherford.	Louis B. Parsell.....Closter.
Danl. Currie.....Englewood.	A. Richter.....Carlstadt.
Dr. Davenport.....Garfield.	J. M. Simpson.....Schraalenburg.
John H. Davis.....Rutherford.	Dr. Stewart.....Rutherford.
John T. Demund.....Ridgewood.	David St. John.....Hackensack.
C. P. De Goe.....Ramseys.	J. W. Terry.....Englewood.
H. Drews.....Carlstadt.	T. E. Townsend.....Westwood.
Henry Eleing.....Ridgefield Park.	Dr. Trantwein.....Lyndhurst.
Chas. Gravesteen.....Ridgefield.	Dr. Tygert.....Carlstadt.
E. W. Hamilton.....Oakland.	Dr. Vreeland.....Rutherford.
John J. Haring.....Tenafly.	W. L. Vroom.....Ridgewood.

Bergen County—Continued.

David Wack.....Englewood.	Ira C. Whitehead.....Hackensack.
Jno. A. Wells....."	Anna W. Williams....."
F. H. White.....Hackensack.	J. T. Wyckoff.....Leonia.
Henry D. White.....Rutherford.	Simeon J. Zabriskie.....Westwood.

Burlington County.

Ellsworth Adams.....Beverly.	Elias P. Maine.....Sykesville.
David Baird.....Florence.	Alexander Marcy.....Riverton.
Charles A. Baker....."	W. L. Martin.....Rancocas.
Richard C. Barrington.....Mount Holly.	Alfred Mattson.....Moorestown.
Richard S. Briddock.....Medford.	Burr W. McFarland.....Bordentown.
John W. Brannin.....Mount Holly.	William P. Melcher.....Mount Holly.
J. C. Brown.....Vincertown.	W. G. Parrish.....Burlington.
Richard E. Brown.....Mount Holly.	Austin H. Patterson.....Georgetown.
A. O. Buck.....Burlington.	J. Howard Pugh.....Burlington.
Samuel Caley.....Mount Holly.	Richard H. Parsons.....Mount Holly.
G. W. H. Calver.....Columbus.	Josiah Reeve.....Medford.
John E. Carey.....Lower Bank.	E. F. Rink.....Burlington.
J. B. Cassady.....Burlington.	J. V. Roberts.....Beverly.
Newton H. Chafey.....Chesterfield.	L. L. Sharp.....Medford.
William Chamberlain.....Mount Holly.	Louis L. Sharp.....Palmyra.
George B. L. Clay.....Moorestown.	Amos Shaw.....Jacobstown.
A. E. Conrow....."	William H. Shippo.....Bordentown.
Joseph J. Currie.....Beverly.	Joseph Schreve.....Burlington.
Charles L. Dey.....Crosswicks.	Alexander Small.....Riverside.
Joseph Du Belle.....Columbus.	P. E. Stilwagon.....Bridgeport.
L. D. Febr.....Bordentown.	Joseph Stokes.....Moorestown.
J. J. Flynn.....Mount Holly.	N. Newlin Stokes....."
Edward E. French.....Bordentown.	F. G. Stroud....."
C. Garrabant.....New Gretna.	P. P. B. Stroud.....Marlton.
Franklin Gauntt.....Burlington.	Addison W. Taylor.....Beverly.
F. Allen Gauntt....."	Levi D. Tebo.....Bordentown.
Joseph S. Gibbert.....Bordentown.	George Vanderveer.....Mount Holly.
A. C. Haines.....Columbus.	R. J. Walm.....Burlington.
Franklin T. Haines.....Rancocas.	John W. Webb.....Pemberton.
H. B. Hall.....Riverton.	E. P. Weeks.....Riverside.
W. E. Hall.....Burlington.	H. K. Weiler.....Delanco.
E. A. Hambright.....Mount Holly.	G. L. Whitehead.....Bordentown.
Chalkley J. Hill.....Moorestown.	Mrs. E. Whitehead.....Mount Holly.
E. Hollingshead.....Pemberton.	J. G. L. Whitehead.....Crosswicks.
Irving Hollingshead....."	William W. Whitehead.....Mount Holly.
Francis S. Janney.....Riverton.	Pusey Wilson.....Moorestown.
J. D. Janney.....Cinnaminson.	E. B. Woolston.....Marlton.
Dr. Lane.....Pemberton.	Dr. Woodruff.....Pemberton.
E. S. Lansing.....Burlington.	Elijah B. Woolston.....Marlton.
Dr. Leedom.....Bordentown.	Irene D. Young.....Bordentown.
T. S. Lippincott.....Riverside.	A. E. Zeidler.....Medford.

Camden County.

N. B. Adams.....	Collingswood	Wesley Grindle.....	Camden.
Amy Ames.....	Camden.	O. B. Gracs.....	"
P. W. Andrews.....	"	Oscar L. Grumbrecht.....	Cramer Hill.
J. L. Artz.....	Dudley.	G. H. Gunter.....	Camden.
Joseph S. Baer.....	Camden.	R. I. Haines.....	"
G. W. Bailey.....	"	John J. Haley.....	Gloucester City.
D. H. Bartime.....	Merchantville.	Lewis Hatton.....	Camden.
Phillip W. Beale.....	Camden	Geo. W. Henry.....	"
Dowling Benjamin.....	"	J. M. Hinson.....	Merchantville.
John K. Bennett.....	Gloucester City.	Levi B. Hirst.....	Camden.
Francis J. Bicker.....	Camden.	Conrad G. Hoell.....	"
Duncan W. Blake.....	Gloucester City.	Frank L. Horning.....	"
Thomas R. Blackwood.....	Camden.	J. I. Hovender.....	Atco.
Howard G. Bonwill.....	"	E. M. Howard.....	Camden.
Henry C. Brannin.....	Blackwood.	Aaron Howell.....	"
Walter S. Bray.....	Camden.	Mary A. Howell.....	"
O. W. Brayman.....	"	Isaac N. Hugg.....	"
John K. Burnett.....	Gloucester City.	Henry F. Hunt.....	"
S. G. Bushey.....	Camden.	Wm. H. Hunt.....	"
Robert Casperson.....	"	Joseph E. Hurff.....	Blackwood.
William B. Christine.....	"	Wm. H. Ireland.....	Camden.
Benjamin Climanson.....	Mount Ephriam.	Allen S. Ironside.....	"
N. A. Cohen.....	Camden.	Wm. H. Iszard.....	"
William T. Collins.....	"	Harry Jarrett.....	"
C. J. Cooper.....	"	Chas. Jennings.....	Merchantville.
N. Davis.....	"	W. B. Jennings.....	Haddonfield.
John B. Davis.....	Dudley.	Wm. S. Jones.....	Camden.
Wm. A. Davis.....	Camden.	Wm. W. Kain.....	"
Eugene E. De Grofft.....	"	Wm. J. Kelchner.....	"
W. L. De Lap.....	Gloucester City.	Wm. H. Kensinger.....	"
John W. Donges.....	Camden.	Grant E. Kirk.....	"
Clarence B. Donges.....	"	Wm. W. Knowlton.....	"
John G. Doran.....	"	J. D. Lawrence.....	Merchantville.
W. G. Du Bois.....	"	John F. Leavitt.....	Camden.
Wilfred Du Pont.....	"	John D. Leckner.....	"
Leo F. Elstein.....	"	Annette Lefevre.....	Blackwood.
Joseph P. Finlaw.....	"	Benj S. Lewis.....	Camden.
Joel W. Fithian.....	"	A. H. Lippincott.....	"
Ida F. Fortiner.....	"	W. S. Long.....	Haddonfield.
J. Howard Frick.....	"	Jno. B. Longshore.....	Camden.
Richard Gardner.....	Gloucester City.	F. W. Marcy.....	"
Howard C. Garrison.....	Camden.	Jno. W. Marcy.....	Merchantville.
James A. George.....	"	Paul M. Mecray.....	Camden.
L. L. Glover.....	Haddonfield.	Alex. M. Mecray.....	"
E. L. B. Godfrey.....	Camden.	Dr. Macray.....	Merchantville.
C. R. Grier.....	"	Joseph W. Martindale.....	Camden.
Anna E. Griffith.....	"	Alex. McAllister.....	"

Camden County—Continued.

Wm. McBride.....	Gloucester City.	Dr. Sharp.....	Berlin.
Emerson McGeorge.....	Camden.	Henry H. Sherk.....	Camden.
Wallace McGeorge.....	"	B. H. Shivers.....	Haddonfield.
M. F. Middleton.....	"	C. H. Shivers.....	"
W. E. Miller.....	"	Henry A. M. Smith.....	Gloucester City.
Wm. Miller.....	Berlin.	S. Bryan Smith.....	Camden.
M. K. Mines.....	Camden.	James G. Stanton.....	"
Wm. S. Moslander.....	"	James H. Stanton.....	"
Joseph L. Nickelson.....	"	E. O. Steam.....	Berlin.
M. M. Osmun.....	Camden.	Frank Stem.....	"
Howard F. Palm.....	"	J. R. Stephenson.....	Haddonfield.
F. Pfeiffer.....	"	J. K. F. Stites.....	Camden.
Edward Phelan.....	"	Jacob F. Stock.....	"
William R. Powell.....	"	D. M. Stout.....	Berlin.
William H. Pratt.....	"	Daniel Strook.....	Camden.
Sophia Presley.....	"	H. G. Taylor.....	"
Silas S. Quinby.....	"	R. G. Taylor.....	"
William Raughley.....	Berlin.	Eli R. Tullis.....	"
Rufus Reed.....	Camden.	James A. Wamsley.....	Gloucester City.
Leolf Reese.....	"	M. West.....	Camden.
R. W. Richie.....	"	Wm. Westcott.....	Berlin.
Joseph M. Ridge.....	"	J. O. White.....	Camden.
George T. Robinson.....	"	F. E. Williams.....	"
S. C. Ross.....	Gloucester City.	J. J. Wills.....	"
Thomas G. Rowand.....	Camden.	J. H. Wills.....	"
Eay Schellengar.....	"	W. P. Wingender.....	"
William Schafer.....	"	George D. Woodward.....	"
Edgar B. Sharp.....	"	E. S. Winn.....	"

Cape May County.

Benjamin T. Abbott.....	Tuckahoe.	James Mecray.....	Cape May City.
Lawrence Cauffman.....	Sea Isle City.	E. H. Phillips.....	" "
Isaac M. Downs.....	Cape May C. H.	Walter Phillips.....	" "
Anna M. Hand.....	Cape May City.	Emlen Physick.....	" "
John H. Hand.....	Dias Creek.	James E. Prior.....	Ocean City.
T. C. Hutchinson.....	Ocean City.	James M. Slaughter.....	Rio Grande.
Wilson R. Lake.....	Green Creek.	J. S. Waggoner.....	Ocean City.
Alorzo L. Leach.....	Cape May City.	Eli B. Wales.....	Cold Spring.
Walter S. Leaming.....	West Cape May City.	J. Eugene Way.....	Dennisville.
J. F. Leaming.....	Cape May C. H.	P. M. Way.....	Ocean View.
Virgil M. D. Marcy.....	Cape May City.	Louisa L. Willie.....	Cape May Point.

Cumberland County.

Orange H. Adams.....	Vineland	Ephraim Ba'eman.....	Cedarville.
J. C. Applegate.....	Bridgeton	F. M. Bateman.....	"
S L Bacon.....	Port Norris.	Judson L. Bch.....	Vineland.

Cumberland County—Continued.

J. O. Bech.....	Vineland.	Charles B. Neal.....	Millville.
Edwin H. Bidwell.....	"	W. L. Newell.....	"
George E. Putter.....	Dividing Creek.	David H. Oliver.....	Bridgeton.
Samuel Butcher.....	Mauricetown.	Charles C. Phillips.....	Deerfield.
Joseph Butcher.....	Heislerville.	George M. Paullen.....	Shiloh.
Joseph A. Canwell.....	Vineland.	J. H. Putman.....	Bridgeton.
Dr. Coigan.....	"	Mrs. L. M. Putnam.....	"
Louis Cooper.....	"	Waldo F. Sawyer.....	Vineland.
Alfred Cornwell.....	Bridgeton.	E. B. Sharp.....	Roadstown.
Chas. H. Dare.....	Shiloh.	Joseph Shepperd.....	Bridgeton.
Rulon Dare.....	Deerfield.	Thomas J. Smith.....	"
Theodore G. Davis.....	Bridgeton.	W. H. C. Smith.....	Millville.
S. Day.....	Port Norris.	S. M. Snyder.....	Greenwich.
George E. Day.....	Millville.	Elsmore Stites.....	Bridgeton.
Miss Dunlap.....	Vineland.	David R. Streets.....	"
Henry W. Elmer.....	Bridgeton.	Jacob B. Streets.....	"
Matthew K. Elmer.....	"	A. M. Sullivan.....	Shiloh.
A. P. Glandon.....	Newport.	John G. Sweeney.....	"
W. P. Glendon.....	Cedarville.	John R. C. Thompson.....	Bridgeton.
J. S. Halsey.....	Vineland.	Joseph Tomlinson.....	"
G. S. Harker.....	Port Norris.	J. J. Tuller.....	Vineland.
George A. Harris.....	Bridgeton.	J. W. Wade.....	Millville.
Charles T. Hill.....	Dividing Creek.	James B. Ware.....	Bridgeton.
Ephraim Holmes.....	Greenwich.	Joseph C. Wheaton.....	Millville.
E. E. Howard.....	Rosenhayne.	Charles R. Wiley.....	Vineland.
Irvin W. Kirk.....	Fairton.	J. Howard Willets.....	Port Elizabeth.
Hamilton Mailly.....	Bridgeton.	C. W. Wilson.....	Vineland.
C. J. Massinger.....	Millville.	Stacey M. Wilson.....	Leesburg.
John H. Moore.....	Bridgeton.	S. M. Wilson.....	Bridgeton.

Essex County.

Henry J. Anderson.....	Newark.	George C. Bayles.....	Orange.
W. J. Andrews.....	"	F. W. Becker.....	Newark.
W. B. Arnold.....	Orange.	William F. Beggs.....	"
Sarah A. Ardray.....	Newark.	E. D. Bemiss.....	"
Maurice Asher.....	"	Charles D. Bennett.....	"
J. S. Ayres.....	"	G. Clinton Blakelock.....	East Orange.
Morgan W. Ayres.....	Montclair.	Ralph Blakelock.....	"
Charles Bachmann.....	Newark.	Herman C. Bleyle.....	Newark.
Wm. O. Bailey.....	"	Edward N. Bliss.....	"
Charles H. Bailey.....	Bloomfield.	James R. Bolton.....	"
Mrs. Mary Bailey.....	Newark.	T. M. Bradfield.....	"
Walter S. Baker.....	"	Edward De L. Bradin.....	"
A. K. Baldwin.....	"	James H. Bradshaw.....	Orange.
T. H. Baldwin.....	"	Edward Brady.....	Newark.
W. E. Baldwin.....	"	Rudolph Braun.....	"

Essex County—Continued.

W. M. Brien.....	Orange Valley.	Bethuel W. Dodd.....	West Orange.
Ida F. Bruce.....	South Orange.	A. G. Dougherty.....	Newark.
James S. Brown.....	Montclair.	George B. Dowling.....	East Orange.
Mess P. D. Brown.....	Irvington.	Charles J. Duffy.....	Newark.
Dr. Brumley.....	Newark.	Frederick W. Duncker.....	"
W. R. Bruyre.....	"	Charles H. Duncker.....	"
John W. Bryant.....	"	Samuel R. Dunlop.....	"
F. C. Bunn.....	East Orange.	John L. Duryee.....	"
E. L. Burns.....	Newark.	Wells P. Eagleton.....	"
James B. Burnett.....	"	William J. Eccles.....	"
H. L. K. Burnett.....	"	Emma W. Edwards.....	"
Robert L. Bunage.....	"	D. J. Edwards.....	"
Clarence W. Butler.....	Montclair.	Thomas P. Edwards.....	"
Carl Buttner.....	Orange.	Julius K. Egge.....	"
Wellington Campbell.....	Millburn.	James Ellicott.....	"
W. E. Carroll.....	Newark.	Daniel Ellicott.....	"
Levi W. Case.....	Montclair.	Charles W. England.....	"
John D. Castner.....	Newark.	Thomas D. English.....	"
William J. Chandler.....	South Orange.	E. English.....	Milburn.
R. W. Chapman.....	Newark.	James English.....	Irvington.
M. Osborne Christian.....	Irvington.	Lucy F. Evarts.....	Newark.
C. Herbert Church.....	Nutley.	Edward Everitt.....	"
A. M. Clalk.....	Belleville.	Paul T. Ferrer.....	"
J. Henry Clark.....	Newark.	Joseph Fewsmith.....	"
Henry L. Coit.....	"	Henry G. Fish.....	"
J. A. Coles.....	"	Armin Fisher.....	"
Jas. W. Collins.....	"	Thomas S. Fitch.....	Orange.
Alice D. Condict.....	East Orange.	Paul M. Fieger.....	Newark.
A. B. Condit.....	Orange.	H. W. Foster.....	Montclair.
Mary F. Conkey.....	Newark.	Richard P. Francis.....	"
E. D. G. Conkling.....	"	Samuel H. Frazer.....	Newark.
F. J. Connelly.....	"	Richard D. Freeman.....	South Orange.
Wm. H. Cooke.....	East Orange.	Albert Frey.....	Newark.
T. W. Corwin.....	Newark.	S. F. Friess.....	"
E. P. Courtright.....	"	R. S. Gage.....	"
M. S. Crane.....	"	Hillmer J. Galluba.....	"
H. Bedell Crane.....	"	Walton D. Garrett.....	East Orange.
Joseph H. Cummins.....	"	Mary Geddes.....	Glen Ridge.
T. G. Cussack.....	Orange.	H. P. Gerbert.....	Orange.
O. E. Cyphers.....	Belleville.	Francis A. Gile.....	East Orange.
Wm. H. Davis.....	East Orange.	Robert F. Gillen.....	Newark.
Charles H. Deakin.....	Newark.	Bradford W. Givens.....	East Orange.
John Dennis.....	"	William Glatzmayer.....	Newark.
Laban Dennis.....	"	Phillip J. Gordon.....	"
R. G. P. Diffenbach.....	"	E. J. T. Gould.....	East Orange.
Daniel M. Dill.....	"	Anna M. Graves.....	Newark.
William S. Disbrow.....	"	William B. Graves.....	East Orange.

Essex County—Continued.

