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Annual Report

of the...

Department of

Health

of...

The City of New York

1903

N.Y.C.VITAL STAT.

ANNUAL REPORT, DEPT. OF HEALTH:

1903

DATE	ISSUED TO



ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE

DEPARTMENT OF HEALTH OF THE CITY OF NEW YORK

FOR THE

YEAR ENDING DECEMBER 31, 1903.



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DECEMBER 31, 1903.



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DEPARTMENT OF HEALTH.

REPORT FOR THE YEAR ENDING DECEMBER 31, 1903.

DECEMBER 29, 1903.

Hon. SETH LOW, Mayor of The City of New York:

SIR—In accordance with the provisions of section 1168, chapter 466, Laws of 1901, I have the honor to submit a report of the operations of the Department of Health for the year ended December 31, 1903.

Up to and including December 21, 1903 (the latest figures now in hand), there were 470 less deaths than in the corresponding period of 1902, while there was of course the normal increase in the population. As a result the death rate for the period stated has fallen to 18.11, as against 18.77 in the corresponding period in 1902, and 20.00 in the year 1901.

The death rate for the year 1903 therefore will represent a still further improvement in the health of the City than was shown when the then record of 18.75 was made for the year 1902.

In the old City of New York the death rate this year will be approximately 19.10. Last year it was 19.49, which was the lowest rate than recorded since the year 1800.

In considering the several causes of death it is found that all the strictly contagious diseases show a decrease excepting diphtheria. Certain of the infectious diseases, however, such as influenza, tuberculosis and pneumonia, show an increase. Diarrhea, the main cause of the deaths under two years, shows a marked decrease. There were 9,460 more births reported than in the corresponding period of last year, and 1,918 marriages; this increase is a great part normal, but in part also due to more rigid enforcement of the requirements upon physicians and midwives relative to reports of births, and upon physicians relative to reports of marriages. The comparative table of deaths for the periods named above is as follows:

	1902.	1903.
All causes.....	66,261	65,791
Typhoid fever.....	734	637
Malarial fevers.....	126	88
Small-pox.....	309	4
Measles.....	700	480
Scarlet fever.....	934	701
Whooping cough.....	410	322
Diphtheria and croup.....	1,942	2,106
Influenza.....	150	393
Phthisis.....	7,366	7,749
Tubercular meningitis.....	786	798
Other forms tuberculosis.....	528	466
Cancer, malignant tumors.....	2,380	2,534
Meningitis, simple.....	976	878
Apoplexy.....	2,443	2,461
Organic heart disease.....	4,758	4,605
Acute bronchitis.....	1,831	1,503
Chronic bronchitis.....	378	264
Pneumonia.....	6,043	6,111
Broncho-Pneumonia.....	3,019	3,161
Diarrheas (under two years).....	4,89	4,399
Bright's disease and nephritis.....	5,278	5,472
Congenital debility and malformations.....	2,974	3,439
Old age.....	923	788
Violent deaths.....	3,651	3,970
Sunstrokes.....	29	141
Other accidents.....	2,978	3,163
Homicides.....	92	86
Suicides.....	552	580
Under one year.....	15,083	14,015

	1902.	1903.
One year and under two.	4,020	3,919
Total under five.	23,854	21,242
65 and over.	8,840	9,346
Births.	82,435	91,895
Marriages.	35,008	36,926

Another evidence of increasing healthfulness of the City is found in the fact that the only increase in the number of deaths is found in those persons sixty-five years and over, which would indicate that preventive health measures have a marked effect in preserving life during the period in which the living are most useful members of society.

CONTAGIOUS DISEASES.

The most marked decrease in the number of deaths from contagious disease was that in smallpox, where the number of deaths decreased from 309 in 1902 to 4 in 1903. As a result of the very large number of vaccinations obtained in the first six months of 1902, cases of smallpox were reduced enormously, and of the cases treated in our hospitals about 40 per cent. were derived from incoming steamships or from other cities of the United States. Vaccination has since been continued as vigorously as possible with the forces at hand, and if people could be aroused to the necessity of vaccination between epidemics, smallpox in this City, according to the best medical opinion, would soon be a thing of the past.

Other marked decreases in contagious diseases are shown in the following table of deaths:

	1902.	1903.
Measles.	700	480
Scarlet fever.	934	701
Whooping Cough.	410	322

The decided decreases shown above are due in part no doubt to the extension and elaboration of the new system of medical school inspection adopted in September, 1902. The only increase in deaths of the character common to school children occurred in diphtheria and croup, where 2,106 deaths occurred in 1903 as compared with 1,942 in 1902.

MEDICAL SCHOOL INSPECTION.

The system of medical school inspection adopted in September, 1902, as previously stated, was developed during the period from January to June, and September to December, 1903. All schools of this City were inspected regularly every morning, and weekly examinations of members of various schools were also instituted, while the school nursing system begun in 1902 with one nurse has been developed until there are now thirty-three school nurses in the employ of this Department. These nurses co-operated with the physician in charge of the school, particularly with respect to the medical supervision over pupils who would otherwise have to be excluded until cured of some minor contagious trouble such as pediculosis or the like. The intention has been not merely to exclude children having contagious disease from attendance in school, but to secure their prompt treatment and return for tuition. To this end Medical Inspectors are now required to ask names and addresses of all children who have been absent from school for several days for unknown reasons and who, in the opinion of the School Board, may be sick. The homes of these pupils are then visited by the Medical Inspector, and in this way the Department has found a large number of cases of contagious disease which would not otherwise have been reported. By the institution of a comprehensive card index system of keeping the records, the method of keeping the children under observation and giving them the necessary treatment has been so systematized as to reduce the necessary exclusions 98 per cent. by comparison with the number when the present Medical School Inspection system was first instituted.

It is the duty of the school nurse to co-operate with the Medical Inspector and receive from him the reports of children who must be excluded or treated. The nurse then puts these children under treatment, if for some minor contagious disease, and she reports to the doctor so that these children need not be excluded, but may return to the class room with their record indorsed

“under treatment.” The nurses also follow up children absent from school. The treatment which the nurse administers is confined to the following diseases:

Pediculosis, conjunctivitis, ringworm, impetigo, favus, molluscum contagiosum, scabies.

After several months of nurse attendance at schools it has been found that their work at the schools has been materially decreased, due to the cleaner state of the pupils. They are required to devote their spare time to visiting the families and instructing parents in hygiene and nursing.

NURSING.

The enormous number of trachoma cases found in the schools in the autumn of 1902 made necessary the establishment of a special hospital for the treatment of trachoma, which was opened on December 16, 1902, at the foot of Gouverneur street. Since that time and until June, 1903, 12,839 patients were treated, of which 2,761 were operative cases. Treatments have since been continued at about the same rate. Trachoma, however, is so tedious in treatment that some of the patients have to visit the hospitals many times. The total number of visits from January 1 to November 20 was 106,040. At the same time the number of new cases applying for treatment has fallen off, showing that considerable progress has been made in diminishing the prevalence of this disease among the school children of this City. A second hospital is now almost ready for use at One Hundred and Eighteenth street and Pleasant avenue, and the prospect for eradicating trachoma is, therefore, steadily improving.

SUMMER CORPS

The work of the Summer Corps in 1903 was based for the first time on systematic visits to the parents of children, the record of whose birth has been reported at the Bureau of Vital Statistics in the period from August 1, 1902, to June 30, 1903. This system was only partially effective because a great many of the families thus reported had moved. The work was then supplemented by routine inspections and the visiting physicians went from house to house and reported the “history” of every child found under one year of age. After treatment by the physician the case was frequently turned over to one

of the nurses, and both medical and nursing corps dispensed tickets for sterilized milk and various summer charities. Sunstroke circulars were also distributed in every house visited, and the Department established dispensaries on five of the recreation piers, where physicians were kept on duty from 3 to 5 P. M., every afternoon except Sunday.

ORTHOPEDIC DEFORMITY AND REFRACTIVE ERRORS.

During the year 1903, special examinations were had for orthopedic deformity and refractive errors in school children. Out of a total number of 1,061 examined for orthopedic defects, 163 were found with deformed feet, and 326 with deformity of the spine.

Of 981 examined for refractive errors, 67 were found with vision 20-30 or less in one eye, and 228 in both eyes.

Conferences are now in progress to take up this work in connection with the Board of Education.

LABORATORY AND DISPENSARY WORK.

I am pleased to be able to report a large increase in the work of the diagnosis and research laboratories, with further extension of the system of collecting cultures for private physicians.

For the treatment of cases of tuberculosis, considerable more work has been done this year than ever before. Besides the bacterial diagnosis work of the laboratories and the routine inspections by physicians of the Department, a corps of three nurses has been employed, whose duty it is to visit all cases of tuberculosis where the patient is reported as being incapacitated for work, and to render any necessary aid, see that instructions are being carried out, furnish sputum cups, etc.

In May last a sanitarium for the treatment of cases of pulmonary tuberculosis was opened at Riverside Hospital on North Brother Island, and the admission of patients continued until August, when the work was curtailed on account of lack of funds. In that brief time good results were manifest, as may be seen from a detailed report hereto annexed.

A building for use as a dispensary in cases of pulmonary tuberculosis has been erected on the property just south of the present headquarters; it has

been leased for the Department, and will be opened on or about January 1, 1904, and should prove to be effective not only in giving treatment to visiting patients, but in disseminating information on the subject of the prevention of tuberculosis.

SANITARY WORK.

The most notable feature of sanitary work of the year was the reinforcement of the smoke ordinance following the great strike at the anthracite coal mines. In spite of the predictions that New York would never again be free from smoke in its atmosphere, prosecutions were had of all of the worst offenders, and the nuisance reduced to a minimum, so that the City's atmosphere is now clearer than ever before. During the year 116 persons were arrested for maintaining a smoke nuisance, of whom 46 were held for trial in the Court of Special Sessions. In 32 of these cases sentence was suspended, eight persons were fined and six cases remain to be disposed of.

Realizing the necessity of improving the condition of property on the north end of Manhattan Island, which, in a short time, will be reckoned within the built-up portions of the City, the Department, in the spring of 1902, made a general inspection of the unimproved property in that region mainly for the purpose of determining all premises on which water might collect. Orders were issued in all instances where the attention of the Department was required, and with the co-operation of the Department of Highways, and of private owners, improvement has been made in the Inwood section, especially with respect to the removal of stagnant water from low-lying lands. Other particular activities of the sanitary division include the inspection of slaughter houses, on account of which not a single complaint has been received during the year, and the inspection of private bathing establishments, with the result that a large number of orders have been issued tending to more frequent changing of the water in the pools.

Important changes in the Child Labor Law have necessitated an enlargement of the scope of the mercantile inspection work. It now includes not only mercantile establishments, but also business offices, telegraph companies, restaurants, hotels and the like. The new law is more difficult of enforcement, but the Department believes it to be a valuable addition to existing statutes. A few minor amendments which need not be dealt with in detail here would decidedly increase its efficiency and fairness to the persons affected.

Considerable extension has been made in the work of inspecting milk, and a large number of stores which sold milk under unsanitary conditions have been compelled to cease such sale. In the Borough of Manhattan 2,291 new permits for the sale of milk have been issued and 4,598 revoked.

NEW BUILDINGS.

A large amount of work has been done upon the contagious disease hospital grounds for the repair of old buildings and the construction of new ones. Some of the items included in this general statement are as follows:

BOROUGH OF MANHATTAN.

New gate house, finished.

Scarlet Fever Pavilion, Willard Parker Hospital, to accommodate 250 cases, now building.

Administration Building, contract awarded.

Laboratory Building, contract awarded.

Tuberculosis Dispensary, Adjoining Main Office.

BOROUGH OF THE BRONX.

Riverside Hospital.

Dock house, finished.

Storehouse, finished.

Nurses' Home, nearly finished.

Coal storage house, work in progress.

Summer house, finished.

Laundry building, contract to be awarded.

Disinfecting station, One Hundred and Thirty-second street and East river, nearly finished.

BOROUGH OF BROOKLYN.

Boiler house and chimney, nearly finished.

Disinfecting and laboratory building, nearly finished.

Pavilion, contract awarded.

Nurses' Home, contract awarded.

Coal storage house, contract to be awarded.

BOROUGH OF RICHMOND.

Disinfecting station, finished.

Additional land has been acquired for hospitals as follows:

Borough of The Bronx, nine acres to be developed.

Borough of Brooklyn, seven acres, to be developed.

Borough of Queens, twenty-two acres, to be developed.

Repairs and alterations have been made as follows:

BOROUGH OF MANHATTAN.

Main Office Building—General overhauling and fireproof vault for the storage of records.

Willard Parker Hospital, East Sixteenth street—General repairs to all buildings and boiler plants.

BOROUGH OF THE BRONX.

Riverside Hospital, North Brother Island.

Remodeling of stable building into dormitory building. Addition to disinfecting building. Remodeling Pavilions Nos. 3, 6, 8, 9 and 10. Nearly all plumbing in the various buildings has been replaced by new plumbing. The buildings have been extensively repaired and all painted. Boiler plant has been overhauled and improved. The buildings are now much better protected than heretofore, all having inclosed foundations, which is very necessary in this exposed location.

BOROUGH OF BROOKLYN.

Kingston Avenue Hospital.

Buildings have been extensively repaired, inside and outside, and repainted. Inclosing walls have been provided beneath pavilions set on piers, and much of the old plumbing has been replaced by new. Two new washing machines have been provided for the laundry, and new slate roof has been placed on the laundry building.

Buildings leased for the use of this Department have been fitted for use as follows:

Northwest corner Avenue C and Sixteenth street—Dormitory for Willard Parker Hospital.

Northwest corner One Hundred and Eighteenth street and Pleasant avenue as a hospital for contagious eye disease (trachoma).

Rear of Nos. 1034 and 1036 East One Hundred and Thirty-fourth street as an ambulance stable.

Four new improved sterilizing disinfecting chambers have been purchased in order to provide facilities for the disinfection of infected clothing in each borough.

Plans have been prepared for two isolation buildings at Riverside Hospital, disinfecting building, stable and laundry, also administration building, and sketches made for two pavilions for the Borough of Queens.

Sketches for a pavilion at Richmond have been made.

Respectfully submitted,

(Signed) ERNST J. LEDERLE, PH. D., *Commissioner of Health.*

Department of Health, City of New York,
 Southwest Corner of Fifty-fifth Street and Sixth Avenue, Borough of Manhattan, }
 New York, December 31, 1903. }

Hon. ERNST J. LEDERLE, Ph. D., President of the Board of Health:

Sir—I have the honor to present herewith reports relative to the work of the Department of Health, performed in the office and under the supervision of the Secretary during the year ending December 31, 1903, submitted by the Chief Clerk of the Department and the Assistant Chief Clerks assigned to duty in the various boroughs of the City.

EUGENE W. SCHEFFER, Secretary.

Office of the Secretary—Notices of the Board.