Richardson Gray.....	Newark.	P. J. Jordan	Newark.
Thomas M. Gray.....	East Orange	William A. Judson.....	"
W. K. Gray.....	East Orange.	George R. Kent.....	"
Frank Gruber.....	Newark.	Charles J. Kipp.....	"
C. A. Graves.....	East Orange.	F. E. Knowles.....	South Orange.
Emil E. Gunther.....	Newark.	F. A. Knowles.....	Vailsburg.
C. H. Hadley.....	East Orange.	Henry A. Kornemann.....	Newark.
John F. Hager.....	Newark.	Charles F. Kraemer.....	"
Charles W. Hagen.....	"	Henry G. Krause.....	"
John F. Haggerty.....	"	Alexander Kunstlich.....	"
F. W. Hagny.....	"	Edwin R. Laine.....	Caldwell.
Eleanor Haines.....	"	Francis A. Lane.....	East Orange.
L. W. Halsey.....	Montclair.	Charles Lancaster.....	Newark.
Clara Hampson.....	Newark.	T. W. Lanterborn.....	"
Albert J. Hann.....	"	E. R. Lain.....	Caldwell.
George W. Harman.....	"	E. W. Lawrence.....	Newark.
H. C. Harris.....	Glen Ridge.	W. H. C. Lee.....	"
Charles W. Harrison.....	Newark.	Charles Lehlbach.....	"
Thomas W. Harvey.....	Orange.	Francis Lehmacher.....	"
Hans Hanx.....	Newark.	John J. Leppa.....	"
E. Z. Hawkes.....	"	William Henry Lewis.....	"
Joseph H. Hayden.....	"	Frank W. Lockwood.....	Bloomfield.
William J. Heberton.....	South Orange.	Herbert M. Long.....	Newark.
Hugh C. Hendry.....	Newark.	John J. H. Love.....	Montclair.
Henry Herrold.....	"	Thomas W. Lowerie.....	Newark.
H. C. H. Herrold.....	"	R. C. Lunsden.....	Orange.
Peter V. P. Hewlett.....	"	Calista V. Luther.....	Newark.
Fred. Hexamer.....	"	Ernest M. Lyon.....	"
L. S. Hinkley.....	"	James M. Maghie.....	East Orange.
W. E. Hitchcock.....	"	Charles D. Mandeville.....	Newark.
Louis A. Hoffmann.....	"	Frederick A. Mandeville.....	"
Gustave Hoffman.....	"	Frederick B. Mandeville.....	"
James A. Hoffman.....	"	H. A. Manderville.....	South Orange.
Edgar Holden.....	"	Robert J. Marshall.....	Newark.
L. E. Hollister.....	"	George Marsland.....	"
Francis W. Holmes.....	Upper Montclair.	Peter W. Martin.....	"
William H. Holmes.....	Orange.	Noah R. Martin.....	"
T. B. Hoffer.....	Newark.	Susan F. Martin.....	"
J. C. Houston.....	"	William H. Matland.....	"
Edwin J. Howe.....	"	H. E. Matthews.....	Orange.
Edward J. Ill.....	"	Frank L. Mayer.....	Newark.
Charles L. Ill.....	"	Daniel McCartie.....	"
C. P. Iliff.....	"	Henry D. McCormick.....	"
Emanuel Isenburg.....	"	Floyd McEwan.....	"
J. C. Johnson.....	"	William H. McKenzie.....	"
William M. Johnson.....	"	Sarah R. Mead.....	"
J. W. Jones.....	"	George Meeker.....	"

Essex County—Continued.

P. Megaro.....	Newark	Manning N. Robinson.....	Newark.
Archibald Mercer.....	"	B. A. Robinson.....	"
R. B. Mershon.....	"	Morton Robinson.....	"
Emory A. Miller.....	"	William D. Robinson.....	East Orange.
A. M. Mills, Jr.....	"	Hugh P. Roden.....	Newark.
W. D. Mitchell.....	East Orange.	R. H. Rogers.....	Orange.
Edgar V. Moffat.....	Orange.	G. W. Rolerfort.....	Newark.
J. T. Moorehouse.....	"	Oswald H. Roth.....	"
Clement Morris.....	Newark.	Phillip Roth, Jr.....	"
William Moore.....	Upper Montclair.	H. Emory Rothe.....	"
Edward Mueller.....	Newark.	Mefford Runyon.....	South Orange.
D. D. Mullahy.....	"	W. Schilling.....	Newark.
J. K. Mulholland.....	"	Albert J. Schureman.....	"
Jane H. Murphy.....	"	Charles A. Schureman.....	"
Frederick C. Nadler.....	"	Emanuel Schwartz.....	"
Vincent Nager.....	"	Edward Sealy.....	"
Albert B. Nash.....	"	W. F. Seidler.....	"
Anna Nivison.....	"	Marker Seidmann.....	"
E. D. Newman.....	"	J. L. Seward.....	Orange.
Richard C. Newton.....	Montclair.	Charles H. Shelton.....	Montclair.
George O. Gorman.....	Newark.	William F. Schick.....	Newark.
C. Herbert Osborne.....	"	M. H. Simmons.....	Orange.
Joseph D. Osborne.....	"	E. M. Skinner.....	Belleville.
Charles B. Parker.....	"	B. H. B. Slegt.....	Newark.
S. H. Pennington.....	"	Anna L. Smith.....	Montclair.
W. Pennington.....	Irvington.	E. Fayette Smith.....	Newark.
A. C. Peters.....	Newark.	Daniel W. Smith.....	"
Elijah Phelps.....	East Orange.	J. F. Somerhoff.....	"
T. F. Phelan.....	Orange.	O. Soper.....	Upper Montclair.
George B. Philhower.....	Nutley.	Lott Sou'hard.....	Newark.
William Pierson.....	Orange.	Sarah C. Spottiswoode.....	Orange.
Jesse B. Pitt.....	Bloomfield.	Marcus F. Squier.....	Harrison.
Robert C. Potter.....	Newark.	Edward Stachlin.....	Newark.
G. Edward Potter.....	"	Robert G. Stanwood.....	"
Edward E. Peck.....	Caldwell.	Charles F. Starkweather.....	"
H. A. Pulford.....	South Orange.	William H. Sternmermann.....	"
Stacey R. Radford.....	Newark.	George D. Stephenson.....	"
Jacob Ran.....	"	Joseph W. Stickler.....	Orange.
John M. Rand.....	"	Frank O. Stockton.....	Newark.
C. H. Randall.....	"	Joseph S. Sutphin.....	"
William Rankin, Jr.....	"	T. Y. Sutphen.....	"
Joshua W. Read.....	"	R. M. Sutphin.....	"
G. H. Richards.....	Orange.	Daniel Sweeney.....	"
Herman T. Richardt.....	Newark.	Amanda Taft.....	"
Phillipe Ricord.....	"	Frank J. Tetreault.....	Orange.
Charles D. Ripley.....	"	Alfred I. Thayer.....	Newark.
Samuel E. Robertson.....	"	Frederick W. Thum.....	"

Essex County—Continued.

William Titus.....Newark.	William H. Warren.....Newark.
Henry A. Towle.....“	Dr. Warren.....Summer av., “
Charles Trevisanello.....“	Walter S. Washington.....“
Sidney A. Twinch.....“	Fred. C. Webner.....“
C. F. Underwood.....“	George M. Weeks.....“
M. H. C. Vale.....Valesburg	A. V. Wendel.....“
R. Van Buskirk.....Newark.	William H. White.....Bloomfield.
S. W. Van Duyne.....“	H. B. Whitehorne.....Verona.
William H. Van Gieson.....Bloomfield	A. Widmann.....Newark.
A. H. Van Riper.....Nutley.	Alfred Wiener.....“
G. A. Van Wagenen.....Newark.	William R. Willmann.....“
Benjamin A. Vernoot.....“	C. D. Wilmont.....“
H. Von Frankendorf.....“	John E. Wilson.....Bloomfield.
George N. Waite.....“	W. S. Wilson.....Newark.
W. A. Wakeley.....Orange.	C. H. Winnous.....Belleville.
David L. Wallace.....Newark.	Franklin C. Woodruff.....Newark.
H. J. F. Wallhauser.....“	Joseph M. Woodruff.....“
Aaron C. Ward.....“	Henry M. Woolman.....“
George S. Ward.....“	Edward Worl.....“
John W. Ward.....“	James T. Wrightson.....“
Leslie D. Ward.....“	Solomon Wrubel.....“
William S. Ward.....“	Joseph C. Young.....“
Arthur Ward.....“	Charles Young.....“
Alice H. Ward.....“	C. M. Zeh.....“
Edwin M. Ward.....Bloomfield.	

Gloucester County.

Clarence G. Abbott.....Woodbury.	E. Z. Hillegass.....Mantua.
John H. Ashcraft.....Mullica Hill	John T. Huff.....Pitman Grove.
Samuel Ashcraft.....“	James Hunter.....Westville.
Dr. Buck.....Newfield.	Howard Iszard.....Glassboro.
G. H. Buckingham.....Clayton.	Jacob Iszard.....“
Benjamin F. Buzby.....Swedesboro.	George C. Laws.....Paulsboro.
H. H. Carr.....Mullica Hill.	Thomas Lee.....Woodbury.
Henry C. Clark.....Woodbury.	M. J. Luffberry.....Glassboro.
Henry H. Clark.....“	S. T. Miller.....Paulsboro.
H. B. Diverty.....“	E. T. Oliphant.....Bridgeport.
Charles L. Duffell.....Clayton.	Cyrus B. Phillips.....Hurffville.
J. G. Edwards.....Williamstown.	Alfred Porch.....Clayton.
Charles Fish.....Aura.	William H. Pounds.....Paulsboro.
W. A. Glover.....Woodbury.	T. E. Parker.....Woodbury.
O. Grimshaw.....Swedesboro.	George Evans Reading.....“
Luther F. Halsey.....“	E. L. Reeves.....Paulsboro.
L. M. Halsey.....Williamstown.	R. H. Reeves.....“
Charles Heritage.....Glassboro.	A. A. Smith.....Malaga.
J. Down Heritage.....“	P. G. Sowder.....Woodbury.

Gloucester County—Continued.

S. F. Stanger.....Harrisonville.	Albert Trenchard.....Glassboro.
Lydia Stokes.....Woodbury.	W. C. Williams.....Woodbury.
Harry A. Stout.....Wenonah.	H. A. Wilson.....“
Edwin Tomlinson.....Gloucester City.	

Hudson County.

W. H. Abercrambie.....Jersey City.	E. L. Bull.....Jersey City.
A. E. Ackerman.....“	John B. Burdett.....“
Clovis Adam.....“	C. V. Burke.....Harrison.
H. Adams.....“	Henry H. Burnett.....Hoboken.
Matilda H. Aldridge.....“	Thomas Byrnes.....Town of Union.
Ulamor Allen.....“	M. S. Caldwell.....Jersey City.
Henry Allers.....Harrison.	A. J. Carpenter.....“
Ende C. Am.....Town of Union.	C. H. Case.....“
B. A. Andrews.....Jersey City.	Romeo Chabert.....Hoboken.
E. C. Armstrong.....Town of Union.	T. R. Chambers.....Jersey City.
W. J. Arlitz.....Hoboken.	Ernest L. Clark.....“
D. R. Atwell.....“	W. A. Clark.....“
Pasquale Baglivi.....Jersey City.	Walter J. Clark.....“
E. M. Baker.....“	W. S. Clark.....“
Mary E. Bance.....“	Benjamin Clausen.....Hoboken.
E. W. Barber.....Arlington.	D. V. Clute.....Jersey City.
Dennis W. Barry.....Hoboken.	E. H. Congdon.....“
Louis Bauman.....Jersey City.	John Connell.....“
John J. Bauman.....“	Charles B. Converse.....“
Alexander Bech.....Arlington.	John P. Cooney.....“
Randolph Belmer.....Jersey City.	John E. Corrigan.....“
H. G. Bidwell.....“	Frederick M. Corwin.....Bayonne.
O. R. Blanchard.....“	E. P. Craig.....Jersey City.
J. H. Bogardus.....“	John J. Craven.....“
S. E. Bondy.....Bayonne.	Joseph J. Craven.....“
Horace Bowen.....Jersey City.	Charles C. Crocker.....Hoboken.
Helen F. L. Bowley.....“	Harvey R. Cronk, 493 Lexington av., N. Y. City.
Franklin D. Bowyer.....“	Charles W. Cropper.....Jersey City.
William S. Boyd.....“	Charles D. Cropsey.....Bayonne.
Nathan G. Bozeman.....“	E. A. Cudlippe.....Jersey City.
H. C. Bradford.....Bayonne.	George M. Culver.....“
William Brüagleb.....Jersey City.	Joseph E. Culver.....“
W. M. Brien.....“	Henry Cunneely.....Hoboken.
Josephine S. Briggs.....“	T. A. Curtis.....Jersey City.
Henry H. Brinkerhoff.....“	Alexander Dallas.....Bayonne.
John J. Broderick.....“	W. L. Darlington.....Jersey City.
Maria H. Brockhaus.....Hoboken.	James Davies.....“
Frank T. Brow.....Bayonne.	L. E. Deary.....Bayonne.
C. De Wolf Brownell.....Jersey City.	Ephraim De Graff.....Town of Union.
H. M. Brush.....Bayonne.	Sarah E. De Hart.....Jersey City.
E. P. Buffett.....Jersey City.	

Hudson County—Continued.

F. De Hart.....	Jersey City.	Frank D. Gray.....	Jersey City.
Arthur De Long.....	"	Francis B. Gren.....	Hoboken.
E. J. Deraimes.....	Weshawken.	W. Griswald.....	Jersey City.
N. R. Derby.....	Bayonne.	L. V. Guerin.....	"
G. K. Dickinson.....	Jersey City.	Henry W. A. Haase.....	"
William J. Dodd.....	"	H. M. Hallock.....	"
L. W. Dodson.....	"	Daniel S. Hardenburg.....	"
John W. Doherty.....	"	George W. Harder.....	"
M. O. F. Dolphin.....	Harrison.	Hugh M. Hart.....	"
L. F. Donohue.....	Bayonne.	Eugene H. Hartnett.....	"
Joseph M. Doyle.....	Jersey City.	Max Hecht.....	West Hoboken.
John S. Drain.....	"	Samuel Helfer.....	Hoboken
Gustave W. Drasel.....	Hoboken.	Charles C. Hendrick.....	"
Henry S. Drayton.....	Jersey City.	John P. Henry.....	Jersey City.
Morris Drowner.....	"	Mary E. Hennessy.....	New York City.
W. A. Dunn, Jr.....	"	F. C. Heppenheimer.....	Jersey City.
W. Elmore.....	"	A. W. Hergoz.....	Hoboken.
John K. Everitt.....	"	Sophia Hergoz.....	"
J. A. Exton.....	Arlington.	A. V. Hill.....	Guttenberg.
John Faber.....	Jersey City.	C. D. Hill.....	Jersey City.
William F. Fason.....	"	Willard Hillages.....	"
Nelson Fanning.....	"	F. L. Hills.....	"
Joseph N. Faulkner.....	Hoboken.	M. E. Hinchman.....	"
Julius Fehr.....	"	Carl Hoenig.....	Hoboken.
J. S. Ferguson.....	Jersey City.	Charles Hoening.....	"
S. E. De Hart Fernald.....	"	James Hoffman.....	Jersey City.
J. T. Field.....	Bayonne.	Peter Hoffman, Jr.....	"
John H. Finnerty.....	Jersey City.	A. J. Holcombe.....	"
J. Firm.....	"	H. J. Holcombe.....	"
William R. Fisher.....	Hoboken.	Samuel Hollister.....	"
Zachary P. Fletcher.....	Jersey City.	H. D. Holt.....	"
Michael F. Foley.....	Hoboken.	P. E. Hommell.....	"
A. Foot.....	Jersey City.	Josiah Hornblower.....	"
Joseph E. Fopeano.....	Hoboken.	Theodore R. Hornblower.....	"
A. C. Forman.....	Bayonne.	D. C. Hornby.....	"
Samuel R. Forman.....	Jersey City.	C. L. Humphrey.....	"
Francis M. Frazer.....	"	Roy Inglis.....	"
William C. Gallagher.....	"	J. L. Irvine.....	"
Rudolph W. Gelbach.....	Hoboken	C. E. Jaeckel.....	"
Charles A. Gilchrist.....	"	M. A. Jardine.....	"
Robert B. Gilman.....	Jersey City.	Frank A. Jellecker.....	"
Eugene H. Goldberg.....	Kearny.	Frederick L. Johnson.....	"
L. G. Goode.....	Jersey City.	W. F. Jones.....	"
L. J. Gordon.....	"	John C. Justin.....	Town of Union.
C. Grabowski.....	"	Charles Kaemmerer.....	Hoboken.
J. H. Graham.....	New York City.	John Keating.....	Jersey City.
Janes E. Gray.....	Jersey City.	W. H. Keller.....	Bayonne.

Hudson County—Continued.

Gertrude Kelly.....	Hoboken	George E. McLaughlin.....	Jersey City.
John S. Kelly.....	Jersey City.	John J. McLean.....	"
James H. Kennedy.....	"	Thomas J. McLaughlin.....	"
George W. King.....	Snake Hill.	T. C. McNamara.....	Hoboken.
Adolph Kirsten.....	Jersey City.	C. Holmes McNeil.....	Jersey City.
John Knox.....	"	Edward B. Meisgeier.....	West Hoboken
Arthur Kohm.....	New York City.	Edward M. Merrius.....	Jersey City.
E. F. Kopetschny.....	Jersey City.	Louis Michel.....	West Hoboken.
Otto E. Kopetschny.....	"	Mary E. Mitchell.....	Jersey City.
S. E. Korlight.....	New Durham.	Joha Mohus.....	Town of Union.
John Kudlich.....	Hoboken.	J. D. Montmarquet.....	Jersey City.
William T. Kudlich.....	"	S. V. Morris.....	Bayonne.
Richard Kuehne.....	Jersey City.	Austin F. Morris.....	Jersey City.
Calvin F. Kyte.....	"	Theodore F. Morris.....	"
M. Lampson.....	"	Edward Mulvaney.....	"
John J. Lappa.....	Hoboken.	Alder C. Muttart.....	"
Charles K. Law.....	Jersey City.	George W. Muttart.....	"
William C. Lewis.....	"	A. T. Muzzy.....	"
Albert Lignet.....	"	Euphemia J. Myers.....	New York City.
George H. Lightfoot.....	Arlington.	S. I. Myers.....	Bayonne.
C. A. Limebriemer.....	Jersey City.	A. J. Nabers.....	Hoboken.
E. H. Linbell.....	Hoboken.	Andrew J. Nelden.....	Jersey City.
Helen S. Livingston.....	Jersey City.	Israel Neugroschal.....	Hoboken.
John Lochner.....	"	John J. Nevin.....	Jersey City.
A. S. Lockwood.....	"	Joseph L. Nevin.....	"
A. J. Loomis.....	"	William B. Nevin.....	"
Joseph W. Love.....	"	Jennie W. Newell.....	"
E. J. Lowenthal.....	Hoboken.	W. H. Newell.....	"
E. P. Luce.....	Bayonne.	Frank Nichols.....	Hoboken.
John T. Luck.....	Town of Union.	Harry Nichols.....	"
William C. Lutkins.....	Jersey City.	G. Lewis Nichols.....	"
H. H. Lynch.....	"	Francis E. Noble.....	Jersey City.
F. K. MacMurrough.....	"	Thomas C. O'Callaghan.....	"
F. D. MacRae.....	Harrison.	August W. Oestmann.....	"
J. W. MacMillan.....	Jersey City.	Marie E. Ohlmeyer.....	West Hoboken.
G. F. Maerker.....	"	Charles Opdyke.....	Jersey City.
E. G. Marks.....	Arlington.	Levings A. Opdyke.....	"
John H. Martin.....	West Hoboken.	L. F. Ossa.....	New York City.
Jennie W. Martine.....	Jersey City.	Patrick O'Sullivan.....	Jersey City.
H. V. Masten.....	"	Robert M. Petrie.....	"
A. M. McCaine.....	"	A. C. Pfenning.....	West Hoboken.
D. McClellan.....	West Hoboken.	Charles M. Phillips.....	Hoboken.
W. J. McDowell.....	Jersey City.	David B. Pinder.....	"
Andrew McFarland.....	"	G. Fred Pitts.....	"
George D. McGauran.....	New York City.	Walter Pocock.....	Bayonne.
John D. McGill.....	Jersey City.	Joseph E. Pollard.....	Jersey City.
Joseph F. McKay.....	"	Joseph C. Poock.....	Hoboken.

Hudson County—Continued.

Louis E. Poole	Jersey City.	James L. Shiland	Bayonne.
J. J. Prendergast	New York City.	George M. Silvers	Jersey City.
John Pringle	Carney.	Harris R. Simmons	"
Edward E. Pruss	Jersey City.	Charles J. Simon	Hoboken.
Charles E. Putnam	"	M. G. Simpson	Jersey City.
Edwin W. Pyle	"	C. F. Smith	West Hoboken.
William L. Pyle	"	H. Melville Smith	Jersey City.
Gothard Paps	Hoboken.	M. J. Smith	"
William J. Parker	Jersey City.	Hulda G. Smith	"
M. F. E. Parody	Hoboken.	Charles F. Snyder	"
John C. Parsons	Jersey City.	Elbert M. Somers	"
George E. Potter	"	Henry Spence	"
James Paul	"	Ezra K. Sprague	"
Rufus W. Peapcock	"	Seth B. Sprague	"
Isaac M. Quimby	"	Fred. Spring	Bayonne.
William F. Radue	"	M. F. Squier	Harrison.
Murphy E. Ramsey	"	Evan T. Steadman	Hoboken.
Charles H. Randall	Arlington	Walter Steadman	"
J. H. Recharadt	Jersey City.	G. E. Steele	Jersey City.
Joseph M. Richter	"	Julia Stegmair	"
Daniel L. Reeve	"	F. B. Steelwagen	Town of Union.
John W. Reid	Kearny.	H. L. W. Stephenson	Jersey City.
Andrew G. Renwick	Jersey City.	S. V. W. Stout	"
T. C. Rhoads	Weehawken.	Frederick Straughn	"
F. C. Robertson	Jersey City.	Edward Sutton	Bayonne.
Joseph G. Rooney	Weehawken.	John J. Sutton	"
James H. Rosenkrans	Hoboken.	Paul J. Taylor	Hoboken.
H. E. Rothe	Harrison.	Julian P. Thomas	Jersey City.
Sidney A. Rowe	Jersey City.	Albert Toeffler	"
Henry B. Rue	Hoboken.	B. F. Underwood	Arlington.
W. H. Russell	Jersey City.	E. J. G. Valentine	Jersey City.
J. E. Salter	Bayonne.	B. Vallarino	New York City.
J. L. Sanburn	"	J. Vander Bach	Guttenburg.
Theodore Schindler	Hoboken.	J. P. Van Horn	Jersey City.
George Schlagher	"	A. F. Van Horn	"
Richard Schlemm	Town of Union.	John D. Van Sun	"
Gustavo A. Schoening	Bayonne.	William W. Varick	"
Richard J. Schofield	Jersey City.	Joseph H. Vonday	"
Adolph H. Schonger	New York City.	Hamilton Vreeland	"
Ernest C. Schultz	Hoboken.	A. P. Walter	"
Fred. Salnow	Jersey City.	A. W. Warren	Town of Union.
Hugo Seuffleben	Hoboken.	A. S. Warwick	Jersey City.
George H. Sexsmith	Bayonne.	W. P. Watson	"
Francis W. Shain	Jersey City.	Joseph E. Weeks	"
H. D. Sherwood	"	Otto A. Weigand	"
George J. Sherrill	"	John E. West	"
Edmond P. Shelby	"	Thomas Whalley	"

Hudson County—Continued.

Wallace White	West Hoboken.	F. F. Wolfe	Jersey City.
Conrad Wienges	Jersey City.	Charles F. Wolff	Town of Union.
George Wilkinson	"	Joseph Wolfson	Jersey City.
James Wilkinson	"	Louis Wolfstrin	Hoboken.
Walter Wilkinson	"	C. H. Yerrington	Jersey City.
John Williams	Kearny.	G. A. Zabriskie	New York City.
Thomas D. Williams	Jersey City.	Otto Ziegenhorn	Hoboken.
Mary A. Willis	"		

Hunterdon County.

T. M. A'Herron	Junction.	Vancleve Johnson	Stanton.
William C. Alpaugh	High Bridge.	William Knight	Clinton.
F. A. Apgar	New Germantown.	C. W. Larison	Ringoes.
George W. Barton	Three Bridges.	Frank W. Larison	Lambertville.
Willard E. Berkaw	Annandale.	E. D. Leidy	Baptisttown.
George V. Best	Rosemont.	J. N. Lowe	Milford.
N. B. Boleau	Jutland.	Peter McGill	Lambertville.
T. B. J. Burd	Flemington.	H. H. Miller	Lebanon.
Edward W. Closson	Lambertville.	Theodore Miller	Califon.
William E. Cornog	Sergeantsville.	E. H. More	White House.
Isaac S. Cramer	Flemington.	A. B. Nash	Frenchtown.
P. G. Creveling	Little York.	Warford L. Nixon	Readington.
Charles F. Creveling	Reaville.	W. L. Nixon	Quakertown.
C. R. Darnell	Milford.	W. W. Pursell	White House.
E. K. Denny	Frenchtown.	H. Race	Pittstown.
J. H. Ewing	Flemington.	George L. Romaine	Lambertville.
W. F. Finney	Frenchtown.	W. H. Schenk	Flemington.
J. M. Frace	Clinton.	Howard Service	Junction.
John H. Fretz	Stockton.	J. W. Silvara	Ringoes.
T. B. Fulper	Glen Gardner.	J. W. Snowball	Flemington.
C. F. Halstead	High Bridge.	Q. E. Snyder	Quakertown.
Dr. Harmon	Frenchtown.	O. H. Sproul	Flemington.
A. M. Hart	Ringoes.	Joseph A. Stites	Lebanon.
Edgar Hunt	Glen Gardner.	George P. Swift	Lambertville.
Thomas E. Hunt	"	S. Van Sichel	Clinton.
Thomas Johnson	Readington.	W. C. Warrington	"
Frederick Johnson	Stanton.	Peter C. Young	Ringoes.

Mercer County.

C. F. Adams	Trenton.	C. E. Brewer	Trenton.
A. W. Atkinson	"	C. A. Brown	"
E. Barwis	"	A. T. Bruere	"
J. G. Bayles	Princeton.	J. Bruere	"
H. M. Beatty	Trenton.	C. R. Burroughs	"
E. H. Bergen	Princeton.	M. Caminade	"
J. W. Boardman	Trenton.	F. V. Cantwell	"

Mercer County—Continued.

W. A. Clark, Jr.....	Trenton.	G. H. Parker.....	Trenton.
C. J. Claythour.....	"	T. A. Pierson.....	Hopewell.
A. Coleman.....	Robbinsville.	H. N. Purta.....	Trenton.
I. Cooper.....	Trenton.	G. H. Quackenboss.....	"
J. R. Cooper.....	"	William Radcliff.....	Woodsville.
H. B. Costill.....	"	William Rice.....	Trenton.
E. De Witt.....	Lawrenceville.	George R. Robbins.....	Hamilton Square.
A. H. Day.....	Trenton.	E. H. Rogers.....	Trenton.
E. L. Dickinson.....	"	R. R. Rogers, Jr.....	"
E. J. Dowd.....	"	R. R. Rogers, Sr.....	"
William Elmer.....	"	W. F. Rogers.....	"
A. S. Fell.....	"	J. H. Satterthwaite.....	"
George H. Franklin.....	Hightstown.	L. H. Satterthwaite.....	"
P. J. Gallagher.....	Trenton.	G. Schoenig.....	"
C. W. Garey.....	"	J. B. Shaw.....	"
W. H. G. Griffith.....	"	C. E. Shepherd.....	"
Edgar Hart.....	Pennington.	J. W. Shepherd.....	"
Israel Hart.....	"	George A. Silver.....	Windsor.
Edward P. Hawke.....	Hopewell.	E. B. Skellenger.....	Trenton.
C. F. Hoff.....	Trenton.	G. Sommer.....	"
E. Hollingshead.....	"	W. W. Stephenson.....	"
A. I. Hunt.....	Hamilton Square.	A. Stokes.....	"
J. F. Jamieson.....	Trenton.	W. McD. Struble.....	"
M. Jenkins.....	"	J. D. Tantum.....	"
Dr. Johnson.....	Lawrenceville.	George E. Titus.....	Hightstown.
E. W. Johnson.....	Trenton.	L. D. Tompkins.....	Trenton.
F. Johnson.....	"	J. P. Turner.....	"
J. P. Johnson.....	Hightstown.	W. B. VanDuyne.....	"
F. Johnston.....	Trenton.	F. Van Horn.....	Titusville.
E. Kelly.....	"	George Van Nest.....	Hopewell.
John Kirby.....	"	David Warman.....	Trenton.
A. K. Kline.....	Princeton.	H. M. Weeks.....	"
W. S. Lalor.....	Trenton.	J. M. Wells.....	"
C. B. Leavitt.....	"	E. L. Welling.....	Pennington.
L. Leavitt.....	"	J. H. Wikoff.....	Princeton.
J. B. Loos.....	"	L. Wilbur.....	Hightstown.
William J. Lytle.....	Princeton.	W. L. Wilbur.....	"
A. K. Macdonald.....	"	E. B. Witte.....	Trenton.
T. H. Mackenzie.....	Trenton.	A. Woodward.....	"
W. H. Matthews.....	"	W. W. Woolsey.....	"
J. H. McCullough.....	"	A. H. Worthington.....	"
W. G. McCullough.....	"	H. R. Worthington.....	"
E. W. McGalliard.....	"	H. E. Wright.....	Princeton.
C. H. McIlwaine.....	"	W. W. Wyckoff.....	Trenton.
John A. Miller.....	Hopewell.	P. W. Yard.....	"
H. G. Norton.....	Trenton.	J. K. Young.....	"
N. B. Oliphant.....	"	J. E. Albright.....	South Amboy.

Middlesex County.

Charles H. Andrus.....	Metuchen.	John L. Lund.....	Perth Amboy.
G. T. Applegate.....	New Brunswick.	Charles T. Mass.....	New Brunswick.
A. V. N. Baldwin.....	"	William McKenzie.....	Metuchen.
Henry R. Baldwin.....	"	Thos. V. Meacham.....	New Brunswick.
Dr. Billingham.....	Perth Amboy.	William J. Nelson.....	New Market.
F. W. Bissett.....	South River.	H. W. Phillips.....	Perth Amboy.
L. S. Blackwell.....	Perth Amboy.	William E. Ramsay.....	"
H. M. Brace.....	"	J. W. Rice.....	New Brunswick.
P. W. Brakley.....	Dunellen.	J. E. Riva.....	Milltown.
C. Burnett.....	South River.	P. A. Shannon.....	New Brunswick.
Edgar Carroll.....	Dayton.	Thomas A. Skillman.....	"
S. V. D. Clark.....	New Brunswick.	Clarence M. Slack.....	"
E. B. Dana.....	Metuchen.	A. L. Smith.....	"
Joseph Dennelsbeck.....	Spottswood.	Joshua Smith.....	South Amboy.
Lawrence Donahue.....	New Brunswick.	David Stephens.....	New Brunswick.
F. M. Donahue.....	"	J. L. Suydam.....	Jamesburg.
G. S. Dudley.....	"	H. C. Symms.....	Cranbury.
D. C. English.....	"	A. Treganowan.....	South Amboy.
Sarah E. Eavens.....	South River.	E. W. Tyrrell.....	Perth Amboy.
E. E. Haines.....	South Amboy.	John S. Van Marter.....	New Brunswick.
John Helm.....	New Brunswick.	Patrick J. Walsh.....	"
Frank Henry.....	Perth Amboy.	J. L. Witaker.....	Cranbury.
W. W. Hubbard.....	"	J. L. Whith.....	South Amboy.
E. A. Hulst.....	"	M. J. Whitford.....	New Market.
A. Clark Hunt.....	Metuchen.	Nicholas Williamson.....	New Brunswick.
W. B. Keasby.....	Perth Amboy.	J. H. Wilson.....	Perth Amboy.
William Knight.....	South River.	H. D. Zant.....	Jamesburg.
Samuel Long.....	New Brunswick.		

Monmouth County.

J. T. Ackerman.....	Asbury Park.	J. W. Bennett.....	Long Branch.
H. B. Alday.....	Ocean Grove.	W. A. Bevin.....	Freehold.
J. H. Aldey.....	"	Wesley K. Bradner.....	Bradley Beach.
Charles Allen.....	West End.	Joseph H. Bryan.....	Asbury Park.
B. Andrews.....	Navesink.	O. W. Budlong.....	Belford.
R. F. Andrews.....	"	Charles Karsner.....	Ocean Grove.
Asher T. Applegate.....	Englishtown.	Thomas Carter.....	Red Bank.
A. A. Armstrong.....	Fair Haven.	James Chasey.....	Long Branch.
Joseph E. Arrowsmith.....	Keyport.	Frederick F. Foleman.....	Asbury Park.
G. H. Baker.....	Long Branch.	H. G. Cock.....	Holmdel.
Mrs. D. J. S. Baright.....	Ocean Grove.	J. E. Cooper.....	Shrewsbury.
D. M. Barr.....	Long Branch.	E. W. Crater.....	Oceanport.
E. W. Beach.....	West Long Branch.	Mrs. Dr. Curry.....	Ocean Grove.
William B. Beach.....	Eatontown.	T. A. Curtis.....	Red Bank.
J. N. Beegle.....	Ocean Grove.	J. F. Davison.....	Asbury Park.

Monmouth County—Continued.

H. S. Des Anges.....Asbury Park.	W. L. Kinmouth.....Belmar.
Vandever M. Disbrow.....Farmingdale.	Henry Mitchell.....Asburk Park.
Stephen M. Disbrow.....“	E. Morton.....Red Bank.
J. D. Ely.....Marlboro.	Harry Neafie.....Freehold.
Susan Ewing.....Atlantic Highlands.	W. E. Newing.....Long Branch.
George D. Fay.....“	H. H. Pemberton.....“
Edwin Field.....Red Bank.	J. C. Price.....Imlaystown.
D. MacLean Forman.....Freehold.	P. B. Pumyea.....Allentown.
Otis R. Freeman.....“	W. W. Palmer.....Keyport.
J. B. Goodenough.....Long Branch.	William F. Patterson.....Chapel Hill.
J. O. Green.....“	E. B. Read.....Keyport.
Daniel D. Hendrickson.....Middletown.	J. J. Reed.....Seabright.
H. A. Hendrickson.....Atlantic Highlands.	T. E. Ridgway.....Red Bank.
William M. Hepburn.....Freehold.	D. E. Roberts.....Keyport.
R. W. Herbert.....Manasquan.	J. T. Rcse.....Eatontown.
J. A. W. Hetrick.....Asbury Park.	J. E. Savre.....Red Bank.
A. S. Higgins.....Manasquan.	George F. Schafer.....Ocean Ridge.
A. A. Higgins.....“	C. W. Shafto.....Asbury Park.
Garret B. Hoagland.....Keyport.	W. H. Slocum.....Long Branch.
George H. Hutchinson.....Englishtown.	P. L. Tantum.....Ocean Grove.
A. J. Jackson.....Matawan.	Edward F. Taylor.....Middletown.
H. P. Johnson.....Allentown.	John Taylor.....Ocean Grove.
Samuel Johnson.....Asbury Park.	C. H. Thompson.....Belmar.
W. E. Johnson.....Keyport.	E. Thompson.....“
H. S. Kinmouth.....Asbury Park.	W. W. Trout.....Spring Lake.
William R. Kinmouth.....Farmingdale.	George S. Tunis.....Manasquan.
Dr. Kirkbride.....Spring Lake.	R. A. Tusting.....Asbury Park.
C. Knecht.....Matawan.	Mrs. E. P. Upham.....“
Robert Laird.....Manasquan.	John H. Van Mater.....Atlantic Highlands.
Isaac S. Long.....Freehold.	W. B. Wainer.....Red Bank.
Sarah F. Macintosh.....Asbury Park.	J. B. Wainright.....Manasquan.
Dr. Marshall.....Ocean Grove.	William Warner.....Red Bank.
R. B. Marren.....Asbury Park.	W. S. Whitmore.....“
Dr. Marsden.....Red Bank.	G. F. Wilbur.....Asbury Park.
Joseph G. Maynard.....Freehold.	Dr. Wilkinson.....Red Bank.
Dr. McForman.....“	Alexander Williamson.....Asbury Park.
William T. McMillen.....Perrineville.	Mrs. Zandt.....Red Bank.
George N. McMillan.....Turkey.	

Morris County.

Calvin Anderson.....Madison.	George A. Coates.....Butler.
P. C. Baker.....Morristown.	William Colfax.....Pompton.
A. Becker.....“	J. W. Collins.....“
G. A. Becker.....“	I. W. Condit.....Dover.
R. A. Bennett.....Dover.	A. W. Condit.....“
A. E. Carpenter.....Boonton.	George C. Connet.....Morristown.

Morris County—Continued.

R. L. Cook.....Dover.	William H. Martin.....Madison.
E. P. Cooper.....Troy Hills.	Charles N. Miller.....Flanders.
T. R. Crittenden.....Dover.	F. W. Miller.....Dover.
George O. Cummins.....“	John Miller.....Stephensburg.
George S. Dearborn.....Rockaway.	J. H. O'Reilly.....Morristown.
George S. De Grooft.....Mendham.	F. W. Owen.....“
W. E. Derry.....Dover.	Stephen Pierson.....“
J. C. Douglas.....Morristown.	Stuart H. Reed.....Madison.
Joseph R. Farrell.....German Valley.	C. D. V. Romont.....Pompton Plains.
Levi Farrell.....Middle Valley.	J. G. Ryerson.....Boonton.
F. W. Flagge.....Rockaway.	Charles W. Scarborough.....Madison.
G. W. Foster.....“	David Shippe.....Butler.
William Story Forster.....Flanders.	Henry Stiger.....Mendham.
E. S. Giffert.....Chester.	John S. Stiger.....“
Eliot Gorton.....Morristown.	George M. Swain.....Chatham.
Alonzo Green.....Chester.	J. L. Taylor.....Mt. Arlington.
P. S. Hann.....Dover.	Dr. Taylor.....Dover.
H. A. Henriques.....Morristown.	A. Uebelacker.....Morristown.
John W. Jackson.....Rockaway.	John Walters.....Port Oram.
H. W. Rice.....Port Oram.	Cuthbert Wigg.....Boonton.
Dr. Kneavitt.....Morristown.	William J. Wolfe.....Chatham.
A. A. Lewis.....“	Mrs. H. M. C. Woodruff.....Boonton.
A. Mac Withey.....Butler.	J. E. Wright.....Morristown.

Ocean County.