The notices of the Board for the abatement of nuisances are issued upon the facts and evidence contained in the written reports of the Sanitary Inspectors, the result of personal inspection of premises complained of. During the year ending December 31, 1903, the number of notices issued by the Board was as follows:

Borough of Manhattan.....	14,022
Borough of The Bronx.....	2,482
Borough of Brooklyn.....	5,394
Borough of Queens.....	2,358
Borough of Richmond.....	1,441
Total.....	25,697

These notices call the attention of owners, lessees and agents to violations of the Sanitary Code in each case, and require the necessary alteration, repairs, cleaning and improvement of the premises named within five days from the receipt of the notice. If, upon reinspection, it is found that the requirements of the notice have not been complied with, a suit for penalty is commenced against the delinquents under sections 1172 and 1222, chapter 466, Laws of 1901.

The subjects of the notices of the Board above referred to are as follows:

Air-shafts cleaned, disinfected, graded, paved, connected with sewer.

Alleys cleaned, disinfected, graded, paved, connected with sewer.

Apartments cleaned, disinfected or ventilated.

Areas connected with sewer, cleaned, disinfected, pavements of, graded and repaired.

Balusters of stairs repaired.

Basements cleaned and disinfected.

Business of lard-rendering, slaughtering, gut-cleaning, fat-rendering, storing bones, manufacturing fertilizers, smoking sausages or storing rags discontinued.

Buildings cleaned or inclosed.

Ceilings cleaned, whitewashed or repaired.

Cellars cleaned, made water-tight, cemented, connected with sewer, ceilings plastered, doors repaired.

Cellars vacated as places of living or sleeping.

Cesspools disinfected, emptied, cleaned, filled, constructed, repaired or covered.

Chimneys repaired, extended, cleaned or obstructions removed.

Cisterns disinfected, emptied, cleaned, covered or provided.

Clothes-poles reset.

Coops cleaned, disinfected or removed.

Cows removed.

Dogs removed.

Drains cleaned, constructed, covered, repaired, removed, obstructions in removed, or connected with sewer.

Excavations cleaned, repaired, relaid, graded, or connected with sewer.

Fences repaired or constructed.

Fire-escapes cleaned or obstructions removed.

Fixtures trapped and waste-pipes therefrom connected on outlet side of water-closet traps.

Flashings provided over woodwork or sinks.

Floors cleaned, repaired, relaid, graded, cemented or connected with sewer.

Fowls removed.

Gas mains and pipes repaired and gas provided in dark halls and rooms.

Garbage and ash receptacles provided, removed, cleaned and disinfected.

Gutters (house or street) provided, repaired, cleaned, disinfected, obstructions in removed, connected with street sewer, street gutter or cesspool.

Halls cleaned and filthy or defective floor coverings removed.

House drains provided with running traps and fresh-air inlets.

Hydrants repaired, constructed or removed.

Ice-boxes connected with properly trapped, water-supplied, open sinks.

Joints closed or caulked with lead.

Leaders repaired, provided, extended, adjusted, connected with sewer, street, gutter or privy vault.

Lodging-houses discontinued.

Lots (vacant) cleaned, disinfected, inclosed, filled, graded, connected with sewer or street gutters.

Manure vaults, boxes or receptacles disinfected, emptied, cleaned, covered, filled, constructed or lined.

Manholes covered and repaired or removed.

Offensive trades and business discontinued or removed.

Pigeons removed.

Pipe (soil, supply, vent, waste, sewer or iron) provided.

Pipe (soil, waste or supply) repaired, trapped, removed, extended, graded, cemented, ventilated or repaired, and openings closed and obstructions removed.

Privy vaults disinfected, emptied, cleaned, ventilated, lined with brick, repaired, cemented, constructed, filled or removed.

Privy-houses cleaned, disinfected, repaired, constructed, removed, adjusted to vaults, or seats of provided with cover.

Pumps provided or repaired.

Rabbits removed.

Railings provided or repaired.

Roofs repaired or cleaned, and roof bulkheads repaired.

Roof tanks provided, cleaned or covered.

School sinks provided, cleaned or repaired.

Sewer pipes provided, repaired, obstructions in removed, trapped or openings inclosed.

Sinks provided, repaired, cleaned, removed, flushed, connected with street sewer or street gutters.

Sidewalks cleaned, repaired, graded, flagged or obstructions in removed.

Skylights repaired and provided.

Slaughter-houses cleaned, repaired or connected with sewer.

Smoke-pipes extended or repaired.

Soil-pipes discontinued as rail leaders.

Spaces cleaned, disinfected, graded, cemented, filled or connected with sewer.

Stables cleaned, removed, repaired or connected with street sewer.

Stagnant water removed.

Stairways cleaned or repaired.

Trees removed.

Urinals cleaned, disinfected, repaired, flushed, connected with sewer, removed, or floor covered with zinc.

Walls cleaned, whitewashed or repaired.

Wash-roofs repaired.

Wash-trays trapped, provided.

Water closets repaired, cleaned, disinfected, flushed, constructed, ventilated or connected with street sewer.

Water closet pans adjusted to preserve water seal, bowls burnt out and retarred, cisterns provided, window sashes repaired and glazed.

Yards cleaned, disinfected, filled, graded, paved, grade of pavements repaired, relaid in cement or connected with street sewer.

Fees Received for Searches and Transcripts.

Amount of fees received for searches and transcripts of the records of births, marriages and deaths, and deposited to the account of Health Department Fund, was as follows:

Borough of Manhattan.....	\$9,591 70
Borough of The Bronx.....	689 90
Borough of Brooklyn.....	3,970 80
Borough of Queens.....	284 50
Borough of Richmond.....	114 90
Total.....	<u><u>\$14,651 80</u></u>

OFFICE OF THE CHIEF CLERK—ANNUAL REPORT, 1903.

Department of Health, City of New York,
 Southwest Corner Fifty-fifth Street and Sixth Avenue, Borough of Manhattan, }
 New York, December 31, 1903. }

EUGENE W. SCHEFFER, Secretary of the Board of Health of the Department of Health:

Sir—I have the honor to submit herewith a report of the work performed in the office of Accounts and Supplies during the year 1903.

In the early part of this year the control of this office was placed in the hands of the Chief Clerk. The work of the office continued to be largely the same as performed during 1902, although the title changed from "Office of the Clerk of Accounts and Supplies" to the "Office of the Chief Clerk."

Assistant Chief Clerks.

With the new designation came some new duties, however, among which was the supervision of the offices of the Assistant Chief Clerks in each of the five boroughs. Agreeable to your instructions, inspections were made of these offices periodically, and many of the conditions found which did not conform to the lines adopted in the Borough of Manhattan were changed, in so far as circumstances would warrant, so that the systems in all boroughs were made as nearly uniform as was practicable.

No supervision had previously been exercised over the offices of these clerks and many matters were found in a condition detrimental to the best interests of the service. The care of the supplies had been very much neglected in one or two of the borough offices. This condition was promptly corrected. Great trouble was experienced in one or two instances with the condition of the antitoxin and vaccine accounts. The

Commissioners of Accounts, in their report submitted early in the year, complained of the manner in which these accounts were kept. At their suggestion the old balances were written off and in each instance the account was started anew. The Assistant Chief Clerks were then instructed that these accounts must be kept balanced from week to week, and that they would be held responsible for errors that might creep in. The result was that there were no errors. Other matters about which there had been some complaint were also taken up and corrected, and I therefore have the honor to report the condition of these offices to be much improved.

Another duty imposed upon the Chief Clerk, according to the rules of the Department, was the care of its property. Steps were taken in the latter part of the year to procure a storehouse near the main office at Fifty-fifth street and Sixth avenue, where supplies for the different hospitals and offices could be cared for and distributed as needed. An application for the rental of such a place was made to the Sinking Fund Commission, but was not granted. No progress was made therefore in the direction of a better supervision of the property of the Department, and this matter was passed over for action during the year 1904. No correct inventory exists of the property of the Department, and no systematic effort has been made to see that such property is kept intact, and that all old material is properly condemned and accounted for. In this respect this Department is considerably behind other branches of the City service. It had been planned that, upon the securing of a storehouse, a storekeeper would be appointed who would keep track of the property in the various hospitals. With this branch of the Department provided for, the remainder would have been simple, and could have been taken care of with the present force.

Inspector of Supplies.

In September the Board appointed an Inspector of Supplies and assigned him to the office of the Chief Clerk. His duties were to inspect the supplies delivered on all orders issued by the Chief Clerk, and to inspect also such work as had been performed on account of such orders as did not properly come under other Inspectors. Such an Inspector had long been needed, and the results obtained from this appointment have been very beneficial to the Department.

In my report for 1902 I had occasion to complain of the quality of the supplies delivered on our orders. Some of this trouble was obviated by the adoption of the contract system in the purchase of supplies. There was, however, no method of determining accurately that the deliveries made on the contracts were equal to the samples exhibited or that they were in accordance with the specifications. The Inspector of Supplies very quickly discovered that the Department was being defrauded in many instances by contractors. These contractors were informed of their delinquencies, and numerous deliveries were rejected, and the contractors compelled to deliver goods equal in every respect to the specifications and to the samples exhibited. Other Depart-

ments of the City government have been helped in this particular by the Inspectors from the Finance Department. Owing to the fact that our hospitals are for contagious diseases, there has been a standing order in the Finance Department that no Inspector shall visit these institutions to inspect any of our supplies. This matter had, therefore, been neglected until this appointment was made.

The Department undoubtedly saved much more than the salary of this Inspector from the fact that the contractors were compelled to deliver the articles called for in the contracts in accordance with the specifications therein contained and on which the bids had been made. Heretofore, they had delivered inferior goods and the resulting profit to the contractors was a loss to the Department. Much valuable help in checking these frauds was given by the chemical laboratory of the Department.

In his journeys among the various offices and hospitals under the control of the Department, this Inspector was instructed to make reports as to the condition of the supplies as he found them. Reports were submitted, from time to time, showing that there was great carelessness in some of the hospitals as to the manner in which food and drug supplies were cared for, and these conditions, having been brought to the attention of the Superintendent of Hospitals, were immediately corrected.

Among other duties imposed upon this Inspector was that of the weighing of coal delivered under contract to the Department. A very significant thing in relation to this matter came to light in the latter part of the year, namely, that the weights of three different cargoes of coal delivered to Riverside and Willard Parker Hospitals showed shortages of approximately forty-five tons, in shipments aggregating about twelve hundred tons. This meant a saving to the Department of about \$220.

Regular inspections were made by this Inspector at each of the hospitals at least once in each week, and in the different offices and other buildings under the control of the Department, as often as the conditions warranted. No bill, except for construction work, was passed through the office without having first been O. K'd by this Inspector. The Department is receiving a much better grade of supplies in response to its orders than ever before. The contractors are compelled to make deliveries in accordance with the specifications as contained in their contracts or as embodied in the open orders issued to them. The establishment of this position has undoubtedly been a big step in advance and one of the most important matters that has come up in connection with the Chief Clerk's office during the year 1903.

Sanitary Inspectors in Charge of Construction.

Somewhat allied to this office, while not directly under its control, has been the work of the Sanitary Inspectors assigned to the various building operations. These assignments covered both repairs and new work. There have been during the year, three men detailed to this position, whose duties have been to follow the work from day to day, and to see that it was always in accordance with the plans and specifications

and with the terms of the contract covering said work. Where conditions existed that were not in accordance with the plans and specifications, reports were made to this office, from time to time, by these Inspectors. This was particularly true of work which had been specified by the Inspectors themselves and where no architect had any supervision. These matters were taken up as they arose, and so far as possible, the contractors were compelled to alter the conditions so that they conformed to the requirements of the Department. Occasionally, questions that arose in connection with the contracts for new buildings were also referred to this office by the architects, and so far as possible, were given the necessary attention. Whenever these questions were not within the jurisdiction of this office, they were brought to the attention of the Commissioner, and rulings obtained from him. These Inspectors passed on such of the work ordered by this office as did not properly come under the Inspector of Supplies mentioned in the preceding paragraph.

The following memorandum was prepared by Inspector Frederick Sprenger, the Sanitary Inspector in charge of these Inspectors:

“Under the jurisdiction of this Department in the several boroughs are about eighty buildings, most of which are hospital buildings used for the care of patients suffering from contagious diseases. About fifteen of these buildings are leased and the rest are owned by the City. Many of the buildings have been in use for a number of years and until this year have never been extensively repaired. Nearly all the buildings connected with the hospitals have been overhauled, improved and generally repaired throughout. Three Sanitary Inspectors have been detailed to supervise the repair work and also to look after new construction. Six new buildings were under construction during the year and contracts for six more were awarded in December. Owing to the fact that but few of the better class of builders bid on department building construction and that contracts are required by law to be awarded to the lowest bidder, it requires constant effort and attention to procure in some cases a good grade of work. Much time and attention has been given during the year to assisting the architects in the preparation of plans for new buildings. Specifications of repair work are generally prepared by the Inspectors. Considerable land has been purchased during the year for the use of this Department—about twenty-two acres in the Borough of Queens, seven acres in the Borough of Brooklyn and nine acres in the Borough of The Bronx. The work of developing this property is now in progress.

“FREDERICK SPRENGER,

“Sanitary Inspector, in charge of Department Buildings, Construction and Repairs.”

Appropriation Accounts.

Statement A appended to this report shows the appropriations awarded to the Department, so far as they are ascertainable, from the year 1866 to date. Statement B attached hereto shows in detail the appropriations for the year 1903.

The appropriation ledgers continue in the same good condition as reported for 1902. The usual checking with the Finance Department showed almost no errors, and in the few that were found in most instances the differences were due to mistakes in the Comptroller's books.

Statement C shows the special appropriations made to the Department by issues of Revenue Bonds and Corporate Stock. Special mention should be made of the two large issues of Corporate Stock, one in February for \$250,000 and the other in June for \$500,000, both of which were for new buildings. In this connection attention might also be called to the issue of Revenue Bonds for \$50,000 for repairs and alterations to the various buildings under the control of the Department. This latter amount was spent in continuing the general scheme for repairs at the various hospitals started in 1902. The annual estimate was forwarded to the Board of Estimate and Apportionment on September 1, as usual, covering the estimated expenditures for the year 1904.

Continued effort was made to shorten the time required to prepare bills for audit and payment at the Finance Department. So far as the work of this office was concerned there undoubtedly was a gain in this direction. We were, however, considerably hampered owing to the fact that bills were held in the hospitals and offices for weeks without any satisfactory explanation. Contractors placed the blame for this delay on this office, not being able to understand that in reality other officers of the Department were responsible. Effort is being made to see that these bills are passed to this office promptly from the hospitals and heads of divisions.

The new method of recording the liabilities of the Department, which was started in 1902, worked very satisfactorily during this year. At the close of business we were able to ascertain within a few minutes the exact amount of the unexpended balances in the various appropriations. Minor changes were made in the methods of keeping some of the records, all of which added to the effectiveness and correctness of these accounts. The so-called requisition book, which had been kept up for years, was discontinued about the middle of the year. It was discovered that all the data formerly contained in this book was practically being duplicated in the liability book and in certain card indices, so that the information could be obtained in a quicker and more satisfactory way.

Pay-rolls.

No change has been made in the method of caring for the pay-rolls of the Department. The method employed during 1902 and for some years prior to that, with slight modifications, seems to be very satisfactory. The number of names on the pay-rolls

during 1903 has been somewhat increased over that of 1902. A great many temporary positions were filled during the year, which complicated the records to a great extent.

Revenue Bonds were issued by the Board of Estimate and Apportionment for the employment of Vaccinators, Special Medical Inspectors, Disinfectors, and for other purposes, which increased the number of pay-rolls very materially. As in 1902, there were practically no exceptions taken to the rolls as forwarded to the Civil Service Commission, and to the Finance Department.

During the year the Comptroller changed somewhat the method of issuing checks to the different departments. Heretofore checks had been printed for the various monthly salaries likely to occur in the Department's rolls, and it was then only necessary to fill in the employee's name. Under the new system it was impracticable to print the amount of the salaries on the checks and they were therefore submitted in blank, and the Clerk was required to write out not only the employee's name, but the amount of his salary as well. Each check was numbered and the Clerk in charge was held responsible for each individual check. If in writing any check he should in any manner spoil it, the spoiled check was to be returned to the Comptroller with those which had been properly filled out. This very materially increased the work.

Payments to the employees at the hospitals were made, as heretofore, in cash.

Purchase of Supplies.

The contract system for purchasing supplies, which was adopted in the latter part of 1902, was continued and amplified during 1903. More items were placed on contract than had been included in the contracts for 1902, and the specifications were revised and corrected so that they were much more exact and better adapted to the needs of the Department. Errors which had crept into the contracts in 1902 were corrected, and specifications that had called for goods of a character not specially adapted to the needs of the Department were changed. Inasmuch as 1902 saw the beginning of the contract system for the purchase of supplies it was perfectly natural that a considerable revision of the specifications should be necessary. Where trouble had been experienced with contractors over interpretations of some specifications, samples were exhibited.

I again have to acknowledge the valuable assistance rendered to this office by business men in various branches of trade in giving advice as to the preparation of specifications covering supplies in their respective lines of business. The plans laid down for the purchase of miscellaneous supplies not under contract during the year 1902 were continued and modified from time to time as occasions presented themselves for improving the methods in vogue. During the year over two thousand nine hundred requisitions passed through the office. The number of orders issued on each requisition averaged, as in 1902, about five, making approximately some fifteen thousand orders issued during the year. For practically every one of these orders at least two,

and in many instances as many as five, requests for estimates were issued. It can, therefore, be readily seen that the work in connection with this branch of the office increased very largely during the year.

Books, Blanks and Stationery.

Increased activities in all branches of the service made increased demands for blanks, books and stationery. As in 1902, many changes were made in existing forms, with the result that much stock was discarded and much was destroyed. The number of special requisitions sent to the CITY RECORD office continued to be very large, and resulted in much more work for this branch of the office.

The same trouble with the printing contractor which was experienced in 1902 was constantly harassing us during the entire year. The same contractor who caused the trouble in 1902 had the contract for 1903, notwithstanding the protest made to the Board of City Record against the awarding of the contract for the supplies of this department to this person. Many items were not delivered until December, and quite a number had to be cancelled entirely.

The care of the books, blanks and stationery in the borough offices was a subject of some complaint during the year, as already mentioned in this report. Orders were issued to have all these supplies cared for by the Assistant Chief Clerks (except in the Borough of Manhattan), and put together in one place in a systematic manner. In some instances blanks were found scattered through the buildings from the cellar to the attic, and bundles of different forms were found for which there had been much demand and which no one knew existed.

Contracts.

Reference has already been made briefly to the contracts for the purchase of supplies for the different hospitals and offices. Much effort was expended to see that these were brought up to date, and, as already mentioned, errors in the specifications were corrected. During the year a great many contracts were made for new buildings and for repairs to buildings already erected. The contract forms were all prepared in this office and the proofs were read and the advertisements prepared and forwarded to the CITY RECORD for insertion in that paper.

The plans for spending the proceeds of the Corporate Stock issued in 1902 did not result in the letting of any contracts for new buildings until 1903. The contracts for the expenditure of this money appropriated in 1902, therefore, were not drawn until 1903, owing to the fact that the architects did not complete the plans and specifications for the various buildings until the latter year. The general scheme for these improvements at the various hospitals having once been settled on, the architects were able to complete their plans for the new buildings covered by the appropriations for 1903, during that year, with the result that both 1902 and 1903 contracts were drawn

in the one year. This made an unusual amount of work in the contract department. Some fifty odd contract forms, covering new buildings as well as supplies, were prepared during the year.

Sale of Laboratory Products.

In the annual report for 1902, under this heading, explanation was made as to the methods employed in establishing stations throughout the city for the sale and distribution of the Department's laboratory products. It was explained that under certain conditions these products were distributed free, upon the signing of a so-called "free-slip" by the physician in charge of any particular case. The Commissioners of Accounts, who had been investigating the books relating to this branch of the office, made an examination of the free-slips obtained by the Department, with the result that a recommendation was made to the Mayor to have the matter placed in the hands of the Corporation Counsel for action. They stated in their report that certain physicians in the City were abusing the privileges extended to them by the Department and that they were obtaining antitoxin free upon these free-slips and in turn charging the patients for the material. The Corporation Counsel recommended that the matter be turned over to the District Attorney, and the District Attorney presented the matter to Justice Mayer of the Court of Special Sessions. After conferring with a representative from the District Attorney's office, and going thoroughly over the papers in the matter, Justice Mayer issued warrants for the arrest of some forty physicians. These cases were brought to trial before Judge Mayer, acting as a Committing Magistrate, and resulted in the conviction of one physician, the rest being discharged.

These actions had a marked effect upon the returns from the various stations. Drug stores which had formerly turned in almost nothing but free-slips, suddenly made considerable returns for cash sales and the number of free-slips very materially decreased.

The cash receipts from the sale of antitoxin for the year 1903 were \$17,840.46, and for vaccine virus \$3,592.45.

Owing to considerable opposition on the part of druggists and others to the Department selling its products outside of the City, the Board passed a resolution directing that the sales outside of the City limits be discontinued on and after the 1st day of July. This had the effect of materially decreasing the amount of the cash sales for the year.

The Commissioners of Accounts, in their annual report covering the work up to September 30, 1902, had occasion to complain of the condition of the antitoxin books. During the early part of the year the entire bookkeeping staff of the office was required to stay overtime to get these books in shape. Monthly trial balances were taken from the time when a balance had been made by the Commissioners of Accounts in their

previous examination of these books. A large number of errors were found and corrected. The comparatively small amount which the Commissioners of Accounts had been unable to find in order to make the balance exact had, upon their advice, been written off. The bookkeeper in charge of these books was changed during the year, and the books are now balanced regularly once a month and are in excellent condition.

The new forms of journal and salesbook adopted January 1 proved themselves to be great labor-savers; at the same time their effectiveness was increased and the entries made much clearer. The accounts with the borough offices were balanced with the stock actually on hand in these offices and with their weekly returns, and have been kept so throughout the year. Previously no attempt had been made to balance the stock in the borough offices with the ledger account. This lack of system resulted in a discrepancy between the books and the actual conditions of several thousands of dollars. On the advice of the examiners from the Commissioners of Accounts' office these items were written off.

Pension Fund.

Statement D is a copy of the report of the Trustees of the Pension Fund for the year 1903. By this statement it will be seen that the fund has reached the sum of \$134,248.78. The number of pensioners on the roll is now eighteen. Three have been added during the year and one has died. The total expenditure for pensions was \$13,173.29. The income for the year 1903 was \$34,157.26, and the net increase in the fund over and above the expenditures for the year was \$20,788.97.

Conclusion.

Much remains to be done to improve the work in this office, but great improvement has been made in practically every division of the work. The amount of detail work is very great, and the volume of work is increasing rapidly. This makes it somewhat difficult to give the attention to improvements that otherwise would be given, and which they really deserve. It would not be proper to close this report without acknowledging the good work of those employees in the office who have helped so largely in bettering the conditions and in keeping the work of the office up to a high standard of efficiency.

Respectfully submitted,

F. D. BELL, Chief Clerk.

STATEMENT A.

A statement of the expenditures and appropriations from 1866 to date is here given:

1866 Expenditures (eight months).....	\$178,633 91
1867 Expenditures	180,395 13
1868 Expenditures	163,834 50
1869 Expenditures	182,258 24
1870 Expenditures	169,478 27
1871 Expenditures	194,976 54
1872 Expenditures (amount not stated).....	.....
1873 Expenditures	163,381 23
1874 Expenditures	215,885 84
1875 Expenditures	242,250 00
1876 to 1888 (amounts not given in the Annual Reports).....	.....
1889 Appropriation	413,600 00
1890 Appropriation	394,426 50
1891 Appropriation	402,615 88
1892 Appropriation	452,111 61
1893 Appropriation	566,427 56
1894 Appropriation	458,645 17
1895 Appropriation	495,830 25
1896 Appropriation	536,052 52
1897 Appropriation	581,358 00
1898 Appropriation (consolidation).....	958,496 50
1899 Appropriation	1,110,538 49
1900 Appropriation	1,055,515 00
1901 Appropriation	1,053,990 00
1902 Appropriation	984,391 48
1903 Appropriation	1,034,391 48

STATEMENT B.

Appropriations, 1903.

Title.

Salaries, Board of Health and Secretary's Office..... \$42,026 00

BOROUGH OF MANHATTAN.

Salaries	\$241,819 52
Supplies and Contingencies.....	20,000 00
Removal of Night Soil, etc.....	30,000 00
Sanitary Police	37,900 00

Disinfection	\$26,880 00	
Hospital Fund	36,953 56	
Bacteriological Laboratory	49,706 00	
Salaries, Medical School Inspection.....	50,000 00	
For Abatement of Nuisances.....	500 00	
	<hr/>	\$493,849 08

BOROUGH OF THE BRONX.

Salaries	\$62,066 64	
Supplies and Contingencies.....	2,750 00	
Disinfection	1,500 00	
Removal of Night Soil, etc.....	11,850 00	
Hospital Fund	30,000 00	
Salaries, Medical School Inspection.....	10,000 00	
Sanitary Police	4,200 00	
For Abatement of Nuisances.....	250 00	
	<hr/>	122,616 64

BOROUGH OF BROOKLYN.

Salaries	\$150,957 76	
Supplies and Contingencies.....	9,042 00	
Disinfection	9,200 00	
Removal of Night Soil, etc.....	15,000 00	
Hospital Fund	23,500 00	
Salaries of Medical School Inspectors.....	25,000 00	
Support of Ambulance Service.....	20,600 00	
Sanitary Police	19,700 00	
For Abatement of Nuisances.....	500 00	
	<hr/>	273,499 76

BOROUGH OF QUEENS.

Salaries	\$23,600 00	
Supplies and Contingencies.....	2,000 00	
Disinfection	2,500 00	
Removal of Night Soil, etc.....	14,950 00	
Hospital Fund	1,000 00	
Salaries, Medical School Inspection.....	5,000 00	
Support of Ambulance Service.....	2,400 00	
Sanitary Police	4,200 00	
For Abatement of Nuisances.....	250 00	
	<hr/>	55,900 00

BOROUGH OF RICHMOND.

Salaries	\$27,200 00	
Supplies and Contingencies.....	1,500 00	
Disinfection	2,000 00	
Hospital Fund	1,000 00	
Salaries, Medical School Inspection.....	4,000 00	
Sanitary Police	4,200 00	
Removal of Night Soil, etc.....	6,500 00	
For Abatement of Nuisances.....	100 00	
		\$46,500 00
		\$1,034,391 48

STATEMENT C.

Bond Issue and Corporate Stock, 1903.

Revenue Bonds.

	1902.		
No. 1.	Dec. 19	Necessary Expenses, Sanitary Police and Vaccinators.	\$30,000 00
	1903.		
No. 2.	Jan. 9	Destruction of Cattle.....	10 00
No. 3.	Jan. 16	Nurses for Schools, etc.....	30,000 00
No. 4.	Mar. 20	Additional Veterinarians.....	5,000 00
No. 5.	Apr. 7	Medical Inspectors (Summer Corps).....	25,000 00
No. 6.	May 8	Hospital Charges, Manhattan.....	11,000 00
		Hospital Charges, The Bronx.....	16,000 00
		Hospital Charges, Brooklyn.....	15,000 00
No. 7.	May 22	(Typhoid, etc.) Inspectors, etc.....	10,000 00
No. 8.	July 1	Destruction of Cattle.....	67 50
No. 9.	July 31	Alterations, repairs, etc., to Buildings and Steamer "Franklin Edson".....	50,000 00
No. 10.	Oct. 8	Necessary Expenses (Disinfection and Fumigation).	15,000 00
No. 11.	Nov. 20	Destruction of Cattle.....	22 50
No. 12.	Nov. 20	Necessary Expenses (Trachoma).....	10,000 00
No. 13.	Nov. 20	Necessary Expenses (Antitoxin).....	6,000 00
No. 14.	Dec. 4	Necessary Expenses, Vaccinators and Sanitary Police	5,000 00
No. 15.	Dec. 11	Special Revenue Bond, Louisiana Purchase Exposition	2,500 00
		Total Revenue Bonds.....	\$230,600 00

Corporate Stock.

Department of Health Building Fund, Feb. 20.....	\$250,000 00
Department of Health Building Fund, June 5.....	500,000 00
Department of Health Building Fund, Oct. 8.....	34,000 00
	<hr/>
	\$1,014,600 00
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STATEMENT D.

Pension Fund, 1903.

Balance in bank, January 1, 1903, as per annual report of December 31, 1902	\$113,459 81
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Receipts.

Attorneys' costs	\$484 49
Fees for searches and transcripts of the records.....	14,651 80
Fines and penalties for violation of Sanitary Code.....	14,740 00
Interest on money in bank.....	4,280 97
	<hr/>
	34,157 26
	<hr/>
	\$147,617 07

Disbursements.

Paid to pensioners.....	\$13,173 29
Refunds to Clerks of Courts for money erroneously trans- mitted to this Department.....	195 00
	<hr/>
	13,368 29
	<hr/>
Balance in bank drawing interest at 3½ per cent.....	\$134,248 78
	<hr/> <hr/>

Department of Health, City of New York,
 Southwest Corner Fifty-fifth Street and Sixth Avenue. }
 Borough of Manhattan,
 New York, December 31, 1903. }

FREDERIC D. BELL, Esq., Chief Clerk, Department of Health, New York City:

Dear Sir—I have the honor to respectfully present the following report of the work performed pursuant to your orders and under my personal supervision and direction during the year ending December 31, 1903:

Reorganization of the Office of Assistant Chief Clerk.