Howard Allen.....New Egypt.	L. Laine.....Manahawkin.
Samuel Ashwist.....Beach Haven.	Dr. Lindley.....Lakewood.
Edmund Bennett.....Barnegat.	William McMillan.....New Egypt.
H. A. Bennett.....Point Pleasant.	J. H. M. Miller.....Bay Head.
W. Blake.....Forked River.	J. H. Platt.....Lakewood.
Frank Brower.....Manchester.	T. T. Price.....Tuckerton.
Dr. H. Buckingham.....Lakewood.	D. B. Robert Palmer.....“
H. H. Cate.....“	M. V. Reeves.....“
H. J. Cate.....“	W. B. Searles.....Lakewood.
E. C. Disbrow.....Toms River.	J. C. Schureman.....Toms River.
R. L. Disbrow.....“	Dr. Souder.....Island Heights.
B. F. Hawley.....Bay Head.	G. S. Tunis.....Burrsville.
Samuel B. Irwin.....Manahawkin.	John W. Webb.....Toms River.
W. H. Katzenbach.....Bay Head.	Frank Whitaker.....Point Pleasant.
Paul Kimble.....Lakewood.	Charles Woodard.....New Egypt.
W. S. Kimble.....“	Israel J. Woodard.....“

Passaic County.

Frank Agnew.....Paterson.	John H. Banta.....Paterson.
James W. Atkinson.....“	Edith Berdan.....“
George H. Balleray.....“	J. S. Bibby.....“

Passaic County—Continued.

William Blundell.....	Paterson.	A. F. McBride.....	Paterson.
Charles Blundell.....	"	John C. McCoy.....	"
D. P. Boardman.....	"	S. R. Merrill.....	"
David T. Bowden.....	"	John R. Merrill.....	"
J. A. Browne.....	"	Chris. Mohl.....	Passaic.
William J. Cadmus.....	"	Hattie Montague.....	Paterson.
C. M. Campbell.....	"	E. B. Morgan.....	"
Ada Carr.....	"	J. C. Morgan.....	Pompton.
William H. Carroll.....	Passaic.	Charles F. W. Myers.....	Paterson.
Charles A. Church.....	"	William Neer.....	"
Theodore Coursen.....	Oak Ridge.	Rush Neer.....	"
W. S. Coursen.....	"	George F. Newcombe.....	"
James Crooks.....	Paterson.	W. K. Newton.....	"
R. M. Curtis.....	"	James O'Donnell.....	"
H. V. Day.....	Bloomingtonville.	Thomas F. O'Grady.....	"
Edwin DeBaun.....	Passaic.	Henry Parke.....	"
William F. Decker.....	Paterson	Thomas L. Paton.....	"
S. DeYeager.....	"	John P. Packston.....	"
F. F. Demarest.....	Passaic.	J. C. Pedrick.....	Passaic.
William C. Dittmer.....	Paterson.	F. H. Rice.....	"
Edward W. Doty.....	"	N. C. Ricardo.....	"
Herbert Emerson.....	"	Benjamin A. Rogers.....	Paterson.
George Fischer.....	"	A. W. Rogers.....	"
Thomas J. Fitzmaurice.....	"	George L. Rundle.....	Passaic.
William Flitcroft.....	"	Charles H. Schribner.....	Paterson.
Vigna Fortunato.....	"	William A. Smith.....	"
O. V. Garnett.....	"	James W. Smith.....	"
M. W. Gillson.....	"	William R. Smith.....	Little Falls.
John F. Gillson.....	"	Joseph Solatinow.....	Paterson.
William S. Green.....	"	James M. Stewart.....	"
P. A. Harris.....	"	John Sullivan.....	Passaic.
Jacob Henggeler.....	"	Homer Sylvester.....	Paterson.
C. P. Hopper.....	"	Martin J. Synott.....	Little Falls.
W. B. Johnson.....	"	Richard A. Terhune.....	Passaic.
Eli G. Jones.....	"	Percy H. Terhune.....	"
Albert D. Jousset.....	"	George W. Terriberly.....	Paterson.
Thomas J. Kane.....	"	Calvin Terriberly.....	"
E. A. Keeler.....	Little Falls.	S. C. Townsend.....	"
P. S. Kinney.....	Paterson.	Iqn. Usavytch.....	Passaic.
T. Y. Kinney.....	"	F. P. Utley.....	Hawthorne.
Henry Kip.....	"	S. Utter.....	North Paterson.
John L. Leal.....	"	Spencer Van Dalsen.....	Paterson.
M. A. Mackintosh.....	"	Cornelius Van Riper.....	"
B. C. Magennis.....	"	G. J. Von Schott.....	Passaic.
E. G. Maines.....	West Milford.	P. Van Vranken.....	"
R. T. Marsh.....	Paterson.	W. Van Winkle.....	Little Falls.
Enoch Mather.....	"	F. Vigna.....	Paterson.

Passaic County—Continued.

Frank D. Vreeland.....	Paterson.	S. F. Wiley.....	Paterson.
George T. Welsh.....	Passaic	J. W. Williams.....	"
Abraham Wessler.....	Paterson.	A. R. Wollfe.....	"
A. A. McWhithey.....	Pompton.		

Salem County.

L. A. D. Allen.....	Woodstown.	William H. James.....	Pennsylvania.
C. P. Atkinson.....	Palatine.	Harry T. Johnson.....	Pedricktown.
Nathan H. Barnhart.....	Pennsgrove.	David Moore.....	Pennsgrove.
A. T. Beckett.....	Salem.	Charles Newton.....	Sharptown.
Francis Bielderback.....	"	William Patrick.....	Woodstown.
J. B. Butterfield.....	Canton.	J. A. Paterson.....	Salem.
John Campbell.....	Elmer.	E. S. Sharpe.....	Salem.
William H. Carpenter.....	Salem.	C. M. Sheron.....	"
C. P. Cheeseman.....	Elmer.	W. Scott Smith.....	"
Henry Chevanne.....	Salem.	Ellen B. Smith.....	"
Warren L. Ewen.....	Alloway.	W. S. Smith.....	Hancocks Bridge.
George W. Fitch.....	Daretown.	William F. Stilt.....	Salem.
Henry W. Flannigan.....	Pennsgrove.	John Somerhill.....	Pennsgrove.
Daniel Garrison.....	"	Miss Sarah Taylor.....	Woodstown.
Uriah Gilman.....	Woodstown.	B. A. Waddington.....	Salem.
James Given.....	Auburn.	Lemuel Wallace.....	Alloway.
William F. Good.....	Quinton.	David Wiley.....	Salem.
John H. Groff.....	Pennsgrove.	Orlando A. Wood.....	Magnolia.
F. B. Harris.....	Canton.	A. B. Woodruff.....	Elmer.
Henry Jackson.....	Salem.		

Somerset County.

Dr. Anderson.....	Neshanic.	L. M. Lanning.....	Somerville.
J. B. Beekman.....	Pluckamin.	J. F. McWilliams.....	"
J. H. Carman.....	North Plainfield.	B. B. Mathews.....	Bound Brook.
J. Howard Cooper.....	Middlebush.	W. B. Mathewson.....	North Plainfield.
H. V. Davis.....	North Branch.	Francis McConangley.....	Somerville.
E. C. Davis.....	Bound Brook.	William H. Merrill.....	South Branch.
Harris Day.....	Bernardsville.	Abram B. Mosher.....	Griggstown.
John Dayton.....	Basking Ridge.	A. Nelson.....	Neshanic Station.
Dr. Dugan.....	Raritan.	L. T. Reed.....	Somerville.
E. F. Farrow.....	Peapack.	Jesse S. B. Ribble.....	Harlingen.
C. R. P. Fisher.....	Bound Brook.	William B. Ribble.....	East Millstone.
T. H. Flynn.....	Somerville.	W. B. Searle.....	Rocky Hill.
Mary Gaston.....	"	Ira Spencer.....	Harlingen.
Frederick W. Hagerty.....	Bloomington.	Phillip S. Steelman.....	Linwood.
J. P. Hecht.....	Raritan.	A. L. Stilwell.....	Somerville.
Joseph Hedges.....	Branchville.	Frederick C. Sutphin.....	Liberty Corner.
Frederick Jones.....	Basking Ridge.	W. J. Swinton.....	Somerville.

Somerset County—Continued.

S. O. B. Taylor.....	Millstone.	H. G. Wagoner	Somerville.
Lucious D. Tompkins.....	Harlingen.	Frederick E. Wild	Bound Brook.
A. F. Voorhies.....	Basking Ridge.	P. J. Zaglio.....	North Plainfield.

Sussex County.

J. M. Allen	Deckertown.	Levi D. Miller	Newton.
Carlos Allen	Vernon.	J. M. Miller.....	Layton.
T. H. Andrus	Sparta.	John Moore	Deckertown.
E. E. B. Beatty.....	Newton.	Ephriam Lorrison.....	Newton.
L. C. Burd.....	Ogdensburg.	C. R. Nelden	Stanhope.
Jeptha C. Clark	Andover.	J. Cole Price.....	Branchville.
Martin Cole, Jr.....	Hainesville.	J. B. Pullet	Hamburg.
J. P. Couse.....	Hamburg	L. B. Smith	Bushkill, Pa.
Edward S. Dalrymple.....	Branchville.	John C. Strader	Lafayette.
C. H. Davis.....	Stanhope.	Sydney B. Straley.....	Andover.
S. Demarest.....	Suffern, N. Y.	F. Straley	"
Benj. W. Furgeson.....	Deckertown	Humphrey Swain	Goshen, N. Y.
J. Hamilton.....	Newton.	H. D. Van Gaeback.....	Deckertown.
Joseph T. Hetzel	Stillwater.	Shepherd Voorhees.....	Newton.
Bruno Hood.....	Newton.	Joseph Wolf.....	Colesville.
J. H. McCloughn.....	Swartswood.	A. S. Zabriskie.....	Suffern, N. Y.

Union County.

Daniel C. Adams	Plainfield.	A. Donnegan	Elizabeth.
Wilforce Allen.....	Crawford.	Robert N. Duncan.....	Crawford.
W. Cornell Allen	Cranford.	G. W. Endicott.....	Plainfield.
G. W. Bailey.....	Elizabeth.	Dr. English.....	Springfield.
Pierre A. Banker	"	Mrs. Frank.....	Plainfield.
Josephine L. Barpean.....	"	J. T. Fritts.....	"
J. F. Berg	Plainfield.	William Gale.....	Westfield.
W. C. Boone.....	"	W. F. Gasten.....	Plainfield.
Dr. Bridgeman.....	Elizabeth.	James S. Green.....	Elizabeth.
L. R. Brown	"	E. B. Green	"
John Burling	Summit.	F. Hallock	Plainfield.
W. E. Cladek.....	Rahway.	T. E. W. Harris	Springfield.
M. L. Closson.....	Plainfield.	Joseph B. Harrison.....	Westfield.
J. Ackerman Coles.....	Scotch Plains.	E. W. Hedges	Plainfield.
J. H. Cooley	Plainfield.	B. Van D. Hedges.....	"
Sherman Cooper.....	Westfield.	C. B. Holmes.....	Rahway.
A. M. Cory.....	New Providence.	Charles Holton.....	Roselle.
Dr. Crane	Etizabeth.	D. W. C. Hough.....	Rahway.
Anna Crothers.....	"	H. Page Hough.....	"
Thomas J. Cusack	Springfield.	T. L. Hough	Elizabeth.
J. J. Daily.....	Rahway.	Dr. Jackson.....	Springfield.
Thomas S. Davis.....	Plainfield.	O. L. Jenkins.....	Plainfield.

Union County—Continued.

Frederick A. Kinch, Jr.....	Westfield.	John B. Probasco.....	Plainfield.
Sarah D. Kinney.....	Plainfield.	Rebecca P. Page.....	"
William H. Lawrence	Summit.	John M. Randall.....	Rahway.
J. G. Leary.....	Elizabeth.	John P. Reilly.....	Elizabeth.
T. L. Livingood	"	W. H. Risk.....	Summit.
M. B. Long.....	Plainfield.	J. Boyd Risk.....	"
H. H. Lowrie	"	E. Rushmore.....	Plainfield.
W. A. M. Mack.....	Elizabeth.	Madame Rummell.....	"
A. Manning	Plainfield.	H. O. Selover	Rahway.
W. E. Matison	"	Eli Hugh Silvers.....	"
Joseph McConnell	Cranford.	W. U. Silvers.....	"
William McConnell.....	"	M. S. Simpson	Plainfield.
T. N. McLean	Elizabeth	John J. Smith	Summit.
J. B. Morton	"	T. V. Smith.....	Westfield.
Victor Mravlag.....	"	Arthur Stearn.....	Elizabeth.
W. H. Murray	Plainfield.	Thomas Terrill.....	"
E. R. O'Reilly.....	Elizabeth.	T. H. Tomlinson.....	Plainfield.
F. W. Oliver	Rahway.	W. F. Turner	Elizabeth.
Alonzo Pettit.....	Elizabeth.	F. W. Wescott.....	Scotch Plains.
John H. Pickett.....	"	E. J. Westfall.....	Rahway.
Henry C. Pierson	Roselle.	N. L. Wilson	Elizabeth.

Warren County.

N. H. Adsit.....	Succasunna.	L. Haggerty	Danville.
W. C. Albertson.....	Belvidere.	Mrs. Laura Hand.....	Washington.
Gertrude Allen	Hackettstown.	W. B. Hoagland.....	Oxford.
G. R. Anderson.....	Portland, Pa.	L. B. Hoagland.....	"
Isaac Barber	Phillipsburg.	P. N. Jacobus	Washington.
Charles Bech	Portland, Pa.	A. C. Jacoby	Phillipsburg.
Frank Beers.....	Coolbaughs, Pa.	John C. Johnson.....	Blairstown.
L. D. Beiber.....	Phillipsburg.	S. H. Johnson	Asbury.
E. J. Bergen.....	Belvidere.	Harry Johnson.....	Riegelsville, Pa.
Charles Boyer.....	Riegelsville.	A. S. Jordan.....	Riegelsville, Pa.
William H. Burd.....	Belvidere.	Wm. Kline	Phillipsburg.
Harry L. Carhart.....	Blairstown.	F. P. Lefferts.....	Belvidere.
Garner H. Cline.....	Harmony.	J. S. Lindabury.....	Bloomsbury.
E. M. Cook.....	Washington.	Wm. R. Little.....	"
John S. Cook.....	Hackettstown.	H. A. E. Martin.....	Hackettstown.
H. M. Cox.....	Washington.	J. V. Mattison.....	Washington.
Samuel D. Crispin.....	Broadway.	W. H. McGee.....	Belvidere.
G. Wyckoff Cummings.....	Belvidere.	F. P. McKinstry	Washington.
Frank W. Curtis.....	Stewartsville.	John Miller.....	Hope.
James D. De Witt.....	Harmony.	L. C. Osmun	Hackettstown.
Harry S. Founk	Port Murray.	J. M. Reese.....	Phillipsburg.
J. H. Griffith.....	Phillipsburg.	E. L. Reigel	Bloomsbury.
F. W. Haggerty	Vienna.	Wm. I. Roe.....	Vienna.

Warren County—Continued.

Dr. Rogan.....	Phillipsburg.	Wm. Stites.....	Washington.
F. Rorback.....	Johnsburg.	G. O. Tunison.....	Oxford.
C. B. Smith	Washington.	A. C. Van Syckle.....	Hackettstown.
R. A. Stewart.....	Phillipsburg.	H. R. West.....	Phillipsburg.

NEW JERSEY SANITARY ASSOCIATION.

A report of the proceedings of the New Jersey Sanitary Association has appeared each year in the annual report of the State Board of Health during the past fourteen years, but, at the meeting held in 1895, it was determined by the Association to print the transactions in pamphlet form. The interest shown by the members of this organization in the progress of public hygiene was never more active than at present, and its membership includes the foremost sanitarians of the State.

The programme for the meeting of 1895 gives an idea of the scope of the work of the Society.

PROGRAMME FOR THE TWENTY-FIRST ANNUAL MEETING OF
THE NEW JERSEY SANITARY ASSOCIATION,

*To be held in the Brighton Casino, Atlantic City, Friday and Saturday,
December 6th and 7th, 1895.*

OFFICERS.

President, David C. English, M.D., New Brunswick.
First Vice-President, Shippen Wallace, Ph.D., Burlington.
Second Vice-President, James Owen, C.E., Montclair.
Recording Secretary, Daniel Strock, M.D., Camden.
Corresponding Secretary, Professor J. M. Watson, Elizabeth.
Treasurer, George W. Howell, C.E., Morristown.

EXECUTIVE COUNCIL.

Superintendent V. L. Davey, East Orange, Chairman; J. C. Smock, Ph.D., State Geologist, Trenton; Charles E. Brush, C.E., Hoboken; William Pierson, M.D., Orange; Professor H. B. Cornwall, Ph.D., Princeton; Professor A. R. Leeds, Ph.D., Hoboken; Judge W. M. Lanning, Trenton; T. R. Chambers, M.D., Jersey City; Professor C. H. Raymond, Ph.D., Lawrenceville; H. R. Baldwin, M.D., LL.D., New Brunswick; I. H. Platt, M.D., Lakewood; E. S. Atwater, Counselor, Elizabeth; Professor C. M. Davis, Bayonne; James A. Exton, M.D., Arlington; P. N. Black, C.E., Asbury Park; William Elmer, M.D., Trenton; Superintendent Randall Spaulding, Montclair; H. B. Francis, Esq., Camden; David Harvey, Counselor, Asbury Park; John L. Leal, M.D., Paterson; H. B. Willis, Counselor, New Brunswick; G. W. Rockfellow, Esq., Plainfield; H. C. Green, Esq., Arlington; G. J. Von Schott, M.D., Passaic; H. B. Baldwin, Chemist, Newark; H. M. Herbert, C.E., Bound Brook; W. H. Hall, M.D., Lakewood; Joseph H. Powell, Esq., Bridgeton.

HONORARY MEMBERS OF COUNCIL.

Ex-Presidents C. F. Brackett, M.D., LL.D., Princeton; L. B. Ward, C.E., Jersey City; McRee Swift, C.E., New Brunswick; W. K. Newton, M.D., Paterson; James C. Bayles, C.E., Orange; F. Gauntt, M.D., Burlington; James M. Green, Ph.D., Principal State Schools, Trenton; Henry Mitchell, M.D., Secretary State Board Health, Asbury Park; D. Benjamin, M.D., Camden; George P. Olcott, C.E., East Orange; E. L. B. Godfrey, M.D., Camden; Carrol Ph. Bassett, C.E., Ph.D., Newark; Addison B. Poland, Ph.D., State Superintendent Public Instruction, Trenton.

PROGRAMME.

First Session—Friday, December 6th, at 4 o'clock P. M.

1. Welcoming addresses by W. G. Hoopes, chairman of the local committee, and Mayor Franklin P. Stoy, of Atlantic City.
2. Response and remarks on the objects of the Association, by the President, D. C. English, M.D., of New Brunswick.
3. Necessity for the Control and Construction of Buildings, by H. M. Herbert, C.E., of Bound Brook.
Discussion opened by Arnold H. Moses, architect, Merchantville.
4. Sanitary Inspection of Factories, by O. W. Braymer, M.D., of Camden.
Discussion opened by Joseph W. Stickler, M.D., of Orange.
5. Progress in Public Hygiene, an address by John L. Leal, M.D., Health Officer of Paterson.

Second Session—Friday, December 6th, at 8 o'clock P. M.