Such duties as were formerly performed by the Clerk of Accounts and Supplies and the Assistant Chief Clerk, which included the purchase of supplies, the keeping of accounts and the supervision of the financial affairs of the Department, were at the direction of the President of the Board and Chairman of the Finance Committee assigned to the Chief Clerk, and the office of Assistant Chief Clerk was reorganized so as to include the general supervision of the following employees of the Department in addition to the duties described in the annual report for the year 1902:

1. Clerical force.
2. Stenographers and Typewriters.
3. Typewriting Copyists.
4. Telephone Switchboard Operators.
5. Engineers' Department.
6. Foreman of Laborers.
7. Watchmen.
8. Elevator Attendants.
9. Cleaners (male and female).

Many improvements have been effected in the routine work of the Department, and necessary repairs and alterations in the interior construction of the building and the arrangement of the offices of the various divisions were made to protect the valuable records and facilitate the prompt transaction of official business.

Official Reports, Communications and Applications.

Reports, communications and applications are presented to the Board through the Secretary for consideration and final action. They are numbered and filed numerically, and are indexed alphabetically under the subject-matter by means of the card system. The minutes of the Board and all applications for permits are indexed and filed in the same manner.

The following is a summary of the reports, communications and applications considered by the Board of Health:

Special reports and communications presented to the Board for action.....	627
Premises declared a public nuisance.....	180
Premises ordered vacated.....	80
Premises overcrowded	220
Miscellaneous permits granted by the Board.....	1,517
Lodging house permits granted.....	132
Cow permits granted.....	237
Mercantile permits granted.....	15
Applications for permits denied by the Board.....	2,074
Registration certificates issued to master plumbers.....	760

Notices of the Board.

During the year ending December 31, 1903, the number of notices issued by the Board was 14,022. These notices call the attention of owners, lessees and agents to violations of the Sanitary Code in each case, and require the necessary alteration, repairs, cleaning and improvement of the premises named within five days from the receipt of the notice. If, upon reinspection, it is found that the requirements of the notice have not been complied with a suit for penalty is commenced against the delinquents under sections 1172 and 1222, chapter 466, Laws of 1901.

The number of notices of the Board issued in the Borough of Manhattan was. . . 14,022

The subject-matter of the notices of the Board referred to are as follows:

- Alleys cleaned, disinfected, graded, paved, connected with sewer.
- Air-shafts cleaned, disinfected, graded, paved, connected with sewer.
- Apartments cleaned, disinfected or ventilated.
- Areas connected with sewer, cleaned, disinfected, pavements of graded and repaired.
- Balusters of stairs repaired.
- Basements cleaned and disinfected.
- Business of lard rendering, slaughtering, gut cleaning, fat rendering, storing bones, manufacturing fertilizers, smoking sausages or storing rags discontinued.
- Buildings cleaned or inclosed.
- Ceilings cleaned, whitewashed or repaired.
- Cellars cleaned, made water-tight, cemented, connected with sewer, ceilings plastered, doors repaired.
- Cellars vacated as places of living or sleeping.
- Cesspools disinfected, emptied, cleaned, filled, constructed, repaired or covered.
- Chimneys repaired, extended, cleaned or obstructions removed.

Cisterns disinfected, emptied, cleaned, covered or provided.

Clothes poles reset.

Coops cleaned, disinfected or removed.

Cows removed.

Dogs removed.

Drains cleaned, constructed, covered, repaired, removed, obstructions removed, or connected with sewer.

Excavations cleaned, repaired, relaid, graded or connected with sewer.

Fences repaired or constructed.

Fire escapes cleaned or obstructions removed.

Fixtures trapped and waste pipes therefrom connected on outlet side of water-closet traps.

Flashings provided over woodwork or sinks.

Floors cleaned, repaired, relaid, graded, cemented or connected with sewer.

Fowls removed.

Gas mains and pipes repaired and gas provided in dark halls and rooms.

Garbage and ash receptacles provided, removed, cleaned and disinfected.

Gutters (house or street) provided, repaired, cleaned, disinfected, obstructions removed, connected with street sewer, street gutter or cesspool.

Halls cleaned and filthy or defective floor coverings removed.

House drains provided with running traps and fresh air inlets.

Hydrants repaired, constructed or removed.

Ice-boxes connected with properly trapped, water-supplied open sinks.

Joints closed or calked with lead.

Leaders repaired, provided, extended, adjusted, connected with sewer, street, gutter or privy vault.

Lodging houses discontinued.

Lots (vacant) cleaned, disinfected, inclosed, filled, graded, connected with sewer or street gutters.

Manure vaults, boxes or receptacles disinfected, emptied, cleaned, covered, filled, constructed or lined.

Manholes covered and repaired or removed.

Offensive trades and business discontinued or removed.

Pigeons removed.

Pipe (soil, supply, vent, waste, sewer or iron) provided.

Pipe (soil, waste or supply) repaired, trapped, removed, extended, graded, cemented, ventilated or repaired, and openings closed and obstructions removed.

Privy vaults disinfected, emptied, cleaned, ventilated, lined with brick, repaired, cemented, constructed, filled or removed.

Privy houses cleaned, disinfected, repaired, constructed, removed, adjusted to vaults or seats, provided with cover.

Pumps provided or repaired.

Rabbits removed.

Railings provided or repaired.

Roofs repaired or cleaned and roof bulkheads repaired.

Roof tanks provided, cleaned or covered.

School sinks provided, cleaned or repaired.

Sewer pipes provided, repaired, obstructions in removed, trapped or openings inclosed.

Sinks provided, repaired, cleaned, removed, flushed, connected with street sewer or street gutters.

Sidewalks cleaned, repaired, graded, flagged or obstructions in removed.

Skylights repaired and provided.

Slaughter-houses cleaned, repaired or connected with sewer.

Smoke-pipes extended or repaired.

Soil-pipes discontinued as rain leaders.

Spaces cleaned, disinfected, graded, cemented, filled or connected with sewer.

Stables cleaned, removed, repaired or connected with street sewer.

Stagnant water removed.

Stairways cleaned or repaired.

Trees removed.

Urinals cleaned, disinfected, repaired, flushed, connected with sewer, removed or floor covered with zinc.

Walls cleaned, whitewashed or repaired.

Wash roofs repaired.

Wash trays trapped, provided.

Water-closets repaired, cleaned, disinfected, flushed, constructed, ventilated or connected with street sewer.

Water-closet pans adjusted to preserve water-seal, bowls burnt out and retarred, cisterns provided, window sashes repaired and glazed.

Yards cleaned, disinfected, filled, graded, paved, grade of pavements repaired, relaid in cement or connected with street sewer.

Transcripts.

Applicants for searches and transcripts of the records of births, marriages and deaths on file in the Bureau of Records are required to satisfy this Department that the information desired is to be used for a proper purpose, and are then granted, upon payment of the prescribed fee, a written order signed by the Assistant Chief Clerk and issued to the Assistant Registrar of Records, authorizing the search and issuance of a transcript of the record, which, in accordance with the regulation of the Board, is authenticated by affixing the seal of the Board of Health and attested by the signature of the Assistant Chief Clerk. Where search is made, and the record is not found to be on file, an official certificate is issued to that effect.

The following is a summary of fees received for searches and transcripts of the records of births, marriages and deaths in the Borough of Manhattan and deposited to the account of the

"Health Department Pension Fund"..... \$9,697 10

Clerical Force.

The clerical force have performed their duties in a satisfactory and efficient manner, reporting for duty each day at the usual hour of 9 A. M. and often exceeding the official office hours when necessary to complete the duties assigned to them. To insure their prompt attendance a time book is kept in this office in which each individual is required to sign their respective names and time of arrival and departure each day. This is a new feature, the result of which has been very satisfactory.

Stenographers and Typewriters.

Upon investigation it was learned that the work of the Stenographers and Typewriters employed by the Department, while performing their respective duties in a satisfactory manner, was unevenly distributed at certain seasons of the year, due to the usual increase and decrease of the business affairs of the various divisions to which they were assigned, and it was therefore decided to establish a separate bureau, consisting of ten Stenographers and Typewriters and two Typewriting Copyists, under the immediate direction of a Stenographer in charge and assigned to the office of the Assistant Chief Clerk. This new idea was merely tried as an experiment and has proved to be of great value, not only to the Department, but to each individual, as they have been thus enabled to obtain a practical and thorough knowledge of the detail work of the entire Department and are competent to assist in any branch of the service. In effecting this change the division to which they were formerly assigned has in no way been embarrassed, as the Stenographers are required to devote their services to the work of such division until the same has been completed for the day and are then required to assist in the general stenographic and typewriting work of the Department.

Telephone Switch Board Operators.

The telephonic business of the Department appears to be constantly on the increase, probably due to the fact that so many modern houses are equipped with telephones, the occupants of same finding it convenient and more satisfactory to communicate directly with the Department and it has been found necessary to establish two additional telephones in the Division of Contagious Diseases to enable the Telephone Operators on duty at night to properly attend to the business—thus making in all five direct wires for the use of the public and such employees as may be on duty on holidays and after 5 P. M. each day. The Department is also equipped with the

police telephone system, with connections to Police Headquarters and all precinct station houses in The City of New York, thus insuring prompt service at all hours of the day or night. The Department telephones are exclusively for official business, and employees desiring to use the same for the transaction of private business affairs are required to pay to the Department the usual rates charged by the telephone company, an account of which is rendered each month.

Engineers' Department.

The force necessary to maintain this branch of the Department consists of one Engineer, one Fireman and two Stokers who have immediate charge of the boilers, steam plant, heating, electrical and fire apparatus of the building. When found necessary materials have been purchased and many repairs and additions have been made in the steam heating apparatus of the building and metal flashings have been provided where needed to conform to the regulations of the Fire Department. These repairs have been mostly made by our own employees, thus saving considerable expense to the City. Owing to the prevailing high price of coal, a considerable saving was effected by changing the grate bars of the boilers, enabling the use of cheaper fuel, and by so arranging the heating apparatus that the fires could be banked and the heat shut off from all parts of the building not in use after 6 P. M., with the exception of one room used by the Telephone Operators employed during the night.

Maintenance of Department Building.

The Foreman of Laborers in charge of the two Watchmen, two Elevator Attendants and Cleaners (six male and nine female) necessary to keep the premises in a proper and sanitary condition, reports that the work of his subordinates has been performed in a very satisfactory manner, and that, while the many alterations and additions to the building has necessarily increased the labor, the work has been performed by the regular force without additional expense to the Department.

Alterations to the Department Building.

The reconstruction of the interior of the building has been made in such a manner as to greatly facilitate the business of the Department, and the offices of the various divisions have been located so as to be most convenient to those cooperating with them in the transaction of the necessary routine work. Many great improvements have been established, making it more congenial to citizens visiting the Department on business, and enabling the clerical force to more promptly attend to matters requiring their services in dealing with the public.

For the information of persons having business with the Department, a large sign board has been erected at the main entrance, giving the exact location of the floor

and room number of the different divisions of the Department; the rooms on each floor being provided with metal signs specifying the designation of the occupant and the number of the room. In addition, an individual directory containing the name of the Commissioner of Health and the name and designation of each official attached to the executive staff of the Department of Health is placed conveniently near the entrance.

Basement.

The basement was formerly used mostly for storage purposes, but has now been converted into a large, airy and commodious room for the accommodation of children applying for vaccination and those desiring certificates of employment. A separate entrance has been established on the Fifty-fifth street side of the building, thus relieving the usual crush at the main entrance during the busy season. On the westerly side of the building an isolation room has been established with a separate entrance directly to the street for the temporary care and confinement of persons calling at the office, afflicted with contagious diseases. On the south side of the building, occupying at least one half of the entire basement floor, a large swimming tank had been erected by the former owner of the building; this tank has been arched over and made into a fireproof vault in which are kept the valuable records of Births, Marriages and Deaths reported to this Department, with an elevator direct to the office of the Bureau of Records on the third floor. On the Fifty-fifth street side of the building an old vault has been made into a fire-proof room for the storage of disinfectants, with a separate entrance leading directly to the street.

First Floor.

The quarters assigned to the Division of Contagious Diseases were found to be inadequate and more space was furnished by assigning the Sanitary Division to the second floor, and shifting the Mercantile Division, the Burial Permit and Complaint Clerk's offices to the space vacated, the dwarf partitions were then removed about ten feet in width and the space formerly used by the Burial Permit office on the westerly side of the building included so as to afford ample room; additional toilet facilities for both men and women were established and rooms were provided for the vaccination of women and the treatment of persons afflicted with rabies. The Burial Permit office was assigned to one of the rooms vacated by the Chief Sanitary Inspector, and a window cut through the wall adjacent to the main entrance for the transaction of business during the night, this room also being used by the night Telephone Operators after 6 p. m. each day.

Second Floor.

This floor was formerly occupied by the Commissioners of Health, three in number, the room occupied by the President being used as the Board room; the Sanitary

Division was assigned to the southerly portion of the building, and the Division of Bacteriology, the office of the Assistant Sanitary Superintendent and the office of the Order Clerk to the northerly side of same. This was accomplished after considerable remodeling to make the quarters suitable for the purpose.

Third Floor.

The rooms occupied by the Bureau of Records on the southerly side were rearranged, and all the steel cases containing the records of vital statistics were stored in the fireproof vault in the cellar. Space was provided for a representative of the Assistant Chief Clerk to collect the fees and issue the necessary orders for searches and transcripts, for the convenience of persons applying for same. The office of the Attorney and Counsel was installed in the room formerly used by the office of Accounts and Supplies on the northerly side, the balance of the space being arranged to accommodate the office of the Chief Clerk of the Department.

Fourth Floor.

The offices formerly occupied by the Secretary of the Department and the Attorney and Counsel on the northerly side were remodeled to accommodate the offices of the Commissioner of Health, the Private Secretary to the Commissioner and the office of the General Medical Officer, while the offices on the southerly side were assigned to the Sanitary Superintendent and the Assistant Chief Clerk, the library being extensively remodeled and newly furnished, to be used as the Board room and office of the Secretary to the Board. Additional rooms were provided and assigned to the Telephone Operators and Stenographers and Typewriters on the same floor.

Fifth Floor.

Additional space was furnished to the Chemical Laboratory by extending the flooring directly over the rooms occupied by the library, office of Secretary to the Commissioner and room occupied by the Stenographers and Typewriters. This was very readily accomplished, the ceilings of the rooms mentioned being of considerable height, the entire top floor having been formerly used as a gymnasium when occupied by the New York Athletic Club. With this additional space many improvements have been effected and the laboratory is now well equipped. In the Bacteriological Laboratory such additional facilities were provided as were necessary.

In presenting this report allow me to express my appreciation of the faithful and efficient service rendered by the Clerks, Stenographers and other employees attached to this office, and I desire to commend them for their interest in the work of the Department which has greatly assisted me in the management of this branch of the service.