6. Prayer by Rev. Thomas J. Cross, of Atlantic City.
7. The Hygienic Supervision of School Children, by Baron Nils Posse, author of the Swedish System of Gymnastics, and Principal of the Posse Gymnastic Institute, Boston, Mass.
Discussion opened by A. B. Poland, Ph.D., State Superintendent Public Instruction, and Superintendent Vernon L. Davey, of East Orange.
8. Governmental Methods for Preventing the Pollution of Streams, by Carrol Ph. Bassett, C.E., Ph.D., of Newark.
Discussion opened by Mortimer Lampson, M.D., of Jersey City, and Percy Jackson, Counselor, of Belleville.
9. Artesian Sources of Public Water Supplies in New Jersey, by J. C. Smock, Ph.D., State Geologist, of Trenton.
Discussion opened by Professor Lewis Woolman, of Philadelphia, and Thomas K. Reed, M.D., of Atlantic City.

Third Session—Saturday, December 7th, at 9 o'clock A. M.

10. Purification of Water Supplies by Filtration, by M. N. Baker, C.E., of Montclair.
Discussion opened by L. B. Ward, C.E., of Jersey City.

11. Bacteriological Diagnosis: Its Sanitary Relations, by D. Meade Bolton, M.D., Chief of the Bacteriological Division of the Dep't of Public Health, Philadelphia, Pa.
Discussion opened by R. N. Connolly, M.D., City Bacteriologist, Newark, and H. R. Baldwin, M.D., LL.D., of New Brunswick.
12. Discussion on Plumbing Inspection, opened by Hon. Geo. P. Olcott, Sanitary Engineer, of East Orange, and Henry Mitchell, M.D., Secretary of the State Board of Health, of Asbury Park.
13. Improvement of Local Administration in Townships, by James A. Exton, M.D., of Arlington.
Discussion opened by Prof. C. F. Brackett, M.D., LL.D., President of the State Board of Health, and D. E. English, M.D., of Millburn.
14. Disposal of Garbage, by W. G. Hoopes, President of the Atlantic City Board of Health.
Discussion opened by W. C. R. Colquhoun, M.D., Health Officer, Wilmington, Del., and T. R. Chambers, M.D., of Jersey City.
15. Election of Officers.
16. Miscellaneous Business.
17. Closing remarks by the President and adjournment.

After Order 12, recess may be taken until 2.30 p. m.

Members will oblige the officers and facilitate business by prompt attendance, as the sessions will begin on time.

Authors of papers are requested to limit them to 20 minutes. The speakers who lead the discussions will be allowed 10 minutes; all others 5 minutes.

The admission to all sessions of the annual meeting will be free, and ladies are cordially invited.

Invitation is especially extended to Health Officers to be present and take part in the discussions.

MEMBERSHIP AND OBJECTS OF THE ASSOCIATION.

The New Jersey Sanitary Association is composed of Professors and Teachers in our Colleges and Schools, Municipal Officers, Health Officers, Lawyers, Physicians, Clergymen, Civil Engineers, Sanitary Engineers, Architects, Plumbers and other citizens of our State interested in sanitation as related to our homes, our schools and our municipalities.

The objects of the annual meeting are the presentation of facts, the comparison of views and the discussion of methods relating to the prevention of sickness and of untimely deaths. The Association also, through the annual meeting, seeks to impress upon the public the importance of securing wise and preventing harmful sanitary legislation; and also to aid the State and Local Boards of Health in their efforts to secure better administration of our health laws for the good of our citizens and the increase in healthfulness and prosperity of our State.

COMMITTEES.

Committee of the Executive Council on Meetings.—E. L. B. Godfrey, M.D., and Daniel Stroock, M.D., of Camden, and Prof. James M. Green, Ph.D., of Trenton.

Local Committee of Arrangements—W. G. Hoopes, Esq., Chairman; Mayor Franklin P. Stey, M. D. Youngman, M.D., Joseph H. Borton, W. B. Loudenslager, Julius Coty, Henry S. Scull and Wm. F. Koeneke.

REPORT
OF THE
Bureau of Vital Statistics
OF THE
STATE OF NEW JERSEY
FOR THE
Statistical Year from July 1st, 1894, to July 1st, 1895.

REPORT OF THE MEDICAL SUPERINTENDENT OF VITAL STATISTICS.

The act approved February 15th, 1888, governs the collection of vital statistics, and the enforcement of the law is placed in the hands of local boards of health. Under former laws relating to this service, certificates of marriages, births and deaths were required to be transmitted to the Secretary of State, and in cities the city clerk was the officer to whom the returns were delivered by physicians and others. Under the present law, city clerks may still receive the certificates unless the local board of health shall have appointed a registrar of vital statistics. Section 4 of the act above referred to reads as follows :

“4. *And be it enacted,* That any certificate of marriage or birth required to be made by the first and second sections of this act shall, in any city, borough, town or other local municipal government, be transmitted to the registrar of vital statistics, if there be such officer, and if not, then to the clerk of the city, borough, town or other municipal government in which such marriage or birth shall occur; and in any township every such certificate shall be transmitted to the assessor of the township in which such marriage or birth shall occur, or if there be no assessor in office, then to the township clerk.”

Section 5 provides that death certificates shall be delivered to the same officer. It will thus be seen that local boards of health may, if they so desire, take charge of the collection and local registration of vital statistics, and that the only act required by law to place this service under the direction of local boards is the appointment of a registrar of vital statistics. Inasmuch as the local boards are responsible for the enforcement of the law, and because these vital facts form the foundation of sanitary administration, and because every local health board should have these records available, and in form to furnish information concerning the healthfulness of the various portions of the territory included within the municipal limits, it is very desirable that there shall be a registrar of vital statistics appointed by

the board of health of every municipality. If the city clerk is at present performing the duty, and if his service is satisfactory, he may receive the appointment. The clerk or secretary of the board is the officer who is most frequently chosen to serve in this capacity. An act approved March 18th, 1895, provides that in all cities of the second class, the city clerk shall be the registrar of vital statistics.

Attention is called to the following provisions of the laws referred to :

I. The penalty for neglect to certify marriages, births and deaths is \$20.

II. Section 2 gives authority to the assessor in every township, and to the clerk or other person acting as registrar of vital statistics in every municipality, to provide and send to each physician twelve prepaid envelopes every year for the monthly return of births, the expenses to be paid by the disbursing officer of the city or township. But the failure of any such officer to provide these envelopes does not excuse the physician for making no returns.

III. Section 3 makes it lawful in cases where there has been sudden death without medical attendance, or where the medical attendant is sick or absent, for another physician to give the certificate. This provision is only intended for unusual cases, and the fact of inability to secure from the attendant the ordinary certificate must be stated. See, also, section 6.

IV. Section 5 allows an undertaker, for his own convenience, to procure a permit for burial (when this is required for burial instead of the certificate of death), in the town in which he lives or where the burial is to be made, but, as in such cases the person acting as registrar of vital statistics must mail the certificate of death to the assessor of the township in which the death may have occurred, the undertaker is required to pay postage.

V. Section 8 gives the same privilege in cases where the body is to be removed from the State and the undertaker finds it more convenient, to get a permit in the town in which he resides instead of obtaining it from the assessor in the township in which the death occurred.

VI. Section 9 requires the keeper of every incorporate cemetery to keep a record of interments open at all proper times to the inspection of the local board of health, and the agents of the State Bureau of Vital Statistics.

Local boards should notify the superintendent of each cemetery of this law.

VII. Section 15 makes it the duty of the health inspector, registrar of vital statistics and members of local boards of health to enforce the law.

PUBLIC DECLARATION

BY THE BOARD OF HEALTH OF THE STATE OF NEW JERSEY CONCERNING PREVENTABLE AND ESPECIALLY DANGEROUS COMMUNICABLE DISEASES.

In accordance with Chapter CCLX., Laws of 1895, entitled "An act for the protection of the public health," the State Board of Health hereby gives

NOTICE.

Cholera, yellow fever, typhus fever, leprosy, plague, trichinosis, small-pox, varioloid, enteric (or typhoid) fever, diphtheria, membranous croup and scarlet fever are hereby publicly declared to be preventable and especially dangerous to public health.

By order of the State Board of Health,

HENRY MITCHELL, Secretary.

Date, January 10th, 1896.

NUMBER OF MARRIAGES, BIRTHS AND DEATHS.

BY COUNTIES, CITIES AND TOWNSHIPS, AND TOTALS FOR THE
STATE, FOR THE YEAR ENDING JUNE 30TH, 1895.

ATLANTIC COUNTY.

	M.	B.	D.
Absecon	5	7	15
Atlantic City	188	329	352
Buena Vista	4	24	15
Egg Harbor City	28	47	26
Egg Harbor Township	23	75	62
Galloway	13	46	48
Hamilton	11	28	29
Hammonton	51	104	65
Mullica	1	21	17
Weymouth	2	6	4
	326	682	633

BERGEN COUNTY.

	M.	B.	D.
Bergen	17	97	54
Englewood	43	86	85
Franklin	19	41	40
Hackensack	56	107	113
Harrington	21	56	45
Hohokus	21	52	34
Lodi	15	113	63
Midland	13	40	48
Orvil	8	29	25
Palisade	9	64	62
Ridgefield	19	138	134
Ridgewood	10	46	36
Saddle River	16	89	74
Union	24	111	134
Washington	23	69	41
	314	1,140	988

BURLINGTON COUNTY.

	M.	B.	D.
Bass River.....	7	27	11
Beverly.....	24	47	60
Bordentown.....	39	81	81
Burlington.....	92	140	148
Chester.....	35	85	63
Chesterfield.....	3	12	16
Cinnaminson.....	8	34	28
Delran.....	16	58	33
Eastampton.....	1	12	3
Evesham.....	7	21	18
Florence.....	10	49	30
Lumberton.....	5	10	21
Mansfield.....	8	21	28
Medford.....	13	26	26
Mount Laurel.....	.....	33	18
New Hanover.....	21	12	27
Northampton.....	38	79	116
Palmyra.....	20	33	32
Pemberton.....	18	20	42
Shamong.....	4	2	8
Southampton.....	2	8	7
Springfield.....	3	9	18
Washington.....	4	20	8
Westampton.....	.....	9	6
Willingboro.....	.....	6	7
Woodland.....	1	7	5
	379	861	860

CAMDEN COUNTY.

	M.	B.	D.
Camden City.....	*3,740	1,280	1,401
Centre.....	5	39	22
Delaware.....	2	22	17
Gloucester City.....	44	129	148
Gloucester.....	19	66	96
Haddon.....	27	96	75
Pensauken.....	9	39	36
Stockton.....	65	122	125
Waterford.....	16	60	29
Winslow.....	6	38	22
	3,933	1,831	1,971

* Marriages of non-residents, 2,942.

CAPE MAY COUNTY.

	M.	B.	D.
Cape May City.....	19	58	51
Dennis.....	20	55	26
Lower.....	14	39	35
Middle.....	19	53	60
Upper.....	13	55	31
	85	260	203

CUMBERLAND COUNTY.

	M.	B.	D.
Bridgeton.....	101	313	224
Commercial.....	16	18	21
Deerfield.....	12	38	25
Downe.....	18	21	21
Fairfield.....	9	26	34
Greenwich.....	9	34	24
Hopewell.....	11	22	32
Landis.....	59	162	137
Lawrence.....	12	26	26
Maurice River.....	18	31	29
Millville.....	79	225	178
Stow Creek.....	2	13	11
	341	929	762

ESSEX COUNTY.

	M.	B.	D.
Belleville.....	11	47	74
Bloomfield.....	64	189	129
Caldwell.....	19	49	28
Clinton.....	25	54	81
East Orange.....	94	226	194
Franklin.....	14	86	39
Livingston.....	4	19	19
Millburn.....	10	58	37
Montclair.....	65	262	183
Newark.....	1,869	4,684	4,643
Orange.....	165	513	426
South Orange.....	20	112	86
Verona.....	5	30	19
West Orange.....	17	109	71
	2,332	6,468	6,023

GLOUCESTER COUNTY.

	M.	B.	D.
Clayton.....	14	55	32
Deptford.....	4	33	17
East Greenwich.....	5	20	20
Elk.....	1	2	5
Franklin.....	10	39	30
Glassboro.....	31	75	50
Greenwich.....	6	23	23
Harrison.....	1	37	31
Logan.....	7	24	10
Mantua.....	6	47	28
Monroe.....	28	52	46
South Harrison.....	4	11	7
Washington.....	2	29	20
West Deptford.....	9	35	19
Woodbury.....	59	97	71
Woolwich.....	29	43	20
	216	622	429

HUDSON COUNTY.

	M.	B.	D.
Bayonne.....	174	669	447
Guttenberg.....	9	129	74
Harrison.....	15	178	243
Hoboken.....	687	1,786	1,243
Jersey City.....	1,427	3,833	4,497
Kearny.....	35	169	219
North Bergen.....	82	161	296
Town of Union.....	161	276	235
Union.....	10	82	72
Weehawken.....	6	70	78
West Hoboken.....	120	512	289
	2,676	7,865	7,693

HUNTERDON COUNTY.

	M.	B.	D.
Alexandria.....	2	14	11
Bethlehem.....	14	32	49
Clinton.....	25	48	30
Delaware.....	18	54	45
East Amwell.....	6	17	19
Franklin.....	15	24	13
Frenchtown.....	10	18	16
High Bridge.....	15	23	22
Holland.....	21	26	18
Kingwood.....	8	20	12
Lambertville.....	50	67	79
Lebanon.....	15	44	36
Raritan.....	26	48	66
Readington.....	17	38	39
Tewksbury.....	18	30	32
Union.....	6	13	12
West Amwell.....	1	15	15
	267	531	514

MERCER COUNTY.

	M.	B.	D.
East Windsor.....	34	27	43
Ewing.....	5	6	106
Hamilton.....	18	35	140
Hopewell.....	19	51	64
Lawrence.....	5	19	22
Princeton.....	19	68	73
Trenton.....	*575	597	1,126
Washington.....	6	14	20
West Windsor.....	7	14	12
	688	831	1,606

* Marriages of non-residents, 82.

MIDDLESEX COUNTY.

	M.	B.	D.
Cranbury.....	8	26	31
East Brunswick.....	29	59	63
Madison.....	.....	17	12
Monroe.....	17	15	21
New Brunswick.....	134	426	346
North Brunswick.....	5	19	23
Perth Amboy.....	112	299	247
Piscataway.....	16	58	65
Raritan.....	21	60	55
Sayreville.....	10	80	16
South Amboy.....	40	72	93
South Brunswick.....	12	41	32
Woodbridge.....	22	106	85
	426	1,273	1,094

MONMOUTH COUNTY.

	M.	B.	D.
Atlantic.....	10	20	14
Eatontown.....	19	33	42
Freehold.....	34	84	91
Holmdel.....	9	19	25
Howell.....	39	55	59
Long Branch.....	69	73	104
Manalapan.....	12	30	34
Marlboro.....	10	12	25
Matawan.....	20	68	41
Middletown.....	41	127	125
Millstone.....	6	19	29
Neptune.....	93	130	187
Ocean.....	2	11	27
Raritan.....	32	93	89
Shrewsbury.....	61	122	143
Upper Freehold.....	38	57	23
Wall.....	50	102	92
	545	1,055	1,155

MORRIS COUNTY.

	M.	B.	D.
Boonton.....	25	35	72
Chatham.....	38	117	64
Chester.....	5	32	14
Hanover.....	18	58	146
Jefferson.....	7	5	14
Mendham.....	6	25	23
Montville.....	10	6	14
Morristown.....	60	215	191
Mount Olive.....	6	29	26
Passaic.....	11	12	27
Pequannock.....	17	72	24
Randolph.....	62	129	136
Rockaway.....	20	92	73
Roxbury.....	22	51	36
Washington.....	17	41	19
	324	919	834

OCEAN COUNTY.

	M.	B.	D.
Berkeley.....	1	20	12
Brick.....	15	28	35
Dover.....	18	37	46
Eagleswood.....	10	16	11
Jackson.....	11	16	21
Lacey.....	4	11	7
Lakewood.....	19	48	52
Little Egg Harbor.....	14	47	23
Manchester.....	2	18	27
Ocean.....	5	6	7
Plumsted.....	12	33	13
Stafford.....	6	20	17
Union.....	7	17	14
	124	317	285

PASSAIC COUNTY.

	M.	B.	D.
Acquackanonk.....	13	46	30
Little Falls.....	11	56	35
Manchester.....	11	90	69
Passaic.....	224	566	386
Paterson.....	820	1,913	1,777
Pompton.....	31	35	40
Wayne.....	11	31	29
West Milford.....	19	33	24
	1,140	2,775	2,390

SALEM COUNTY.

	M.	B.	D.
Alloway.....	13	23	14
Elsinboro.....	.....	1	5
Lower Alloways Creek.....	7	21	17
Lower Penns Neck.....	6	12	9
Mannington.....	3	6	30
Oldmans.....	2	23	15
Pilesgrove.....	30	47	63
Pittsgrove.....	11	46	36
Quinton.....	5	8	21
Salem.....	59	92	102
Upper Penns Peck.....	20	33	23
Upper Pittsgrove.....	5	18	3
	161	335	343

SOMERSET COUNTY.

	M.	B.	D.
Bedminster.....	11	36	35
Bernards.....	12	16	32
Branchburg.....	2	13	19
Bridgewater.....	90	180	188
Franklin.....	24	66	60
Hillsborough.....	15	32	44
Montgomery.....	10	12	16
North Plainfield.....	27	47	67
Warren.....	7	6	21
	198	408	432

SUSSEX COUNTY.

	M.	B.	D.
Andover.....	14	20	16
Byram.....	11	13	13
Frankford.....	13	25	18
Green.....	3	11	4
Hampton.....	5	5	8
Hardyston.....	22	4	25
Lafayette.....	5	3	14
Montague.....	2	.....	5
Newton.....	20	22	26
Sandyston.....	9	1	19
Sparta.....	10	15	22
Stillwater.....	9	11	9
Vernon.....	16	18	34
Walpack.....	3	1	11
Wantage.....	17	30	53
	159	179	277

UNION COUNTY.

	M.	B.	D.
Clark.....	1	3	9
Cranford.....	22	38	19
Elizabeth.....	269	1,024	799
Fanwood.....	10	30	13
Linden.....	7	8	56
New Providence.....	8	19	26
Plainfield.....	117	287	287
Rahway.....	50	77	144
Springfield.....	16	12	15
Summit.....	25	82	47
Union.....	9	30	32
Westfield.....	21	74	44
	555	1,634	1,434

WARREN COUNTY.

	M.	B.	D.
Allamuchy.....	3	9	10
Belvidere.....	7	37	24
Blairstown.....	13	24	27
Franklin.....	8	16	18
Frelinghuysen.....	8	10	18
Greenwich.....	8	18	12
Hackettstown.....	19	50	44
Hardwick.....	1	10	4
Harmony.....	12	20	23
Hope.....	10	23	19
Independence.....	11	9	6
Knowlton.....	91	20	23
Lopatcong.....	.....	30	30
Mansfield.....	12	6	25
Oxford.....	24	110	57
Pahaquarry.....	.....	1	3
Phillipsburg.....	*338	193	188
Pohatcong.....	10	40	20
Washington.....	59	86	57
Total	634	712	608

* Marriages of non-residents, 258.

SUMMARY.

	M.	B.	D.
Atlantic.....	326	682	633
Bergen.....	314	1,140	958
Burlington.....	379	861	860
Camden.....	3,933	1,891	1,971
Cape May.....	85	260	203
Essex.....	341	929	762
Gloucester.....	2,382	6,468	6,023
Hudson.....	216	622	429
Hunterdon.....	2,676	7,865	7,693
Mercer.....	267	531	514
Middlesex.....	638	831	1,606
Monmouth.....	426	1,273	1,194
Morris.....	545	1,055	1,155
Ocean.....	324	919	884
Passaic.....	124	917	285
Salem.....	1,140	2,775	2,390
Sussex.....	161	335	343
Union.....	198	408	482
Warren.....	159	179	277
Total	555	1,684	1,434
Warren	634	712	608
Total	*15,873	31,742	30,634

* Marriages of non-residents, 3,282.