Respectfully submitted,

JAMES McC. MILLER, Assistant Chief Clerk.

Department of Health, City of New York,
No. 1237 Franklin Avenue, Borough of The Bronx, }
New York, August 15, 1905.

F. D. BELL, Esq., Chief Clerk, Department of Health, Sixth avenue and Fifty-fifth street, New York City:

Dear Sir—I have the honor to submit the following report in relation to the work of this office during the year 1903.

There were received 2,840 complaints from citizens covering sanitary matters and 244 complaints regarding contagious diseases.

Total number of Board Orders issued requiring abatement of nuisances, 2,482.

Number of complaints referred to the several City Departments for action, 707.

Number of Board Orders issued requiring vacation of premises on account of violations of the Sanitary Code, 22.

During the year 590 vials of diphtheria antitoxin were disposed of, representing a value of \$2,797.50; of this amount 567 vials, value \$2,736.25, was free antitoxin, and 23 vials, valued at \$61.25, less \$3.12 discount, were sold.

Receipts for searches and transcripts amounted to \$689.90.

791 applications for permits were made to the Board over the signature of the applicants for the following purposes, viz.:

To sell milk	269
To keep chickens	210
To keep cows	163
To keep goats	26
To dump ashes, street sweepings, etc.....	24
To keep fowl	16
Scavengers' licenses	16
To board and care for children	15
To keep pigs	14
To keep and slaughter poultry.....	11
To dump snow and ice.....	5
To drive cows to and from pasture.....	5
To use basement as salesroom	4
To keep geese	4
To use a smoke house.....	3
To keep pigeons	2
To manufacture Pintsch gas.....	2
To keep ducks	1
To maintain an incinerating plant.....	1
Total.....	791

Respectfully submitted,

AMBROSE LEE, JR.,

Assistant Chief Clerk, Borough of The Bronx.

Department of Health—City of New York,
Nos. 38 and 40 Clinton Street, Borough of Brooklyn, }
New York, October 29, 1904.

Mr. FREDERIC D. BELL, Chief Clerk, Department of Health:

Dear Sir—During the year ending December 31, 1903, the work in the office of the Assistant Chief Clerk showed a decided increase over previous years. After the citizens' complaints have been investigated by the Division Inspectors the orders are referred to this office, and all communications in reference to the same are sent out. All orders which are issued also pass through this office. The number of orders issued during the year was 5,394. Number of orders referred to counsel for prosecution was 2,924.

The total number of orders issued on the Assistant Registrar of Records for searches of marriages, births and deaths was 7,605, the fees for which amounted to \$3,970.80. This money was forwarded weekly to the main office in Manhattan to be added to the Pension Fund of the Department.

There was established in our building, Nos. 38 and 40 Clinton street, a station for the sale and distribution of vaccine virus and antitoxin manufactured by the Department, and in the subjoined report here shown in detail the amount of each article sold and given away.

Virus.

Amount sold for cash.....	\$110 12
Amount given away.....	3,326 90

Antitoxin.

Amount sold for cash.....	102 08
Amount given away.....	20,097 50

Tetanus.

Amount sold for cash.....	.....
Amount given away.....	124 00

Mallein.

Amount sold for cash.....	44 45
Amount given away.....	19 00

Tuberculin.

Amount sold for cash.....	.....
Amount given away.....	5 00

Respectfully submitted,

ALFRED T. METCALFE, Assistant Chief Clerk.

Department of Health—City of New York, }
 No. 374 Fulton Street, Jamaica, Borough of Queens. }
 New York, August 29, 1904.

F. D. BELL, Esq., Chief Clerk:

Dear Sir—In compliance with your direction, at the request of the Secretary conveyed by yours of the 10th inst., I have the honor to forward herewith a report of the transactions of the office of Assistant Chief Clerk in the Borough of Queens for the year 1903, as follows:

The number of orders issued was.....	2,358
Vacation and nuisance orders issued by the Board and forwarded for service	32
Signed communications, including complaints, etc., acknowledged.....	642
Number of orders for transcripts issued.....	553
<hr style="border-top: 1px solid black;"/>	
Amount of cash received for same and forwarded to the Chief Clerk....	\$284 50
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Number of vials of antitoxin given away.....	354
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—of which 62 were given to physicians for free use and 292 to Inspectors.

Number of vials of vaccine virus, 55 large vials, 72 small vials and 36 capillary tubes, used by Inspectors.

Number of references relating to unsanitary conditions forwarded to other Departments	395
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—of which 158 were to the President of the Borough, 175 to the Tenement House Commission, 7 to the Police Department, 32 to Board of Education, 6 to the Department of Water Supply, 10 to the Fire Department, 7 to the Comptroller and 3 to the Society for the Prevention of Cruelty to Animals.

The working staff during the year consisted of one Assistant Chief Clerk, one Stenographer and Typewriter, one Senior Clerk and one Junior Clerk.

Respectfully submitted.

GEORGE R. CROWLY, Assistant Chief Clerk.

Department of Health, City of New York,
 Nos. 54-56 Water Street, Stapleton, Borough of Richmond, }
 New York, September 16, 1904.

FREDERIC D. BELL, Esq., Chief Clerk, Department of Health, City of New York:

Dear Sir—Pursuant to your request I have the honor to respectfully forward you a report of the work performed in the office of the Assistant Chief Clerk in the Borough of Richmond.

As the duties of Assistant Chief Clerk in the different Boroughs have never been clearly defined, and as I have been instructed by you not to include in my report anything that might relate to the office of the Assistant Sanitary Superintendent, I find it somewhat of a difficult task to present a report of all the work performed by me.

The work which is under my personal supervision and direction includes the issuing of the necessary written orders upon the Assistant Registrar of Records, authorizing the same to make searches and furnish transcripts of the records of births, marriages and deaths on file in this Department in this borough, and attending to all of the correspondence in this office, to prepare all requisitions and audit the vouchers before they are forwarded to the office of the Chief Clerk. I am in full charge and responsible for the clerical force and the work performed by them in the Sanitary Bureau and Division of Contagious Diseases.

The Laboratory products are under my personal care and I am responsible for the proper distribution of the same. I might at this time say that I have seldom had a request for the sale of antitoxin. This can be explained, probably, by the fact that a supply station of this Department is located within two blocks of the offices, and which is open at hours when this Department is closed. I have, however, daily demands for free antitoxin from the local physicians and the various institutions, as the S. R. Smith Infirmary, Nursery and Child's Hospital, Mount Loretto and Sea Side Hospital.

The applications for searches and transcripts are steadily on the increase, year by year. In this connection I desire to say that we experience considerable difficulty in searching the old records of the various former Boards of Health, which records were turned over to this Department at the time of consolidation. There were nine different Boards of Health, and in none of these books are the records indexed, so that when an application for a search is made and the applicant does not know in which section of the borough the birth, marriage or death, whichever it may be, occurred, it necessitates a clerk searching through all these different books which requires considerable time. As the Assistant Registrar of Records is without any clerical force whatever, this work devolves either upon myself or one of the clerks under my charge, taking up valuable time and thus delaying the other routine business. If I may be permitted to do so, I would recommend that an effort be made to have these old records properly

indexed. By the appointment of an additional clerk the work could be done within a year.

In presenting this recommendation, I desire it to be understood that I do not intend in any way to reflect upon the office of the Assistant Registrar of Records, which office is being conducted in a manner that is a credit to the administration, and without assistance he could not be expected to have these old records indexed as they should be to facilitate the work of searching.

I also take charge of the Court cases and am required to attend the Court on all days that we have cases for trial.

The clerks under my charge are William T. Fetherston, Clerk; Mortimer Denyse, Junior, Clerk, and Miss Adelaide L. McNamara, Stenographer.

In forwarding this report I desire to express my high appreciation of the faithful and efficient services of the above named employees for their devotion to their duties and their interest in the work of the Department.

Respectfully submitted,

CHAS. E. HOYER, Assistant Chief Clerk.

Office of the Assistant Corporation Counsel for the Boroughs of Manhattan, Brooklyn,
The Bronx, Queens and Richmond.

BOROUGH OF MANHATTAN.

Orders received from the Board of Health for prosecution.....	6,628
Notices of intention to commence action issued.....	6,628
Nuisances abated after issuance and service of notice.....	4,506
Civil actions commenced to recover penalties.....	1,681
Civil actions pending last year.....	78
Judgments recovered in Municipal Courts in favor of the Department of Health	66
Judgments vacated and set aside by order of the court.....	16
Civil actions discontinued upon request of the Board of Health.....	1,499
Civil actions now pending, December 31, 1903.....	210
Executions issued	8
Judgments collected	2
Amount of costs, penalties and judgments collected in civil actions, and paid to Secretary of Board.....	\$446 49
Criminal actions pending last year.....	12
Criminal actions commenced for violation of Sanitary Code.....	1,463
Defendants held for trial at Special Sessions.....	693

Defendants discharged by Magistrates.....	365
Defendants convicted by Magistrates.....	401
Judgments of conviction in Court of Special Sessions.....	611
Judgments of acquittal in Court of Special Sessions.....	52
Complaints withdrawn	29
Criminal actions now pending, December 31, 1903.....	17
Amount of fines imposed by Court of Special Sessions upon conviction....	\$7,692 00
Amount of fines imposed by City Magistrates.....	\$709 00
Appeals—	
Pending last year.....	4
By the Department	7
By the defendant.....	2
Determined in favor of Department.....	5
Determined in favor of defendant.....	6
Now pending, December 31, 1903.....	2

BOROUGH OF BROOKLYN.

Orders received from the Board of Health for prosecution.....	2,890
Notices of intention to commence action issued.....	2,890
Nuisances abated after issuance and service of notice.....	2,114
Civil actions commenced to recover penalties.....	4
Judgments recovered in Municipal Courts in favor of the Department of Health	3
Civil actions now pending, December 31, 1903.....	2
Judgments collected	2
Amount of costs, penalties and judgments collected in civil actions and paid to Comptroller.....	\$109 00
Criminal actions pending last year.....	7
Criminal actions commenced for violation of Sanitary Code.....	726
Defendants held for trial at Special Sessions.....	669
Defendants discharged by Magistrates.....	52
Defendants convicted by Magistrates.....	11
Judgments of conviction in Court of Special Sessions.....	532
Judgments of acquittal in Court of Special Sessions.....	99
Criminal actions now pending, December 31, 1903.....	33
Amount of fines imposed by Court of Special Sessions upon conviction....	5,940
Appeals now pending, December 31, 1903.....	1

BOROUGH OF THE BRONX.

Orders received from the Board of Health for prosecution.....	1,197
Notices of intention to commence action issued	1,197
Nuisances abated after issuance and service of notice.....	657
Civil actions commenced to recover penalties	353
Civil actions pending last year.....	33
Judgments recovered in Municipal Courts in favor of the Department of Health	13
Judgments vacated and set aside by order of the Court.....	2
Civil actions discontinued upon request of the Board of Health.....	273
Civil actions now pending, December 31, 1903.....	102
Executions issued	4
Amount of costs, penalties and judgments collected in civil actions and paid to Secretary of Board.....	\$9 50
Criminal actions commenced for violation of Sanitary Code.....	101
Defendants held for trial at Special Sessions.....	67
Defendants discharged by Magistrates.....	13
Defendants convicted by Magistrates.....	10
Judgments of conviction in Court of Special Sessions.....	36
Judgments of acquittal in Court of Special Sessions.....	7
Complaints withdrawn	2
Criminal actions now pending, December 31, 1903.....	2
Amount of fines imposed by Court of Special Sessions upon conviction....	\$435 00
Amount of fines imposed by City Magistrates.....	\$15 00

BOROUGH OF QUEENS.

Orders received from the Board of Health for prosecution.....	851
Notices of intention to commence action issued.....	461
Nuisances abated after issuance and service of notice.....	230
Civil actions commenced to recover penalties.....	4
Civil actions discontinued upon request of the Board of Health.....	2
Civil actions now pending, December 31, 1903.....	2
Amount of costs, penalties and judgments collected in civil actions and paid to Secretary of Board.....	\$27 00
Criminal actions pending last year.....	1
Criminal actions commenced for violation of Sanitary Code.....	59
Defendants held for trial at Special Sessions.....	55
Defendants discharged by Magistrates.....	5
Judgments of conviction in Court of Special Sessions.....	43
Judgments of acquittal in Court of Special Sessions.....	10
Amount of fines imposed by Court of Special Sessions upon conviction....	\$557 00

BOROUGH OF RICHMOND.

Orders received from the Board of Health for prosecution.....	651
Notices of intention to commence action issued.....	651
Nuisances abated after issuance and service of notice.....	210
Civil actions commenced to recover penalties.....	266
Civil actions pending last year.....	16
Judgments recovered in Municipal Courts in favor of the Department of Health	29
Judgments vacated and set aside by order of the Court.....	4
Civil actions discontinued upon request of the Board of Health.....	171
Civil actions now pending, December 31, 1903.....	86
Amount of costs, penalties and judgments collected in civil actions and paid to Secretary of Board.....	\$9 50
Criminal actions commenced for violation of Sanitary Code.....	16
Defendants held for trial at Special Sessions.....	9
Defendants discharged by Magistrates.....	2
Defendants convicted by Magistrates.....	5
Judgments of conviction in Court of Special Sessions.....	5
Judgments of acquittal in Court of Special Sessions.....	2
Criminal actions now pending, December 31, 1903.....	2
Amount of fines imposed by Court of Special Sessions upon conviction....	\$10 00
Amount of fines imposed by City Magistrates.....	\$23 00
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Complaints received of violations on Croton watershed.....	133
Notices of intention to commence action issued.....	133
Violations removed after issuance of notice.....	26
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SANITARY BUREAU.

Department of Health—City of New York, }
Office of the Sanitary Superintendent. }

To the Honorable Board of Health :

Sirs—I have the honor to submit the report of the work performed in the Sanitary Bureau during the year 1903.

The following is a summary of the operations of the Sanitary Bureau, which is charged with the duty of inspecting and reporting, in proper form, all nuisances or causes of danger to the public health; with the execution of the orders of the Board; with the care of contagious diseases; with the inspection of foods and offensive trades; with the inspection of mercantile establishments and issuance of employment certificates; with the pathological, bacteriological and chemical research and investigations, and with the inspection of scholars attending the public, parochial and private schools:

The number of inspections and reinspections made was 1,374,886, classified as follows:

By the Division of Inspection.....	902,674
By the Division of Contagious Diseases.....	434,101
By the Division of Bacteriology.....	30,963
By the Division of Chemistry.....	7,148
	1,374,886
Total.....	1,374,886

The number of complaints returned was 34,740, classified as follows:

By the Division of Inspection.....	32,875
By the Division of Contagious Diseases.....	435
By the Division of Bacteriology.....	1,430
	34,740
Total.....	34,740

The number of complaints received from citizens was 30,392, all of which were referred to the Sanitary Inspectors and Sanitary Police for investigation and report.