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895, by Counties.

COUNTIES. Statistical Divisions.	DEATHS AT ALL AGES.										PRINCIPAL CAUSES OF DEATH.																										
	Under one month.	Between one month and one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.	Total, including unclassified.	Population, census of 1893.	Death-rate per 1,000.	Death-rate per 1,000 without cities of over 5,000.	Deaths under 5 in each 100, or comparison of these with total deaths.	Number of deaths from chief preventable diseases.	Comparative number of deaths in each 100 from chief preventable diseases.	Remittent fever, &c.	Small-pox.	Scarlet fever.	Measles.	Whooping-cough.	Diphtheria and croup.	Erysipelas.	Diarrhoeal diseases of children.	Consumption, M.	Consumption, F.	Acute lung diseases.	Brain and nervous diseases of children.	Circulation of heart and diseases.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute Rheumatism.	Pneumonia.	Violent deaths.			
Atlantic.....	45	112	41	43	195	198	1	633	34750	18.22	17.42	31.28	178	28.12	1	5	1	1	2	12	3	82	33	39	80	31	57	41	69	32	27	4	6	27			
Bergen.....	65	163	98	67	330	258	7	988	62511	15.14	15.09	33.00	284	28.71	7	4	1	1	1	15	35	2	98	52	45	160	51	86	31	93	46	34	2	4	77		
Burlington.....	44	111	83	73	249	297	3	860	59117	14.55	13.69	27.67	284	33.02	1	2	1	1	1	1	43	4	95	55	35	40	85	45	81	60	27	3	5	46			
Camden.....	168	401	216	160	692	418	6	1971	100104	19.69	13.86	39.83	662	33.59	3	78	3	3	3	18	103	3	226	87	111	227	162	160	88	176	85	43	5	18	94		
Cape May.....	14	29	12	8	51	87	2	203	12985	15.79	17.07	27.09	292	27.09	4	4	4	4	4	3	3	1	22	13	9	20	8	27	9	33	10	4	1	11	11		
Cumberland.....	54	117	76	67	201	247	2	762	48615	15.30	13.82	32.41	292	31.76	9	11	6	19	10	17	1	71	44	55	117	49	73	33	86	36	22	6	8	16	16		
Essex.....	423	1018	794	474	2074	1217	21	6023	312000	19.30	13.00	37.14	2026	33.64	17	57	19	11	6	57	291	21	730	442	393	974	391	458	345	471	304	169	9	47	227		
Gloucester.....	223	609	43	34	117	141	2	423	31191	18.75	21.44	42.62	2815	36.59	55	218	1	13	13	63	390	14	1090	400	390	1233	807	388	365	468	386	118	19	66	420		
Hudson.....	25	43	26	37	140	240	3	514	33334	14.55	18.20	33.00	124	24.12	2	9	2	2	2	3	23	1	51	28	21	46	20	45	18	51	22	16	1	5	23		
Hunterdon.....	110	212	209	156	511	393	15	1606	85538	18.78	20.85	33.00	506	37.11	9	20	11	4	4	17	173	2	258	116	174	92	63	195	81	50	4	10	67	40	80	40	
Mercer.....	60	139	124	74	319	292	2	1084	70058	15.06	13.50	38.12	329	30.07	1	9	6	1	1	4	52	1	151	56	48	171	65	81	49	78	68	30	6	11	48	48	
Middlesex.....	94	198	125	74	319	292	2	1084	70058	15.06	13.50	38.12	329	30.07	1	9	6	1	1	4	52	1	151	56	48	171	65	81	49	78	68	30	6	11	48	48	
Monmouth.....	60	291	104	74	338	333	5	1185	75543	15.29	15.41	33.23	369	31.05	7	20	1	1	1	13	35	3	174	62	50	168	54	105	61	106	77	30	6	11	48	48	
Ocean.....	11	25	33	25	101	73	4	285	187269	15.21	17.07	26.38	218	28.05	3	7	5	4	8	8	10	2	75	31	41	111	25	73	45	131	46	31	1	2	15	15	15
Passaic.....	213	510	295	166	773	427	6	2390	133227	17.94	12.62	42.89	881	34.77	11	31	12	16	21	109	10	325	189	140	369	163	101	100	110	61	8	23	100	100	100	100	100
Salem.....	29	64	27	6	82	60	4	277	16064	13.12	12.50	26.76	182	27.38	2	9	2	2	2	5	10	1	42	24	34	70	20	47	29	45	22	12	1	15	29	29	
Somerset.....	36	60	34	27	153	163	4	482	30497	15.83	18.20	33.00	182	27.38	2	9	2	2	2	5	10	1	42	24	34	70	20	47	29	45	22	12	1	15	29	29	
Sussex.....	24	26	23	20	79	103	2	277	22866	12.26	12.26	26.35	73	27.07	2	3	3	3	3	10	1	19	17	14	25	38	5	31	14	20	14	6	3	12	12	12	
Union.....	100	276	173	86	454	313	2	1431	84504	16.79	12.70	38.29	413	30.89	2	25	10	14	14	23	51	1	137	75	81	273	103	113	136	23	63	13	5	22	70	70	
Warren.....	40	83	47	41	188	201	5	608	37283	16.30	14.89	27.37	137	21.18	4	6	6	6	6	2	2	2	58	21	21	402	20	58	31	17	1	1	1	1	1	1	
Totals	2212	5,129	3,645	2,370	10,005	6,874	36,634	107,294	18.31	14.87	36.84	10,092	33.27	144	568	23	281	195	273	1,164	74	37,467	18,600	16,982	43,077	10,227	22,838	15,233	29,263	15,859	770	82	2,941	1,469	2,941	1,469	

Note.—Under the heading "Number of deaths from chief preventable diseases" the first ten diseases are classified, including consumption (male and female). Of those dying under one year, 2,212 died under one month, of which 1,549 died in the large cities. Of those dying under one year, 5,419 died in the large cities. Of the 11,286 that died under five years, 8,079 died in the large cities. Total death-rate from consumption for the State as compared with total deaths, 11.86, the deaths being 2,920 in cities, 1,222 outside. Rates for short periods, or which deal with small numbers, do not eliminate or balance errors which practically disappear in larger aggregates. The number of deaths before twenty, in proportion to the rest, is much more informative as to local causes affecting health than the total deaths. See, also, number dying from chief preventable diseases. The death-rate for 1895 is based upon the State census, and it is accurate. The death-rates for inter-census years is based upon an estimated population, and is, therefore, liable to slight errors.

REPORT OF VITAL STATISTICS.

Table with columns: CITIES HAVING OVER 5,000 POPULATION, Statistical Divisions, DEATHS AT ALL AGES, PRINCIPAL CAUSES OF DEATH.

* Probably due to infants brought to the city sick.

† This death-rate is calculated on the resident population, whereas the real population is often several times larger, and on account of this floating population the death-rate is not a criterion of health conditions.

MORTALITY TABLES.

Return of Deaths from all Causes and Certain Specified Diseases, in the Cities of the State of New Jersey of Over 5,000 Population, for the Year Ending June 30th, 1895—Continued.

Table with columns: CITIES HAVING OVER 5,000 POPULATION, Statistical Divisions, DEATHS AT ALL AGES, PRINCIPAL CAUSES OF DEATH.

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

ATLANTIC COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.						Population, census of 1895.	Death-rate per 1,000.	PRINCIPAL CAUSES OF DEATH.																						
	Under one month.	Between one month and one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.			Undefined.	Total, including unclassified.	Remittent fever, &c.	Enteric fever.	Small-pox.	Scarlet fever.	Meadles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption, M.	Consumption, F.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.
Abscon.	2	7	1	2	4	7	15	15	3	2	2	2	2	2	7	2	7	55	2	19	41	17	26	37	32	12	16	2	3	1	
Atlantic City.	26	75	22	20	116	33	352	18329	19.20	3	1	1	1	1	2	7	55	23	19	5	7	1	1	1	1	1	1	2	3	2	
Buena Vista.	2	1	1	2	2	8	15	15	1	1	1	1	1	1	1	1	4	4	4	2	3	4	4	4	1	1	1	1	1	1	
Bigg Harbor City.	6	6	2	2	5	11	26	26	13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Bigg Harbor Township.	6	9	4	3	13	18	48	48	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Caloway.	1	6	1	6	6	6	29	29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Hamilton.	1	9	6	1	6	6	29	29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Hammon.	1	2	6	6	21	25	63	63	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mullica.	1	2	6	6	21	25	63	63	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Weymouth.	4	3	3	3	1	3	17	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Totals.	45	112	41	43	195	196	1,638	3,750	18.22	1	5	1	1	1	2	12	8	82	83	89	80	31	57	41	69	32	27	4	6	27	

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

BERGEN COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.						Population, census of 1895.	Death-rate per 1,000.	PRINCIPAL CAUSES OF DEATH.																						
	Under one month.	Between one month and one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.			Undefined.	Total, including unclassified.	Remittent fever, &c.	Enteric fever.	Small-pox.	Scarlet fever.	Meadles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption, M.	Consumption, F.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute Rheumatism.	Puerperal.	Violent deaths.
Bergen.	8	12	7	1	17	37	54	54	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Englewood.	4	11	7	6	39	17	85	85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Franklin.	3	3	3	3	11	16	40	40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hackensack.	9	15	6	7	40	35	113	782	15.92	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Harrington.	3	3	6	5	12	10	34	34	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hobokus.	1	6	5	3	9	10	34	34	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Iradi.	7	16	8	8	13	10	63	63	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Midland.	1	4	2	3	3	3	10	25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Orvil.	1	5	3	3	3	10	25	25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Palisade.	4	7	4	4	17	25	62	62	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ridgefield.	7	33	13	8	47	25	134	134	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ridgewood.	1	6	5	1	14	9	36	36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Saddle River.	7	14	9	5	28	11	74	74	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Union.	6	21	17	13	52	25	134	134	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Washington.	4	7	3	2	11	13	41	41	8	17	1	7	4	15	35	2	96	52	45	160	51	86	31	93	46	36	2	9	77	77	
Totals.	65	163	93	67	330	258	7,988	6,251	15.14	8	17	7	4	15	35	2	96	52	45	160	51	86	31	93	46	36	2	9	77		

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

Table with columns for 'DEATHS AT ALL AGES' (Under one month, Between one month and one year, etc.) and 'PRINCIPAL CAUSES OF DEATH' (Remittent fever, etc., Small-pox, Measles, etc.). Rows include Hudson County and various statistical divisions like Bayonne, Guttenberg, etc.

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

Table with columns for 'DEATHS AT ALL AGES' and 'PRINCIPAL CAUSES OF DEATH' for HUNTERDON COUNTY. Rows include Alexander's, Bechtelheim, Clinton, Delaware, etc.

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

MERCER COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.										PRINCIPAL CAUSES OF DEATH.																			
	Under one month.	Between one month and one year.					Total, including unclassified.	Population, census of 1895.	Death-rate per 1,000.	Remittent fever, &c.	Enteric fever.	Small-pox.	Scarlet fever.	Measles.	Whooping-cough.	Diphtheria and croup.	Erysipelas.	Diarrhoeal diseases of children.	Consumption, M.	Consumption, F.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.
		One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.																								
East Windsor.....	1	2	1	11	22	43	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	4	4	5	6	6	6	6	6	.....	.....	.....	.....	.....
Ewing.....	1	1	6	51	45	106	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamilton.....	5	1	8	72	37	140	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hopewell.....	2	6	1	12	30	64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence.....	3	2	3	13	22	43	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Princeton.....	2	11	5	7	18	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trenton.....	90	179	182	121	335	208	111126	62518	18.01	6	11	8	.....	17	183	2	134	56	138	59	46	51	51	51	51	51	51	51	51	51
Washington.....	2	1	1	3	7	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Windsor.....	2	2	2	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	110	212	209	156	511	393	151606	85588	18.78	9	20	11	.....	17	173	3	156	115	92	193	74	62	63	195	81	50	4	19	67	

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

MIDDLESEX COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.										PRINCIPAL CAUSES OF DEATH.																			
	Under one month.	Between one month and one year.					Total, including unclassified.	Population, census of 1895.	Death-rate per 1,000.	Remittent fever, &c.	Enteric fever.	Small-pox.	Scarlet fever.	Measles.	Whooping cough.	Diphtheria and croup.	Erysipelas.	Diarrhoeal diseases of children.	Consumption, M.	Consumption, F.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.
		One to five.	Five to twenty.	Twenty to sixty.	Over sixty.	Undefined.																								
Cranbury.....	1	2	6	7	15	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Brunswick.....	2	13	6	11	28	68	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madison.....	23	52	32	2	7	12	19310	17.38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monroe.....	4	1	1	16	27	51	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Brunswick.....	36	72	41	7	67	24	247	13030	18.96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Perth Amboy.....	5	9	6	5	19	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Piscataway.....	2	3	7	5	18	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hartman.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sayreville.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Amboy.....	12	10	13	5	29	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Brunswick.....	3	2	1	14	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woodbridge.....	6	26	7	5	25	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	94	198	125	74	319	282	21094	70658	15.06	1	9	0	.....	4	52	1	151	56	48	174	65	84	49	78	68	80	4	10	90	

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

OCEAN COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.								PRINCIPAL CAUSES OF DEATH.																									
	Under one month.	Between one month and one year.				Over sixty.	Undeclared.	Total, including unclassified.	Population, census of 1895.	Death-rate per 1,000.	Enteric fever.	Small-pox.	Scarlet fever.	Measles.	Whooping-cough.	Diphtheria and croup.	Erysipelas.	Diarrhoeal diseases of children.	Consumption, M.	Consumption, F.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.				
		Under one month.	Between one month and one year.	One to five.	Five to twenty.																										Twenty to sixty.			
Berkeley.....	4	2	4	4	12	1	12																											
Brick.....	1	4	5	14	35	2	46																											
Dover.....	1	4	5	14	46	2	46																											
Englewood.....	4	2	4	4	11	3	11																											
Jackson.....	4	2	4	4	21	3	21																											
Lacey.....	4	2	4	4	7	3	7																											
Lakewood.....	2	2	4	12	52	1	52																											
Little Egg Harbor.....	1	0	2	5	8	0	23																											
Manchester.....	2	1	0	5	27	0	27																											
Ocean.....	1	0	0	3	7	0	7																											
Summestad.....	4	1	1	4	13	3	13																											
Stafford.....	1	1	1	6	17	0	17																											
Stafford.....	1	1	1	6	17	0	17																											
Union.....	2	1	1	5	14	5	14																											
Totals.....	14	25	38	28	101	78	4	286	18789	15.21	3	7	5	4	3	10	26	27	20	25	17	24	11	25	19	13	1	1	2	15				

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

PASSAIC COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.								PRINCIPAL CAUSES OF DEATH.																								
	Under one month.	Between one month and one year.				Over sixty.	Undeclared.	Total, including unclassified.	Population, census of 1895.	Death-rate per 1,000.	Remittent fever, &c.	Enteric fever.	Small-pox.	Scarlet fever.	Measles.	Whooping-cough.	Diphtheria and croup.	Erysipelas.	Diarrhoeal diseases of children.	Consumption, M.	Consumption, F.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.		
		Under one month.	Between one month and one year.	One to five.	Five to twenty.																											Twenty to sixty.	
Aquackmonk.....	2	5	4	10	30	0	30																										
Atlantic City.....	5	4	5	17	35	5	35																										
Manchester.....	5	15	9	4	20	16	69																										
Passaic City.....	38	119	62	22	105	40	386	17894	21.57	2	2	2	2	8	14	1	85	18	10	68	32	21	16	17	11	11	1	1	2	15			
Paterson.....	158	358	201	132	606	316	6177	97844	18.25	7	24	7	13	12	85	9	218	122	237	123	111	74	117	90	48	6	19	77					
Pompton.....	6	3	5	4	7	15	40																										
Wayne.....	1	5	2	5	16	28	28																										
West Milford.....	1	5	4	1	3	10	24																										
Totals.....	213	510	296	196	773	427	62366	138227	17.94	11	31	12	16	21	108	10	825	102	144	352	168	161	104	160	110	61	3	23	100				

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

Table for Salem County, New Jersey, showing deaths at all ages and principal causes of death. Columns include age groups (Under one month to Over sixty), population, death rate per 1,000, and various disease categories like Measles, Small-pox, and Consumption.

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

Table for Somerset County, New Jersey, showing deaths at all ages and principal causes of death. Columns include age groups (Under one month to Over sixty), population, death rate per 1,000, and various disease categories like Measles, Small-pox, and Consumption.

Return of Deaths from all Causes and Certain Specified Diseases, in the Statistical Divisions of the State of New Jersey, for the Year Ending June 30th, 1895.

WARREN COUNTY. Statistical Divisions.	DEATHS AT ALL AGES.						Population, census of 1893.	Death-rate per 1,000.	PRINCIPAL CAUSES OF DEATH.																				
	Under one month.	Between one month and one year.	One to five.	Five to twenty.	Twenty to sixty.	Over sixty.			Total, including unclassified.	Enteric fever.	Small-pox.	Scarlet fever.	Measles.	Whooping-cough.	Diphtheria and croup.	Erysipelas.	Diarrheal diseases of children.	Consumption, M.	Consumption, F.	Acute lung diseases.	Brain and nervous diseases of children.	Diseases of heart and circulation.	Renal and cystic diseases.	Adult brain and spinal diseases.	Digestive and intestinal diseases.	Cancer.	Acute rheumatism.	Puerperal.	Violent deaths.
Alamuchy.....	1	1	1	5	4	10	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Belvidere.....	4	2	1	9	7	24	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Blairtown.....	3	1	3	9	14	27	27	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Franklin.....	1	2	1	4	7	18	18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Frelinghuysen.....	1	2	1	6	9	18	18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Greenwich.....	1	1	4	1	3	12	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hackettstown.....	2	6	5	1	19	44	44	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hackettstown.....	2	4	2	2	2	23	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hackettstown.....	2	4	2	2	2	23	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Harmony.....	1	1	1	5	8	19	19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hope.....	1	1	1	2	3	8	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Independence.....	2	2	1	2	3	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Knowlton.....	1	1	1	2	3	8	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lopatcong.....	4	6	2	1	9	30	30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nausfield.....	1	4	2	1	5	17	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Oxford.....	3	13	4	4	15	57	57	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pohatcong.....	15	30	16	16	68	188	188	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pohatcong.....	15	30	16	16	68	188	188	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Phillipsburg.....	4	4	1	2	6	20	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pohatcong.....	15	30	16	16	68	188	188	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Washington.....	1	8	2	5	20	57	57	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Totals.....	40	83	47	44	188	201	5,608	16.30	2	6	1	6	1	22	2	53	26	28	102	20	58	31	74	53	18	2	5	28	

Table Showing the Mortality per 10,000 of the Population from Certain Diseases in New Jersey.