The Sanitary Superintendent during the same period, under instructions and authority of the Board, granted 4,132 permits to discharge cargoes, under proper vouchers from the Health Officer of the Port, and 12,427 miscellaneous permits under the Sanitary Code.

The following tabulated statement and summary shows the date, location of premises, cause of action, and the result of vacation of premises by the Board of Health, in compliance with the requirements of sections 1176 and 1299 of the New York City Consolidation Act of 1901.

Borough of Manhattan.

No.	DATE.	LOCATION.	CAUSE.	RESULT.
1	Jan. 30	No. 125 West One Hundred } and Twenty-seventh street }	Defective plumbing and defective } drainage.....	Complied Mar. 2.
2	Feb. 4	No. 238 West Thirty-seventh } street.....	Defective plumbing and defective } drainage.....	Complied Nov. 23.
3	" 25	No. 252 East Fifty-third street..	Defective drainage.....	" Mar. 24.
4	Mar. 4	No. 263 West Seventeenth street	"	" " 11.
5	" 4	No. 29 West One Hundred } and Thirtieth street..... }	Defective plumbing and defective } drainage.....	" " 25.
6	" 11	No. 1 Front street.....	Public nuisance.....	" Oct. 29.
7	" 11	No. 3 Front street.....	"	" " 29.
8	" 18	No. 247 East Fifty-sixth street.	"	" Apr. 25.
9	" 18	No. 343 East Forty-sixth street.	"	" Mar. 25.
10	Apr. 23	No. 353 East Thirty-fourth street	"	" Nov. 21.
11	May 6	No. 42 Duane street.....	Sickness.....	" July 1.
12	" 6	No. 2170 Broadway.....	Defective drainage.....	" Sept. 26.
13	" 6	No. 2172 Broadway.....	"	" " 26.
14	" 6	No. 2174 Broadway.....	"	" " 26.
15	" 6	No. 2176 Broadway.....	"	" " 26.
16	" 6	No. 2178 Broadway.....	"	" " 26.
17	" 20	No. 24 Stone street.....	Public nuisance.....	" " 22.
18	" 20	No. 26 Stone street.....	"	" " 22.
19	" 20	No. 59 Pearl street.....	"	" Sept. 22.
20	June 10	Southeast angle of Seaman } avenue with Hawthorne } avenue, Inwood..... }	"	" Nov. 24.
21	July 15	No. 613 West 49th street.....	"	" " 25.
22	" 22	No. 9 Hester street.....	Defective plumbing.....	" Sept. 22.
23	" 22	No. 11 Hester street.....	"	" " 22.
24	" 22	No. 628 West 130th street.....	"	" " 17.
25	" 29	No. 9 Ludlow street.....	Public nuisance.....	" Dec. 18.
26	" 29	No. 11 Ludlow street.....	"	" " 18.
27	Aug. 5	No. 135½ Allen street.....	"	" Sept. 16.
28	" 12	No. 16 Morton street.....	"	" Aug. 16.
29	" 12	No. 16 Morton street..... }	Defective plumbing and defective } drainage.....	" " 16.
30	" 12	South side 147th street, 100 } feet east of Eighth avenue, } and extending 25 feet east. }	Public nuisance.....	" Ncv. 5.
31	Sept. 2	No. 30 Henry street.....	"	" Dec. 30.
32	" 16	Nos. 210-223 West 93th street..	"	" Nov. 10.

No.	DATE.	LOCATION.	CAUSE.	RESULT.
33	Sept. 23	No. 511 West 14th street.....	Public nuisance.....	} Vacated Oct. 28; work progressing. } Vacated Oct. 28; work progressing. } Vacated Oct. 28; work progressing.
34	" 23	No. 535 West 14th street.....	"	
35	" 23	No. 541 West 14th street (front and rear).....	"	
36	Oct. 8	No. 825 Third avenue.....	Defective plumbing.....	Complied Nov. 11.
37	" 8	No. 177 Monroe street.....	Public nuisance.....	" " 10.
38	" 8	No. 323 Fifth street.....	"	" " 4.
39	" 8	No. 13 Mangin street.....	"	} Vacated Oct. 28; work progressing.
40	" 15	No. 555 West Broadway.....	Defective drainage.....	
41	" 15	No. 173 East Broadway (rear) }	Defective plumbing and defective drainage.....	} Complied Oct. 31. } " Nov. 13.
42	" 21	No. 309 East 84th street.. }	Defective plumbing and defective drainage.....	
43	" 21	No. 423 East 90th street.....	Public nuisance.....	Vacated Dec. 11; work progressing.
44	" 21	No. 425 East 90th street.....	"	Complied Dec. 29.
45	" 28	No. 6 East 31st street.....	"	" " 29.
46	" 28	No. 8 East 31st street.....	"	" Nov. 30.
47	" 28	No. 10 East 31st street.....	"	" " 30.
48	Nov. 4	No. 653 First avenue.....	"	" " 30.
49	" 4	No. 25 Bond street.....	"	" Dec. 2.
50	" 4	No. 504 West 29th street.....	"	" " 2.
51	" 4	No. 152 West street.....	"	Work progressing.
52	" 4	No. 6 Prince street.....	Defective plumbing and defective drainage.....	Complied Nov. 11.
53	" 4	No. 185 Bowery.....	Defective plumbing and defective drainage.....	" " 20.
54	" 4	No. 415 East 24th street.....	Defective plumbing and defective drainage.....	" " 15.
55	" 4	No. 252 East 53d street.....	Public nuisance.....	" Dec. 8.
56	" 4	No. 1499 First avenue.....	Defective plumbing and defective drainage.....	Work progressing.
57	" 18	No. 80 Park row.....	Public nuisance.....	Work progressing.
58	" 18	No. 80 Park row.....	Defective plumbing and defective drainage.....	Work progressing.
59	" 18	No. 106 Norfolk street.....	Defective plumbing and defective drainage.....	Work progressing.
60	" 18	No. 16 Morton street.....	Public nuisance.....	Complied Dec. 31.
61	" 18	No. 225 East 28th street.....	Defective plumbing and water supply.....	Vacated Dec. 30; work progressing.
62	" 24	No. 20 Catharine street.....	Defective plumbing.....	Vacated Dec. 30; work progressing.
63	" 24	No. 212 East 86th street (front) }	Defective plumbing and defective drainage.....	} Work progressing. } " } "
64	" 24	No. 214 East 85th street (front) }	Defective plumbing and defective drainage.....	
65	" 24	No. 116 East 85th street (front) }	Defective plumbing and defective drainage.....	
66	" 24	No. 212 East 86th street (rear) }	Public nuisance.....	"
67	" 24	No. 214 East 86th street (rear).. }	"	"
68	" 24	No. 216 East 86th street (rear).. }	"	"
69	Dec. 10	Nos. 65 and 67 Suffolk street... }	"	"
70	" 10	No. 341 West 50th street..... }	Defective plumbing and defective drainage.....	"

NO.	DATE.	LOCATION.	CAUSE.	RESULT.
71	Dec. 16	No. 9 Grand Circle.....	Defective plumbing.....	Complied Dec. 22.
72	" 16	Nos. 423 and 425 East 90th street	Public nuisance.....	Work progressing.
73	" 16	No. 1926 First avenue.....	"	"
74	" 16	No. 1928 First avenue.....	"	"

Borough of Brooklyn.

NO.	DATE.	LOCATION.	CAUSE.	RESULT.	
1	Jan. 14	No. 343 Columbia street.....	Public nuisance.....	} Vacated Jan. 30; work progressing.	
2	" 14	No. 345 Columbia street.....	"		} Vacated Jan. 30; work progressing.
3	" 14	No. 347 Columbia street.....	"		
4	" 14	No. 349 Columbia street.....	"		} Vacated Jan. 30; work progressing.
5	" 14	No. 351 Columbia street.....	"		
6	" 30	No. 450 Decatur street.....	Defective plumbing.....		} Vacated Dec. 12; work progressing.
7	" 30	No. 257 Pacific street.....	Public nuisance.....	Complied May 14.	
8	Feb. 4	No. 610 Myrtle avenue.....	} Defective plumbing and defective drainage.....	} " April 30.	
9	" 11	No. 35 Union street.....			Public nuisance.....	Work progressing.
10	Mar. 25	No. 454a 16th street.....	Defective drainage.....	Complied May 12.	
11	" 25	No. 470 16th street.....	"	" " 12.	
12	" 25	No. 40 Locust street.....	Public nuisance.....	" Apr 28.	
13	" 25	No. 674 Washington avenue..	} Defective plumbing and defective drainage.....	} " May 23.	
14	" 25	No. 468 16th street.....			Defective drainage.....
15	" 25	No. 464 16th street.....	"	" May 12.	
16	Apr. 17	Head of Stair street.....	Public nuisance.....	} Vacated Aug. 6; work progressing.	
17	" 17	Jamaica avenue, near Ashford street	"		} Vacated Aug. 6; work progressing.
18	" 17	No. 245 Livonia avenue.....	"	Work progressing.	
19	" 29	No. 415 Leonard street.....	"	"	
20	" 29	No. 417 Leonard street.....	"	"	
21	May 13	No. 17 Luquer street.....	Defective drainage.....	} Vacated June 11; work progressing.	
22	" 13	Osborn, near Newport avenue..	Public nuisance.....		Work progressing.
23	" 13	Osborn, near Newport avenue..	"	"	
24	" 13	Osborn, near Newport avenue..	"	"	
25	" 13	No. 113 Troutman street.....	Defective drainage.....	} Vacated Sept. 23; work progressing.	
26	" 20	No. 345 Snediker avenue.....	"		Complied Aug. 20.
27	" 20	No. 347 Snediker avenue.....	"	"	
28	July 15	Coney Island and Brooklyn Railroad Company.....	Public nuisance.....	Work progressing.	
29	" 15	Coney Island and Brooklyn Railroad Company.....	"	"	
30	" 15	Dumont avenue and Christopher street.....	"	Complied Nov. 17.	
31	" 15	Clarkson street, near Butterfly road.....	"	} Vacated Nov. 30; work progressing.	

No.	DATE.	LOCATION.	CAUSE.	RESULT.
32	July 15	No. 98 Railroad avenue.....	Public nuisance	Complied Oct. 10.
33	" 15	Halleck street, near Columbia } avenue.....	"	Work progressing.
34	" 15	Ridgewood and Norwood ave- } nues.....	"	"
35	" 15	No. 275 Maujer street.....	"	Vacated Dec. 30; work } progressing.
36	" 15	No. 564 Sackett street.....	"	Work progressing.
37	" 15	Blake and Snediker avenues...	"	"
38	" 15	No. 138 Sheffield street.....	"	"
39	" 15	Forty-second street and } Eighth avenue.....	"	"
40	" 15	Cleveland street and South } Worthman.....	"	"
41	" 15	No. 134 Bayard street.....	"	Vacated Nov. 19; work } progressing.
42	" 29	Forty-ninth street, between } Eighth and Ninth avenues	"	Complied Nov. 27.
43	" 29	No. 351 Christopher street.....	"	Work progressing.
44	" 29	Thirty-ninth street and Four- } teenth avenue.....	"	Vacated Oct. 16; work } progressing.
45	" 29	Church avenue and Bristol } street.....	"	Work progressing.
46	" 29	Rockaway avenue and Nolan's } lane.....	"	Vacated Dec. 30; work } progressing.
47	Aug. 28	No. 2045 Pitkin avenue.....	"	Vacated Dec. 30; work } progressing.
48	" 28	No. 2047 Pitkin avenue.....	"	Vacated Dec. 30; work } progressing.
49	" 28	No. 2049 Pitkin avenue.....	"	Vacated Dec. 30; work } progressing.
50	" 28	No. 2051 Pitkin avenue.....	"	Vacated Dec. 30; work } progressing.
51	" 28	No. 37 Benton street.....	"	Work progressing.
52	" 28	Nos. 1181 and 1183 Degraw } street.....	"	"
53	Sept. 2	Eleventh avenue and Fif- } teenth street.....	Defective drainage	Complied Nov. 24.
54	" 2	No. 8797 Bay Thirty-third } street.....	"	Vacated Oct. 7; work } progressing.
55	" 2	No. 101 Thirty-eighth street...	"	Complied Nov. 27.
56	" 9	No. 482 Belmont avenue.....	"	Vacated Sept. 30; work } progressing.
57	" 30	Prospect street, near Grand } street.....	Public nuisance	Work progressing.
58	" 30	Rockaway and Riverdale ave- } nues.....	"	"
59	Oct. 28	No. 310 Watkins street.....	"	"
60	" 28	East New York and Buffalo } avenues.....	"	Vacated Dec. 30; work } progressing.
61	Nov. 24	Northeast and northwest cor- } ners of Pitkin and Williams } avenues.....	"	Work progressing.
62	Dec. 2	Union street, near Franklin } avenue.....	"	"
63	" 2	Lincoln avenue and Glen } street.....	"	"
64	" 2	Fort Hamilton and Chester } avenues.....	"	"
65	" 23	Hobby's Park, West Fifth } street, Coney Island.....	"	"
66	" 23	No. 204 Seigel street.....	"	"
67	" 23	No. 956 Jefferson avenue.....	Defective plumbing and defective } drainage.....	"
68	" 30	No. 127 Bedford avenue.....	Public nuisance.....	"
69	" 30	No. 129 Bedford avenue.....	"	"

No.	DATE.	LOCATION.	CAUSE.	RESULT.
70	Dec. 30	No. 131 Bedford avenue.....	Public nuisance.....	Work progressing.
71	" 30	No. 133 Bedford avenue.....	"	"
72	" 30	No. 417 Liberty avenue.....	Defective plumbing and defective drainage.....	"

Borough of The Bronx.

No.	DATE.	LOCATION.	CAUSE.	RES'LT.
1	Apr. 17	No. 673 East One Hundred and Forty-fifth street.....	Defective plumbing and defective drainage.....	Complied, Nov. 12.
2	May 27	No. 9052 Prospect avenue.....	Defective drainage.....	Complied, June 26.
3	June 10	Washington avenue, between West Farms road and Westchester avenue.....	Public nuisance	Complied, Oct. 16.
4	July 7	No. 686 East One Hundred and Forty-sixth street....	"	Complied, Nov. 12.
5	" 7	West side Forest avenue, 4 houses west of West Farms road, Westchester.....	Defective drainage	"
6	" 22	West side Bronx terrace, 1 house south of Tenth street, Williamsbridge....	Defective plumbing and defective drainage.....	Complied, Oct. 7.
7	Aug. 12	East side Washington avenue, 1 house north of One Hundred and Eighty-ninth street	Defective plumbing and defective drainage.....	Complied, Nov. 21.
8	" 19	No. 143 Pleasant avenue, Williamsbridge.....	Defective plumbing and defective drainage.....	Work progressing.
9	" 19	West side Southern Boulevard, 1 house north of One Hundred and Eighty-third street	Defective plumbing and defective drainage.....	Complied, Nov. 13.
10	" 19	Westchester avenue and Boston road, Williamsbridge....	Public nuisance	Complied, Sept. 22.
11	Sept. 23	No. 1507 Bryant street.....	Defective drainage	Complied, Dec. 29.
12	Oct. 8	East side Amethyst street, 2 houses north of Morris Park avenue, Van Nest....	"	Complied, Oct. 14.
13	" 8	East side Amethyst street, 1 house north of Morris Park avenue, Van Nest....	"	"
14	" 8	East side Amethyst street, 3 houses north of Morris Park avenue, Van Nest....	"	"
15	" 8	East side Amethyst street, 4 houses north of Morris Park avenue, Van Nest....	"	"
16	" 8	No. 2466 Arthur avenue.....	Defective plumbing and defective drainage.....	Complied, Dec. 3.
17	" 8	No. 2458 Arthur avenue.....	Defective plumbing and defective drainage.....	"
18	" 15	No. 1212 Bryant street.....	Defective drainage	Work progressing.
19	" 21	No. 2480 Hoffman street.....	"	Vacated, Nov. 16 ; work progressing.
20	" 21	No. 2450 Hoffman street	"	Vacated, Nov. 16 ; work progressing.
21	Nov. 18	West side St. George Crescent, 2 houses south of Van Cortlandt avenue ...	Public nuisance	Work progressing.
22	" 24	North side Summit place, 3 houses west of Boston avenue, Kingsbridge.....	Defective drainage	Complied, Dec. 1.

Borough of Queens.

No.	DATE.	LOCATION.	CAUSE.	RESULT.
1	Jan. 14	Sixth street and Snediker avenue, Union Course.....	Public nuisance	Complied March 5.
2	" 14	Old South road, Aqueduct.....	"	" June 26.
3	" 14	Fresh Pond road, near Metropolitan avenue, northeast of railroad,	"	" Sept. 11.
4	" 14	Adriatic street, near Collins avenue, East Williamsburg,	"	" June 25.
5	" 14	Metropolitan avenue, near Bushwick Junction, East Williamsburg	"	" Aug. 27.
6	" 14	Trotting Course lane, Maspeth.	"	" Sept. 10.
7	" 14	Clinton avenue, near Maiden lane, Maspeth	"	" June 11.
8	" 14	No. 13 Old Flushing road, Maspeth.....	"	" Nov. 9.
9	" 14	Cedar lane, South Woodhaven, Maspeth.....	"	" Oct. 30.
10	" 21	Mount Olivet avenue, opposite Collins avenue, East Williamsburg.....	"	" June 25.
11	" 21	Near Maspeth and Betts avenue, Maspeth	"	" Oct. 27.
12	" 21	Near Maspeth and Betts avenue, Maspeth.....	"	Work progressing.
13	" 30	Fosdick avenue, Glendale....	"	Complied Sept. 9.
14	" 30	North Hempstead plank road, near Maiden lane, Maspeth.....	"	" " 24.
15	" 30	Thompson avenue, between Fiske and Madison avenues, Winfield.....	"	" Nov. 9.
16	" 30	Monroe street, between Columbia avenue and railroad, Winfield.....	"	" Apr. 20.
17	" 30	Lafayette avenue, near railroad tracks, Glendale....	"	" June 25.
18	" 30	Lafayette avenue, Glendale....	"	" " 26.
19	" 30	Newtown avenue, near Debevoise avenue, Laurel Hill	"	" Sept. 30.
20	" 30	Newtown avenue, near Debevoise avenue, Laurel Hill	"	" Apr. 14.
21	" 30	Howell avenue and Second street, Woodside.....	"	" Mar. 5.
22	Mar. 18	Fresh Pond road, near Metropolitan avenue, north of railroad.....	"	" Sept. 11.
23	" 18	Old South road, Aqueduct....	"	Work progressing.
24	" 18	Flushing avenue, near Woodward street, Metropolitan	"	Complied Oct. 9.
25	" 18	No. 144 Metropolitan avenue	"	" Nov. 14.
26	" 18	Metropolitan avenue, near Flushing avenue, Metropolitan.....	"	Work progressing.
27	" 18	Metropolitan avenue, near near Newtown creek, Metropolitan....	"	Complied June 26.
28	" 25	Harmon avenue, Myrtle and Cooper avenues, Evergreen	"	" Nov. 11.
29	" 25	Corner Park place and Pleasant avenue, Long Island City.....	"	" May 26.
30	" 25	Corner Van Alst avenue and Cedar lane, Long Island City.....	"	" " 13.
31	" 25	Seventy-fifth Precinct Station-house, Fourth street and Vernon avenue.....	Defective plumbing and defective drainage	" " 26.

No.	DATE.	LOCATION.	CAUSE.	RESULT.
32	Apr. 17	Dry Harbor road, Middle Village.....	Public nuisance.....	Complied June 26.
33	" 17	Mount Olivet avenue, opposite Collis avenue, Metropolitan.....	"	" May 26.
34	" 23	Pine street and Collins place, Flushing.....	Defective plumbing and defective drainage.....	" " 27.
35	" 29	Morris avenue, near Cumberland street, Jamaica.....	Public nuisance.....	" " 26.
36	" 27	Review avenue and Pearsall street, Blissville.....	"	" Sept. 10.
37	" 29	Sixth avenue, between Ninth and Twentieth streets, Whitestone.....	"	" Oct. 20.
38	" 29	No. 438 Van Buren avenue, near Middleburg, L. I. C.....	"	" June 24.
39	" 29	No. 25 Park place, Evergreen..	"	Work progressing.
40	" 29	Washington street, near Cooper avenue, Evergreen	"	Complied Oct. 20.
41	" 29	Whitestone avenue, near Bayside avenue, Flushing....	"	" May 26.
42	" 29	Corner Whitestone avenue and Bayside avenue, Flushing.....	"	" " 27.
43	May 6	Hull avenue, between Clermont and Willow avenue, Maspeth.....	"	" June 26.
44	" 6	No. 935 Crescent street, L. I. C.	"	" Aug. 12.
45	" 6	No. 168 Sixteenth avenue, L. I. C.....	"	" May 26.
46	" 6	No. 570 Jackson avenue, L. I. C.	"	" June 26.
47	" 6	School street, near Skillman avenue, L. I. C.....	"	Work progressing.
48	" 6	Flushing avenue, near Old Flushing road, Maspeth..	"	Complied Oct. 8.
49	" 6	Calamus road, near Fisk avenue, Winfield.....	"	" June 25.
50	" 20	No. 1445 Metropolitan avenue, Metropolitan.....	"	" Sept. 24.
51	" 20	Old Flushing road, between Grand street and Flushing avenue, Metropolitan....	"	" Oct. 12.
52	" 20	Corner Newtown and Devoe avenues, Laurel Hill	"	Work progressing.
53	" 20	Johnson avenue, Maspeth....	"	Complied Sept. 29.
54	June 3	Kneer avenue, Rockaway Beach.....	"	Work progressing.
55	" 10	Enfield street and Fulton avenue, Union Course.....	"	Complied Oct. 28.
56	" 17	Corner Drew avenue and Rockaway road, Union Course.....	"	" " 8.
57	" 17	Corner Drew avenue and Rockaway road, Union Course	"	" " 8.
58	" 17	Corner Drew avenue and Rockaway road, Union Course.....	"	" " 8.
59	" 17	Evergreen street and Shell road, Corona.....	"	Work progressing.
60	" 17	Blackstump road, north of Hillside avenue, Jamaica.	"	Complied Sept. 13.
61	" 24	Smith street, near Myrtle avenue, Corona Heights..	"	" Oct. 15.
62	" 24	Smith street, near Myrtle avenue, Corona Heights..	"	" " 15.
63	" 24	Jamaica avenue, opposite Benedict avenue, Woodhaven.....	"	" Sept. 12.
64	" 24	Western avenue, near Johnson avenue, Maspeth	"	Work progressing.

No.	DATE.	LOCATION.	CAUSE.	RESULT.
65	June 24	Jay avenue, Maspeth.....	Public nuisance.....	Complied Oct. 8.
66	" 24	Cooper avenue, near Harmon avenue, Evergreen.....	"	" Nov. 10.
67	" 24	No. 85 Marion street, L. I. C...}	"	Work progressing.
68	" 24	Flushing avenue, corner Woodward avenue, East Williamsburg.....}	"	Complied Aug. 12.
69	" 24	Lott's lane, Jamaica.....}	"	Work progressing.
70	July 1	East side Dodge avenue, } Rockaway Beach.....}	"	Complied Aug. 10.
71	" 7	No. 229 Debevoise avenue, L. I. C.....}	Defective drainage.....	" Oct. 19.
72	" 7	Court street, Newtown.....	Public nuisance.....	Work progressing.
73	" 7	No. 37 Willow avenue, L. I. City.....}	Defective drainage.....	"
74	" 7	No. 37 Willow avenue (rear), L. I. City.....}	"	"
75	" 7	Twelfth street, between Fourth and Fifth avenues, College Point.....}	Public nuisance.....	Complied Aug. 10.
76	" 15	Flushing avenue, near Wood- ward avenue, Metropolitan }	"	Work progressing.
77	" 15	West side Seventeenth street, near Seventh avenue, Col- lege Point.....}	Defective drainage.....	Complied Oct. 3.
78	" 29	Main avenue, Douglaston.....	"	" Aug. 10.
79	" 29	Sixth street, near Broad street, Maspeth.....}	Defective plumbing and defective drainage.....}	" Dec. 8.
80	" 29	South road, Aqueduct.....	Public nuisance.....	" Sept. 22.
81	" 29	Walling street, near Wood- haven avenue, Glendale...}	"	" Aug. 26.
82	Aug. 28	Water street, near Ferry street, Woodhaven.....}	"	" Oct. 8.
83	" 28	Corner Covert avenue and Stanhope street, Ridge- wood.....}	"	" Sept. 30.
84	" 28	Central and Norton avenues, Far Rockaway.....}	Defective drainage.....	Work progressing.
85	" 28	7th house from Seventh ave- nue and north side Eigh- teenth street, Whitestone..}	Defective plumbing and defective drainage.....}	Complied Oct. 19.
86	" 28	Alley road, near Broadway, Douglaston.....}	Public nuisance.....	Work progressing.
87	" 28	Shoelather street, near Broadway, Woodhaven...}	"	Complied Oct. 28.
88	" 28	No. 297 Gra'ton avenue, Woodhaven.....}	"	" " 29.
89	" 28	Woodhaven avenue, near Liberty avenue, Wood- haven.....}	"	" Nov. 10.
90	" 28	No. 211 Water street, Wood- haven.....}	"	" Oct. 29.
91	" 28	No. 193 Water street, Wood- haven.....}	"	" " 8.
92	" 28	Nos. 70 and 72 Union street, Flushing.....}	"	Work progressing.
93	" 28	Amerman avenue, north of Boulevard, Rockaway Beach.....}	"	Complied Sept. 16.
94	" 28	Covert avenue and Harmon street, Ridgewood.....}	"	" Nov. 9.
95	" 28	Columbia avenue, Maspeth....	"	" Oct. 20.
96	Sept. 2	Pipe line, near City line, Aqueduct.....}	"	" Nov. 11.
97	" 2	South Road, Aqueduct.....	"	" Oct. 19.
98	" 9	Farmer avenue, near Merrick road, Springfield.....}	"	" Nov. 10.
99	" 9	Farmer avenue, near South street, Hollis.....}	"	Work progressing.

No.	DATE.	LOCATION.	CAUSE.	RESULT.
100	Sept. 9	South Enfield street, near Atlantic avenue, Union Course.....	Public nuisance.....	Complied Oct. 5.
101	" 9	Beaver street, Division avenue and Rockaway road, Jamaica.....	"	" Dec. 30.
102	" 9	Corner Dean and South streets, Jamaica.....	"	" Oct. 13.
103	" 16	Nos. 71 and 72 Milton street, Metropolitan	"	Work progressing.
104	" 16	Webster avenue, Glendale....	"	Complied Oct. 19.
105	" 16	Barnum avenue, near Metropolitan, Middle Village... }	"	Work progressing
106	" 16	Hoffman Boulevard, near Union turnpike, Newtown }	"	"
107	" 23	Corner Merrick road and Springfield, Springfield... }	Defective drainage and Public nuisance.....	"
108	" 23	Fresh Pond road, near Myrtle avenue, Evergreen..... }	Public nuisance.....	"
109	" 23	Lake street, near Central avenue, Corona..... }	"	Complied Oct. 8.
110	" 30	Town Hall, Jamaica.....	"	Work progressing.
111	" 30	Chestnut street and Lexington avenue, Richmond Hill }	"	Complied Nov. 10.
112	Oct. 8	South side Atlantic avenue, house west of Hoffman avenue, Chester Park..... }	Defective drainage.....	" " 23.
113	" 8	Head of the Vleigh, Jamaica....	Public nuisance.....	Work progressing.
114	" 28	No. 209 Elm street, L. I. City	Defective drainage.....	"

Borough of Richmond.

No.	DATE.	LOCATION.	CAUSE.	RESULT.
1	Sept. 10	West side Caroline street, south of Carey avenue.... }	Defective drainage.....	Vacated Oct. 6; work progressing.
2	Nov. 18	West side Arietta street, First Ward..... }	" .....		Complied Nov. 24.

WORK PERFORMED BY THE DIVISION OF INSPECTION.

Work Performed by the Inspectors.

Total number of inspections and reinspections.....	710,549
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Classified as to Character of Premises.

Number of tenement-houses.....	7,681
Number of shore inspections	2,503
Number of lodging-houses.....	932
Number of private dwellings.....	15,057
Number of mercantile establishments.....	19,202
Number of manufactories and workshops.....	4,348
Number of stables.....	7,332
Number of sunken and vacant lots.....	5,917
Number of miscellaneous.....	*586,769

Total number of inspections.....	650,341
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Number of complaints forwarded for Board orders.....	22,870
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Number of reinspections on orders.....	60,208
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Number of specimens of milk examined.....	54,018
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Number of specimens of milk collected for analysis.....	7,439
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Number of quarts of milk destroyed.....	61
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Number of analyses.....	2,424
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Number of permits issued.....	14,545
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Number of arrests.....	798
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Number of persons held on bail.....	646
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Number of persons discharged.....	85
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Number of pounds of milk, fruit, food, meat and fish condemned and seized	11,443,987
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Mercantile Establishments.

Number of citizens' complaints received.....	217
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Number of citizens' complaints returned for orders.....	181
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Number of citizens' complaints returned as negative.....	35
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Number of original complaints forwarded for orders.....	729
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*Includes inspections of milk, meat, fruit, food, etc.