CAUSES OF DEATH.	1878 to 1883.	1883 to 1888.	1888 to 1893.
Consumption.....	133.29	131.05	123.05
Diarrheal diseases of children.....	104.03	110.74	128.92
Diphtheria and croup.....	50.60	55.46	57.86
Scarlet fever.....	34.09	17.61	17.23
Remittent fever.....	15.21	17.00	6.41
Whooping-cough.....	8.45	7.15	9.35
Measles.....	5.06	6.11	5.62
Erysipelas.....	4.90	3.50	3.10
Small-pox.....	6.09	.01	.05

REPORT OF VITAL STATISTICS.

Table Showing Rates per 1,000 of the Population of Births and Deaths for Seventeen Years, 1878-1895.

	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Birth-rate.....	22.65	20.94	20.76	20.42	21.60	22.33	18.84	19.96	21.39	21.97	20.82	20.80	19.53	20.26	20.05	21.33	18.97
Death-rate.....	*20.08	16.77	18.39	22.90	20.60	19.20	15.53	17.80	19.04	17.01	18.99	19.80	19.50	21.62	19.88	19.09	18.31

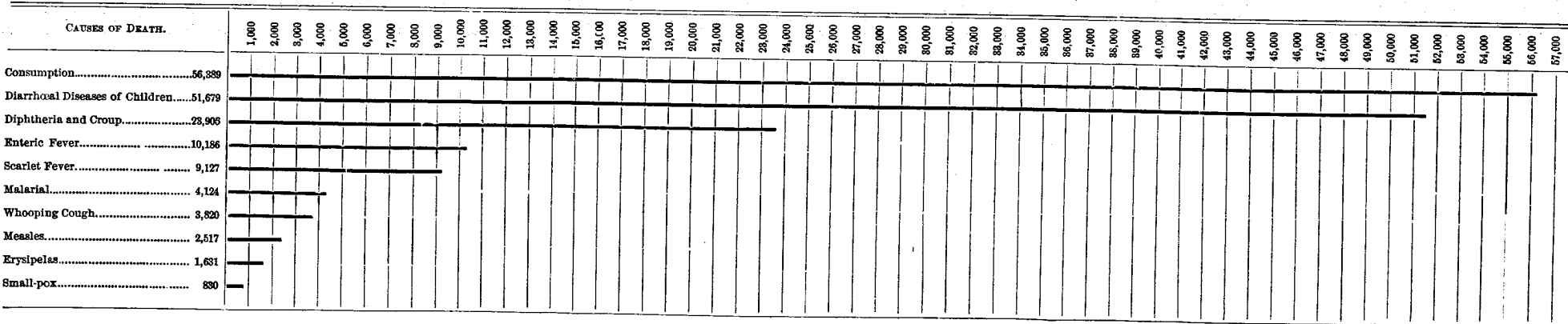
* The death-rate for 1879 was based upon a census which was imperfect, and is, therefore, slightly larger than it should be.
 NOTE.—The returns of births received by this Bureau are not as complete as are those for marriages and deaths, hence the above table does not represent with accuracy the relations between the birth and death-rates.

Table Showing the Mortality Each Year for Seventeen Years, 1878-1895, from the Chief Preventable Diseases.

CAUSE OF DEATH.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Consumption.....	2788	2714	2689	2475	3191	3215	3320	3205	3053	3353	3449	3669	3456	3575	3429	3433	3542
Diarrhoeal diseases of children.....	1100	2163	2255	2792	2656	2462	2845	2864	2894	3508	3377	3627	3191	4043	3981	3803	3746
Diphtheria and croup.....	110	873	1128	1472	1146	1027	1466	1303	1527	2036	1574	1575	1737	1776	1677	1294	1461
Enteric fever.....	324	393	574	684	684	640	642	545	522	620	724	792	695	628	508	496	568
Scarlet fever.....	627	573	499	1306	853	1447	646	222	265	574	583	209	268	1008	445	272	264
Malarial fever.....	208	293	431	879	290	280	209	243	217	264	203	195	180	188	143	162	144
Whooping-cough.....	277	130	119	253	189	116	181	274	181	161	278	371	390	163	237	328	272
Measles.....	77	87	70	208	131	169	135	88	280	143	118	174	260	197	73	257	98
Erysipelas.....	137	109	124	94	90	80	74	79	90	125	114	81	85	94	74	97	74
Small-pox.....	.....	15	284	367	54	7	2	4	5	5	3	.....	.....	38	43	31	23

DIAGRAM

Showing the Comparative Mortality from Chief Preventable Diseases for Seventeen Years, 1878-1895.



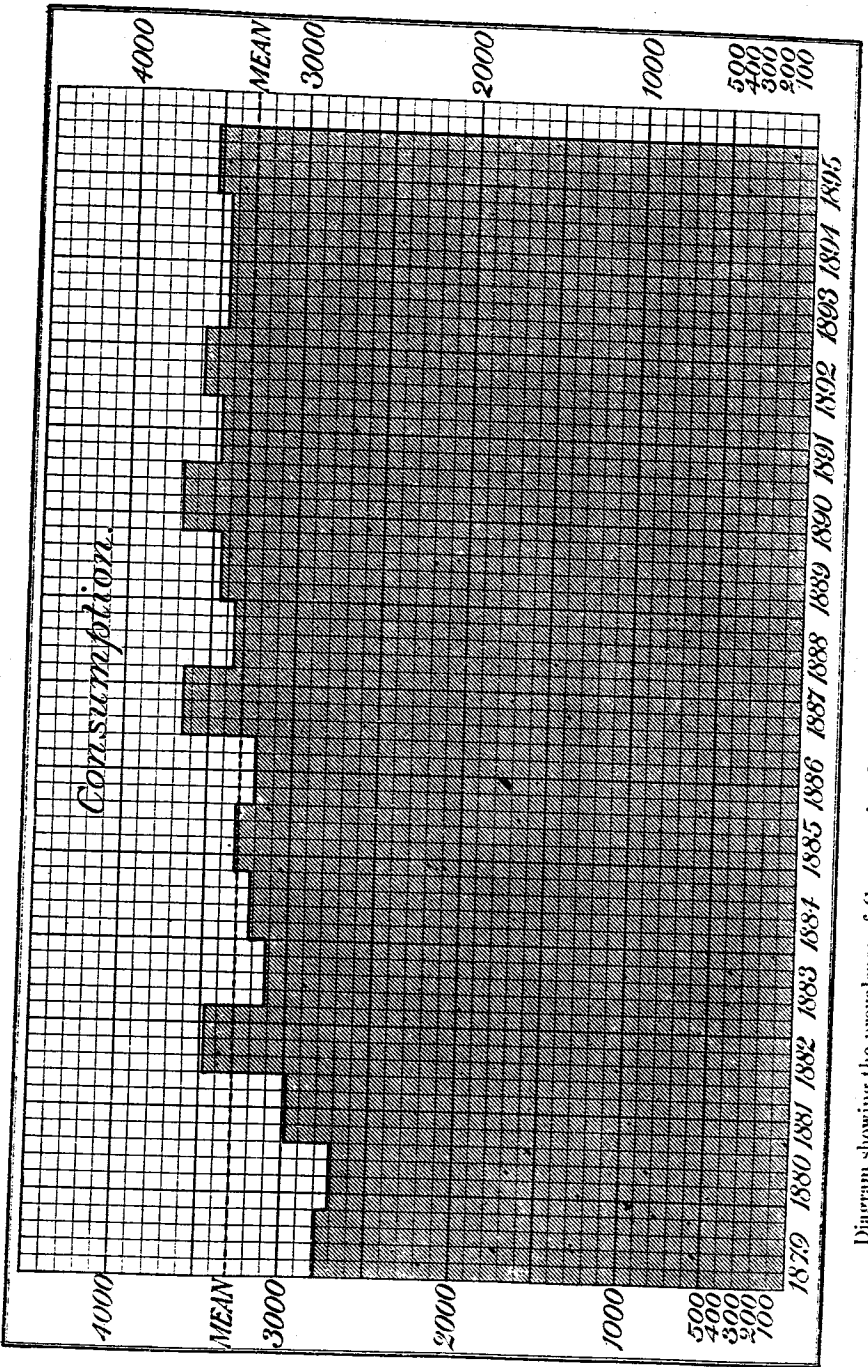


Diagram showing the prevalence of Consumption during each year for seventeen years, from 1879 to 1895, inclusive.

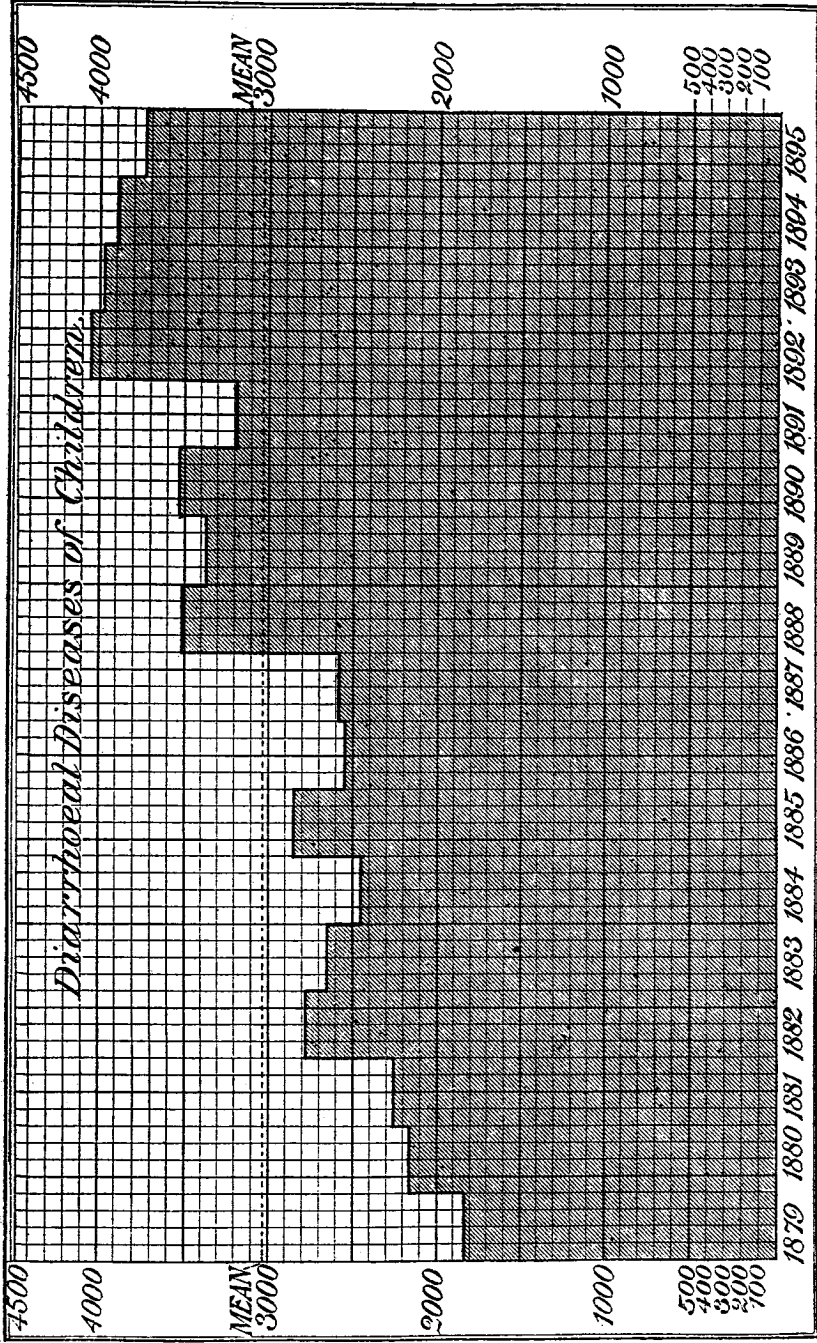


Diagram showing the prevalence of Diarrhoeal Diseases of Children during each year for seventeen years, from 1879 to 1895, inclusive.

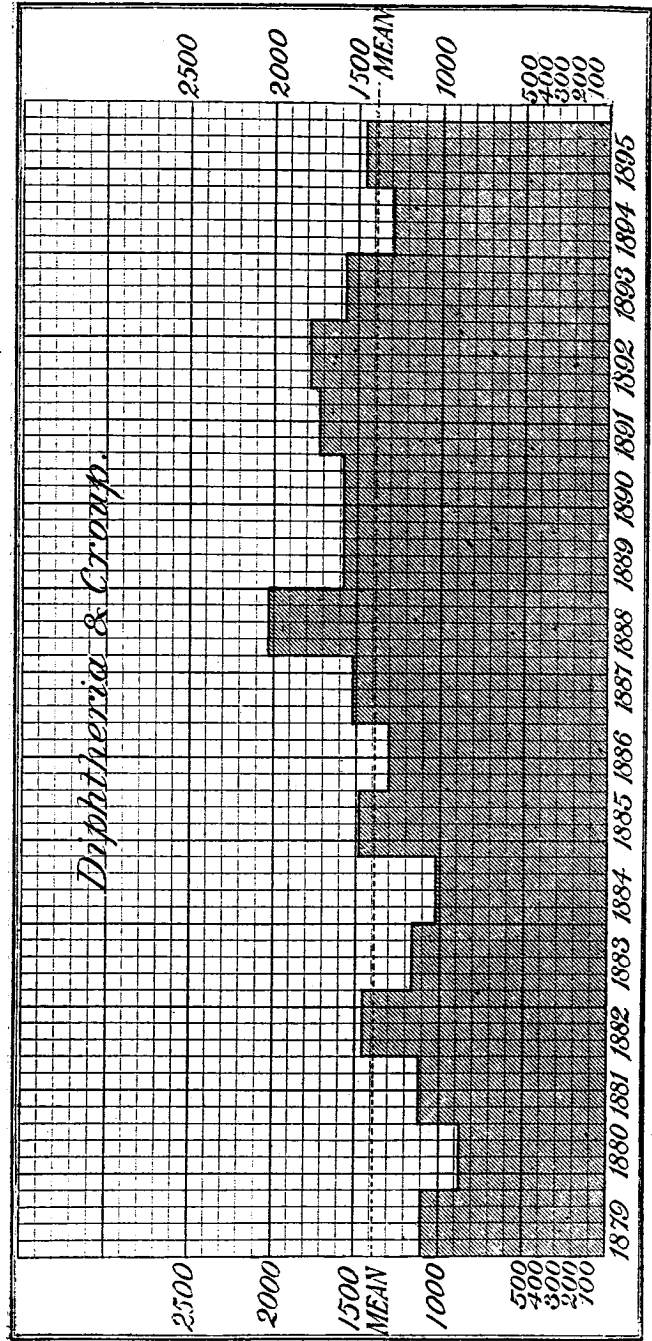


Diagram showing the prevalence of Diphtheria and Croup during each year for seventeen years, from 1879 to 1895, inclusive.

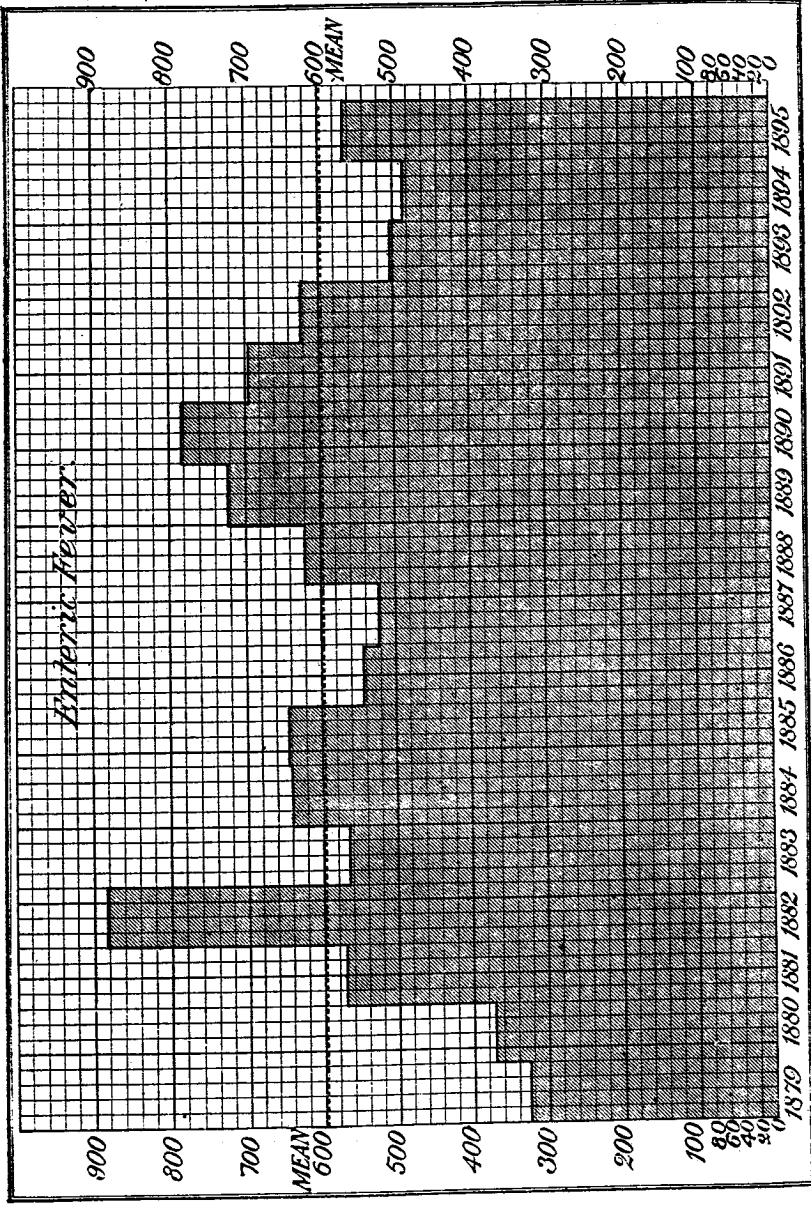


Diagram showing the prevalence of Enteric Fever during each year for seventeen years, from 1879 to 1895, inclusive.

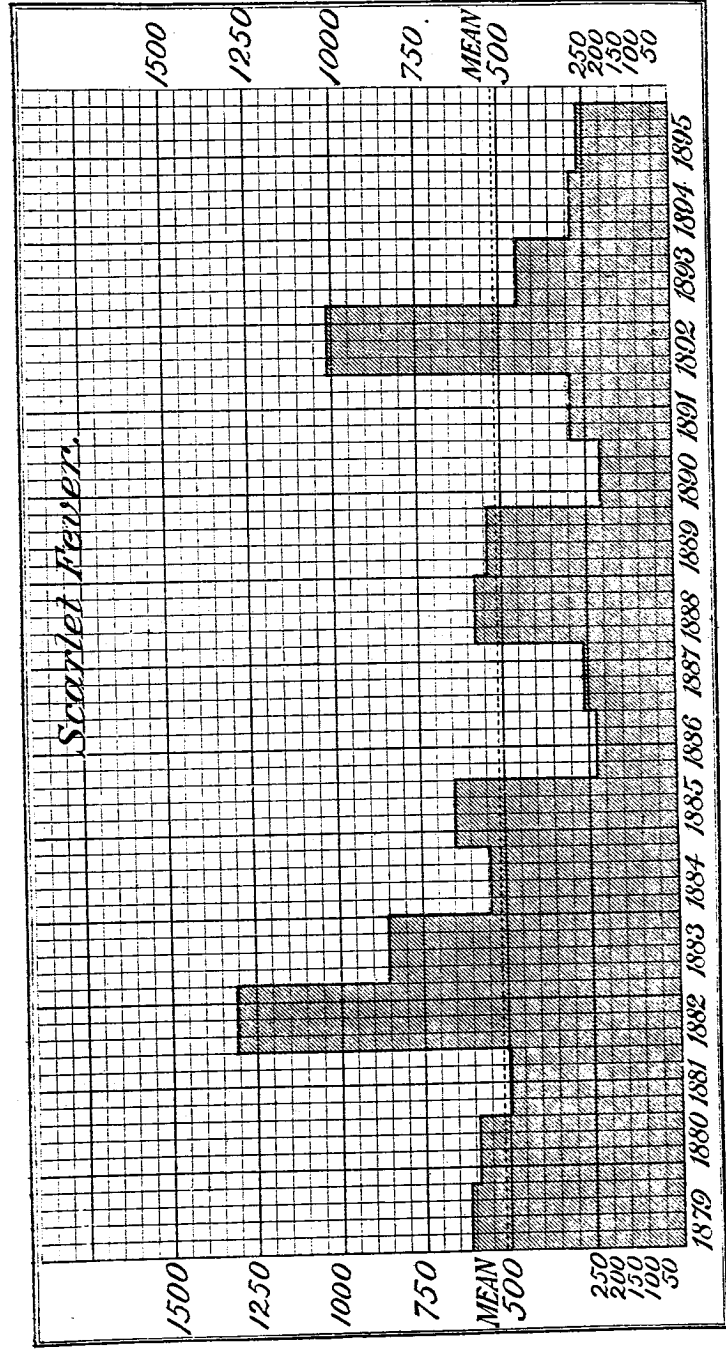


Diagram showing the prevalence of Scarlet Fever during each year for seventeen years, from 1879 to 1895, inclusive.

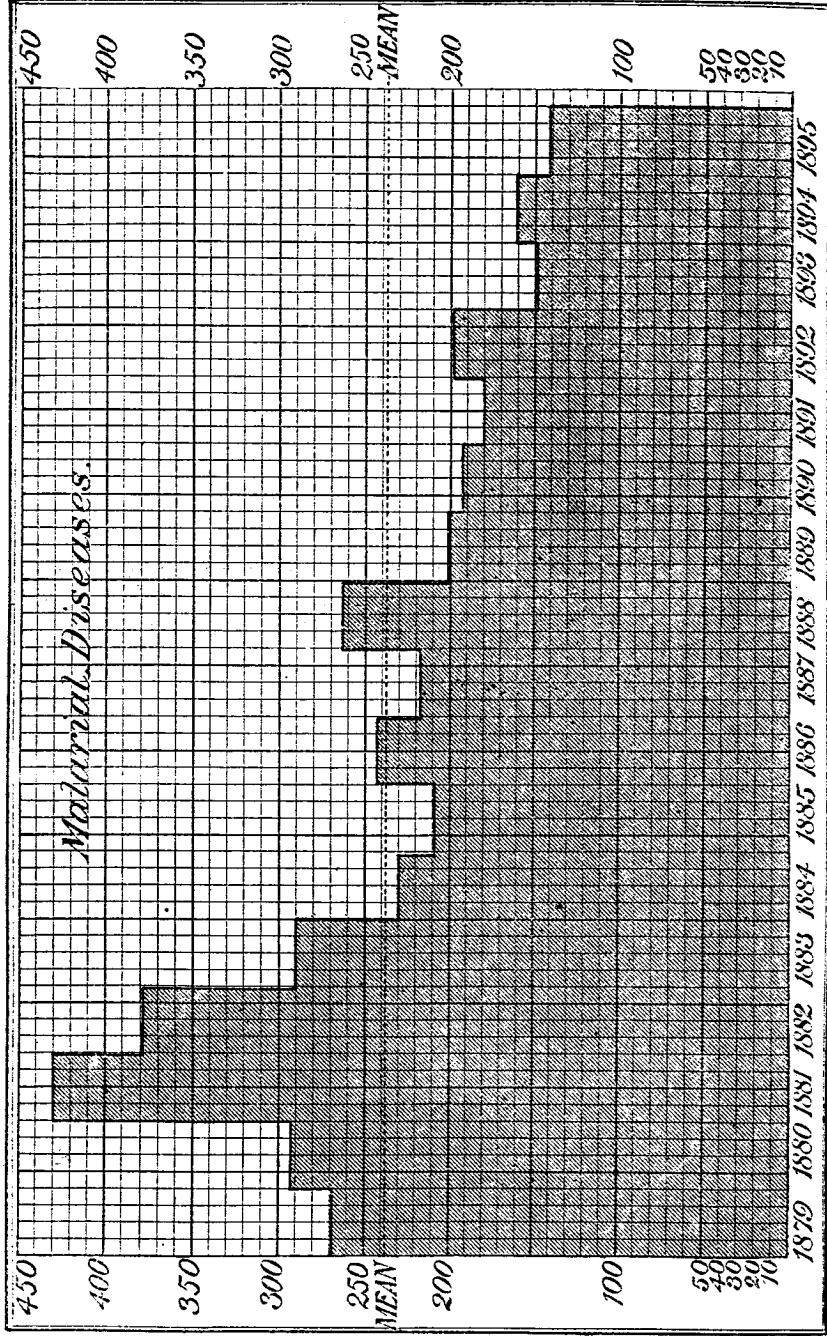


Diagram showing the prevalence of Malarial Diseases during each year for seventeen years, from 1879 to 1895, inclusive.

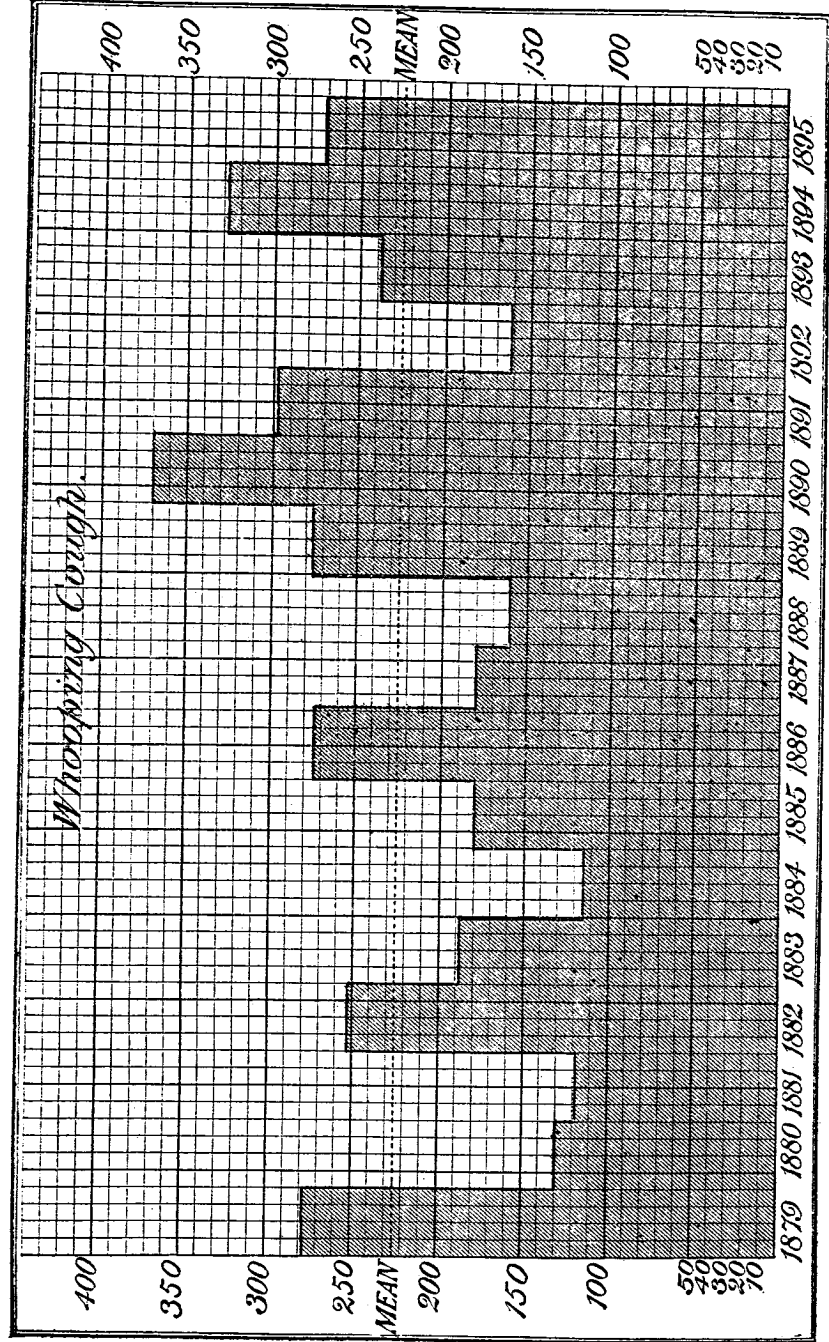


Diagram showing the prevalence of Whooping-cough during each year for seventeen years, from 1879 to 1895, inclusive.

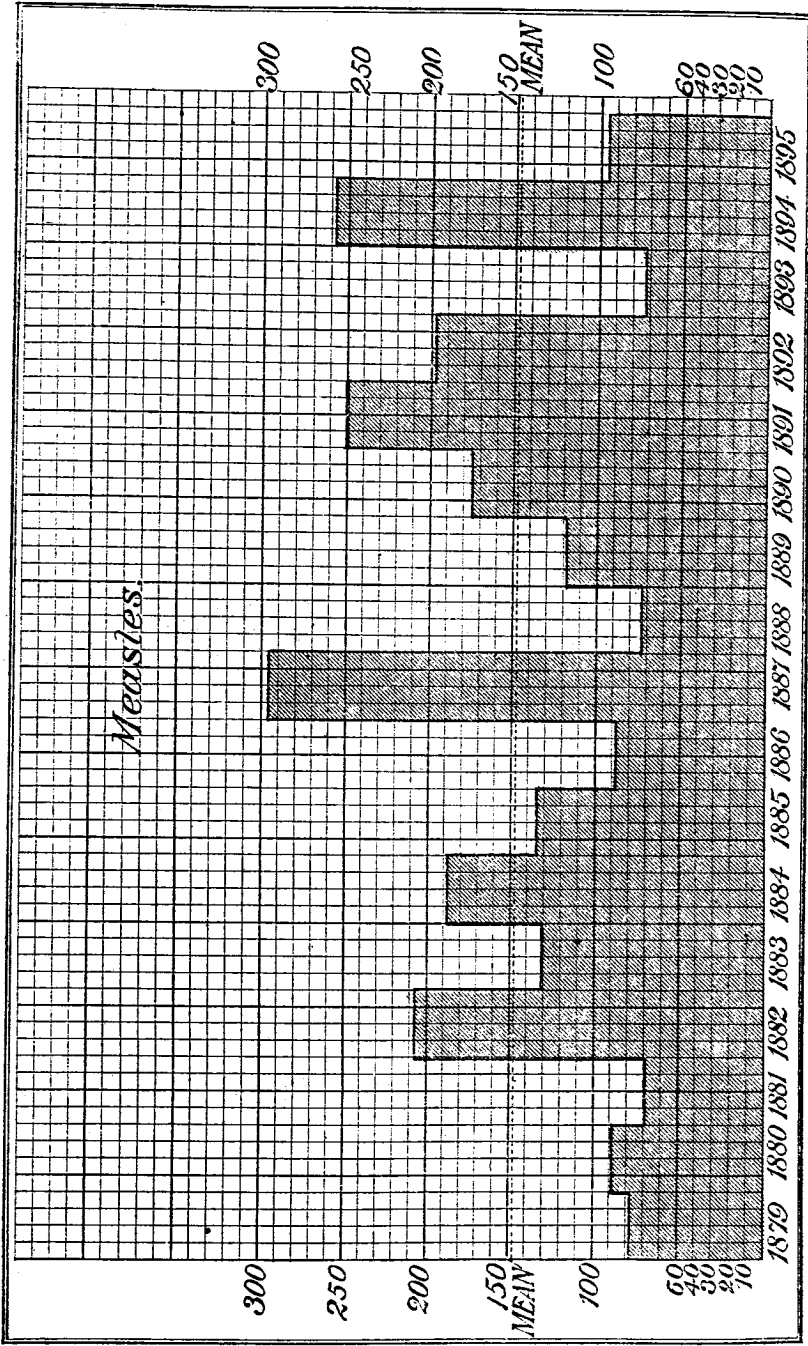


Diagram showing the prevalence of Measles during each year for seventeen years, from 1879 to 1895, inclusive.

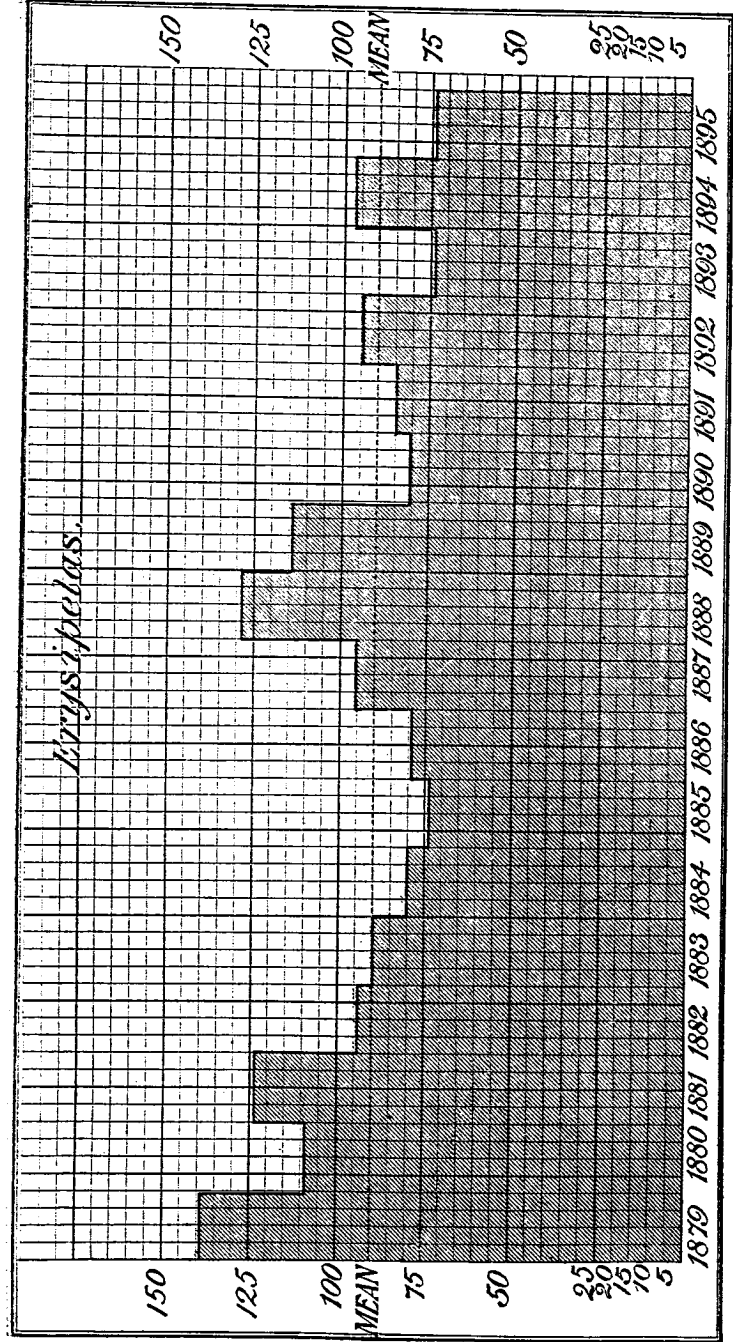


Diagram showing the prevalence of Erysipelas during each year for seventeen years, from 1879 to 1895, inclusive.

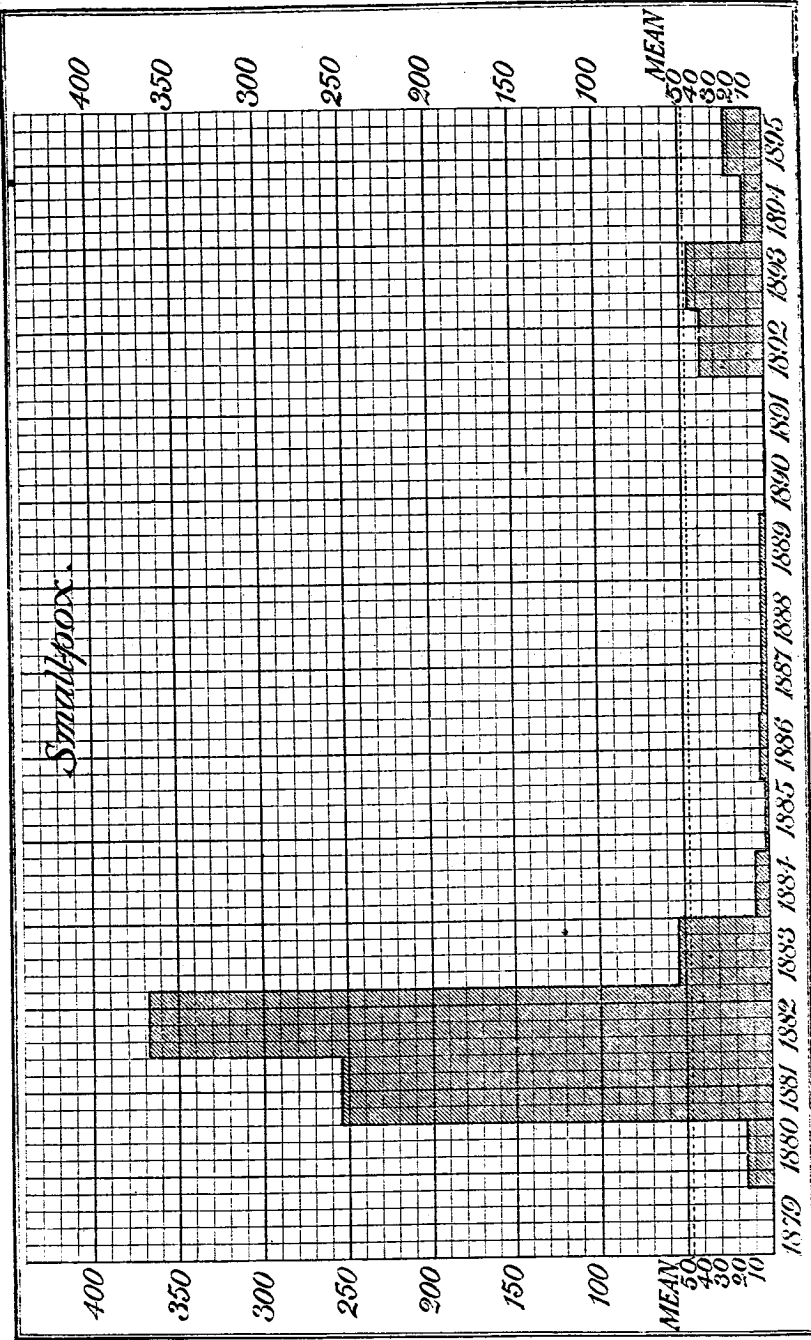


Diagram showing the prevalence of Small-pox during each year for seventeen years, from 1879 to 1895, inclusive.

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