Number of children interviewed applying for certificates.....	43,362
Number of employment certificates granted.....	23,591
Number of employment certificates refused.....	7,175
Number of duplicate certificates issued.....	1,029

The number of dead animals and the quantity of offal, garbage, etc., removed from the shore front by the Shore Inspectors was:

Dogs	575
Cats	339
Rats	238
Goats	27
Sheep	59
Hogs	39
Calves	6
Horses	2
Fowl	374
Total.....	1,659

Fish	437
Offal	200
Garbage	22
Meats	529
Bedding	226
Clothing	339
Mattresses	391
Human bodies	3

Work Performed by the Sanitary Police.

Number of inspections and reinspections.....	192,125
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Classified as to Character of Premises.

Number of tenement-houses.....	19,055
Number of lodging-houses.....	1,528
Number of private dwellings.....	11,230
Number of mercantile establishments.....	256
Number of manufactories and workshops.....	4,237
Number of stables.....	19,754
Number of manure dumps.....	7,108

Number of sunken and vacant lots.....	8,104
Number of miscellaneous.....	93,551
	<hr/>
Total number of inspections.....	164,823
	<hr/> <hr/>
Number of complaints forwarded for Board orders.....	8,776
Number of complaints made and referred to Inspectors.....	1,229
Number of nuisances abated by personal effort.....	13,378
Number of visits to stop work, close stores, and premises under observation on account of contagious diseases.....	2,808
	<hr/> <hr/>
Number of reinspections on orders.....	27,302
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Number of arrests.....	1,657
Number of persons held on bail.....	1,105
Number of persons discharged.....	350
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WORK PERFORMED BY THE DIVISION OF CONTAGIOUS DISEASES.

Number of visits to cases of contagious diseases.....	163,148
Number of cases visited for special diagnosis.....	7,594
Number of cases treated with diphtheria antitoxin.....	651
Number of persons immunized with diphtheria antitoxin.....	1,165
Number of school notices sent.....	19,238
Number of complaints forwarded for Board orders.....	435
	<hr/> <hr/>
Number of visits to tenement houses.....	178,705
Number of visits to hotels.....	657
Number of visits to schools and institutions.....	135,696
Number of visits to private houses.....	23,535
Number of visits, miscellaneous.....	44,842
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Total number of visits.....	383,435
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Number of primary vaccinations.....	32,046
Number of revaccinations.....	141,323
Number of vaccinations in schools.....	41,822
Total number of certificates of vaccination issued.....	20,204
Number of visits to infected houses.....	1,021
Number of visits to sick children.....	10
Number of prescriptions filled.....	11
Number of animals examined.....	59,619

Number of post-mortems on animals.....	323
Number of glandered horses condemned.....	1,462
Number of persons removed to Contagious Disease Hospital.....	3,908
Number of dead bodies removed to Morgue.....	28
Number of houses visited for disinfection.....	37,317
Number of infected rooms disinfected.....	61,208
Number of times ambulances, etc., disinfected.....	2,413
Number of pieces infected goods disinfected.....	108,349
Number of pieces infected goods destroyed.....	35,951
Number of inspections and reinspections by Veterinarians.....	13,349
Total number of inspections and reinspections.....	<u>434,101</u>

Number of Communicable Diseases Reported.

BOROUGH.	Diphtheria-	Scarlet Fever.	Measles.	Tuberculosis.	Typhoid Fever.	Parotiditis.	Croup.	Cerebro-Spinal Meningitis.	Chicken-pox.	Whooping Cough.	Small-pox.	Erysipelas.	Total.
Manhattan.....	10,568	6,705	7,283	10,334	2,342	754	1	19	2,548	538	24	44	41,160
Brooklyn.....	5,705	2,921	4,863	3,426	1,003	...	..	..	1,151	321	15	..	19,405
The Bronx.....	1,010	738	555	869	120	90	37	1	228	41	2	3	3,694
Queens.....	660	398	667	388	119	...	9	..	120	63	1	2	2,427
Richmond.....	311	125	321	197	87	47	6	..	134	103	1	10	1,352
Quarantine.....	.....	.....	.....	.....	...	...	..	..	...	...	24	..	24
Total.....	18,264	10,887	13,689	15,214	3,671	891	53	20	4,181	1,066	67	59	68,662

Work Performed by the Medical School Inspectors.

SCHOOLS.	TOTAL DAILY AVERAGE ATTENDANCE.	NUMBER OF SCHOOLS VISITED.	NUMBER OF VISITS TO SCHOOLS.
Public Schools.....	464,344	454	75,926
Parochial Schools.....	60,541	107	16,622
Industrial Schools, American Female Guardian Society.....	4,275	11	1,740
Industrial Schools, Children's Aid Society.....	8,188	20	3,099
Private Schools.....	393	3	167
Kindergarten Schools.....	2,969	42	5,747
Total.....	540,710	637	103,301

SCHOOLS.	NUMBER EXAMINED.	NUMBER EXCLUDED.
Public Schools.....	9,916,012	56,903
Parochial Schools.....	1,108,018	5,803
Industrial Schools, American Female Guardian Society.....	69,962	721
Industrial Schools, Children's Aid Society.....	150,693	1,532
Private Schools.....	847	5
Kindergarten Schools.....	56,159	330
Total.....	11,301,691	65,294

Table Showing Diseases for Which Children Were Excluded.

SCHOOLS.	Measles.	Diphtheria.	Scarlet Fever.	Whooping Cough.	Mumps.	Contagious Eye Diseases.	Pediculosis.	Chicken-pox.	Skin Diseases.	Miscellaneous.	Total Excluded.
Public Schools.....	*159 233	*389 482	*36 63	.... 340	.... 598	.... 27,700	.... 18,567	*672 797	.... 3,590	.... 4,539	*1,256 56,909
Parochial Schools.....	*6 7	*14 15	*1 1	.... 4	.... 16	.... 3,303	.... 1,978	*29 45	.... 283	.... 145	*50 5,797
Industrial Schools, American Female Guardian Society.....	*1 4	*12 13	.... ....	.... 2	.... ....	.... 390	.... 128	*18 26	.... 76	.... 82	*31 721
Industrial Schools, Children's Aid Society.....	*2 2	*10 12	*2 2	.... 10	.... ....	.... 989	.... 355	*14 22	.... 49	.... 91	*28 1,532
Private Schools.....	.... *1	.... *6	.... ....	.... ....	.... ....	.... 1	.... ....	.... *15	.... ....	.... ....	.... *22
Kindergarten Schools.....	4 *169	8 *431	.... *39	8 ....	.... 614	142 32,525	72 21,100	19 *748	31	46 4,089	330 *1,387
Total.....	250	530	66	364	614	32,525	21,100	609	4,089	4,907	65,294

*Cases of true measles, diphtheria, scarlet fever and chicken-pox.

Work Performed by the School Nurses.

Number of visits to houses.....	16,085
Number of visits to schools.....	16,573
Number of miscellaneous visits.....	293
Total number of visits.....	32,951

Number of Cases of Diseases Cared For.

Contagious eye affections.....	153,427
Pediculosis	205,549
Ringworm	10,461
Eczema	6,096
Scabies	425
Miscellaneous	24,150
	<hr/>
Total cases	400,108
	<hr/> <hr/>

Work Performed at the Department Eye Hospital and Dispensary.

Number of cases treated by operation.....	4,337
Number of cases treated without operation.....	11,399
	<hr/>
Total number of children treated.....	15,736
Total number of revisits made for treatment.....	129,830
	<hr/>
Total number of treatments.....	145,566
	<hr/> <hr/>
Number of children not having trachoma examined.....	3,121
	<hr/> <hr/>

WORK PERFORMED BY THE DIVISION OF BACTERIOLOGY.

Work Performed at the Diagnosis Laboratory—Work Performed by the Medical Inspectors.

Number of new cases treated with antitoxin.....	2,469
Number of curative injections.....	2,623
Number of cases immunized.....	5,341
Number of cases intubated.....	113
Number of diphtheria inspections.....	7,679
Living cases of tuberculosis investigated.....	8,503
Dead cases of tuberculosis investigated.....	4,011
Number of miscellaneous cases.....	2,044
Total inspections	29,396
	<hr/>
Number of original complaints.....	1,430
	<hr/> <hr/>
Number of special reports.....	1,336
	<hr/> <hr/>

Summary.

Number of bacteriological diagnoses of suspected diphtheria.....	25,833
Cases found to be true diphtheria.....	10,477
Cases found not to be true diphtheria.....	14,190
Number of bacteriological diagnoses indecisive.....	1,166
Number of bacteriological examinations of healthy throats in infected families.....	14,994
Number of later bacteriological examinations of diphtheria (convalescents).....	23,077
Number of cultures taken by Medical School Inspectors.....	13,584
Number of bacteriological examinations of sputum from cases of suspected tuberculosis	11,842
Tubercle bacilli found	4,388
Tubercle bacilli not found.....	7,346
Number of specimens of blood examined for typhoid fever (Widal test)....	4,231
Specimens showing positive reaction.....	1,125
Specimens showing negative reaction.....	2,978
Specimens showing doubtful reaction.....	128
Number of specimens of urine examined for typhoid fever reaction (Diazo).....	739
Specimens showing positive reaction	276
Specimens showing negative reaction.....	336
Specimens showing doubtful reaction.....	127
Number of specimens of blood examined for malarial organisms.....	658
Malarial organisms found	63
Malarial organisms not found.....	595
Number of visits to collect diphtheria culture tubes, samples of sputum, etc..	18,226
Number of culture tubes prepared.....	86,414
Number of swabs made.....	86,965

Work Performed at the Vaccine Laboratory.

Number of visits to tenement houses.....	1,561
Number of visits to institutions.....	5
Number of miscellaneous visits	1
Total number of visits.....	1,567
Total primary vaccinations.....	1,164
Number of vaccination certificates issued.....	192
Number of specimens of vaccine virus tested bacteriologically.....	10,574
Number of animals vaccinated.....	91
Number of animals collected from.....	88
Number of grammes of vaccine virus collected.....	3,132.67
Number of cub. centimetres of liquid vaccine virus prepared.....	11,658
Number of spades charged with humanized virus.....	1,577
Number of capillary tubes of vaccine virus prepared.....	51,063

Number of small vials of vaccine virus prepared.....	3,645
Number of large vials of vaccine virus prepared.....	5,761
Number of mailing blocks prepared.....	48,880
Number of autopsies on animals.....	43
Number of white mice injected with vaccine virus.....	45
Number of other animals experimented upon.....	98

Work Performed at the Research Laboratory.

Number of bacteriological examinations for presence of diphtheria bacilli....	669
Number of specimens of blood examined for typhoid fever reaction (Widal test)	4
Specimens showing positive reaction.....	1
Specimens showing negative reaction.....	3
Number of inoculations of animals with toxins for development of antitoxic substances	434
Number of animals bled for antitoxic serums.....	57
Number of c. c. of diphtheria antitoxic serum produced.....	231,278
Number of c. c. of diphtheria antitoxic serum bottled for distribution.....	193,002
Number of c. c. of tetanus antitoxic serum produced.....	14,730
Number of c. c. of tetanus antitoxic serum bottled for distribution.....	3,970
Number of c. c. of mallein produced.....	4,740
Number of c. c. of mallein bottled for distribution.....	1,401
Number of c. c. of tuberculin produced.....	200
Number of c. c. of tuberculin bottled for distribution.....	207
Number of samples of toxins tested.....	223
Number of samples of antitoxic serums tested.....	262
Number of specimens from cases of dysentery examined.....	18
Number of bacteriological examinations of water.....	8
Number of bacteriological examinations of milk.....	1,782
Number of bacteriological examinations of feces.....	5
Number of bacteriological examinations of urine.....	7
Number of miscellaneous bacteriological examinations.....	88
Number of diphtheria cultures positive.....	1,636
Number of diphtheria cultures negative.....	1,853
Number of disinfection tests.....	4,592
Number of pencils examined for diphtheria.....	20

Pasteur Treatment.

Number of cases receiving Pasteur treatment.....	28
Number of injections made in patients.....	168
Number of inoculations of fixed virus.....	50

Diagnosis of Hydrophobia.

Number of animals inoculated for diagnosis.....	58
Number of animals received for diagnosis.....	21

Work Performed by the Pathologist.

Number of inspections.....	8
Number of autopsies (human).....	8
Number of autopsies (animal)	1
Number of c. c. of serum prepared.....	398,975
Number of bleedings for antitoxic serum.....	178
Number of injections of animals.....	603

WORK PERFORMED BY THE DIVISION OF CHEMISTRY.

Total number of reports forwarded and filed.....	10,331
Total number of analyses.....	9,956

Classified as to Character of Analyses.

Number of—	
alcohol	1
ashes	1
atropine sulphate	1
baking powder	9
bay rums	100
beers	11
bis. sub nitrate	7
blood stains	23
borax	22
boric acid	12
brandy drops	1
bread	2
breakfast food	1
butter	4
buttermilk	1
cake	1
camphor (spirits of)	242
candy	20
capsules	1
catsup	6
cereal	1

Number of—

cheese	1
cherries	1
chloral hydrate.....	7
chloroform	3
chlorate of potash.....	12
chocolate	4
cider	2
cigarette	1
citrate of magnesia.....	49
coal	1
cocoa	9
codein powders.....	6
coffee	8
cordial	1
corn (canned).....	1
cream (adulterated).....	5
cream (unadulterated).....	60
cream of tartar.....	153
disinfectant	1
effluent	1
epsom salts.....	1
excreta	2
experimental analyses	1,781
fat	1
floor oil (bacterial examination).....	1
floor oil (chemical examination).....	1
formaldehyde	10
fur	1
gelatin	1
ginger (essence of).....	1
grass	3
ham	2
herbicide	1
herrings	1
honey	5
horse ball.....	4
hydrogen peroxide.....	2
ice (bacterial examination).....	2
ice cream.....	1
iodin tincture.....	48
iodoform	5

Number of—

jamaica ginger.....	27
lacquer	1
lard	2
laudanum	5
lemonade	1
lime water.....	1
linseed oil.....	1
liquid	6
liquor	2
lithia tablets.....	1
meat	1
medicine	23
milk powder	10
milk (adulterated)	1,985
milk (unadulterated)	3,973
milk (bacterial examination).....	131
milk (evaporated).....	4
milk (human)	1
milk (preserved, bacterial examination)	2
milk (preserved, chemical examination).....	39
molasses	1
mud.....	2
opium pastes.....	48
paint dryer.....	1
paraform	1
paris green.....	1
peas (canned).....	3
pepper	2
peppermint (essence of).....	1
phenacetin	192
physostigmine	1
pickles	2
pills	6
plates (food left on).....	1
potassium iodide	6
powder	4
preservatives	3
preserves	11
quinine sulphate pills.....	1
rolled oats.....	1
rubber hose.....	4

Number of—

salmon	1
salt	1
sardines	2
saucer (material on).....	1
sediment	2
smoked beef	1
soap (bacterial examination).....	1
soap (chemical examination).....	3
soap liniment	31
stink pots	2
stomach and contents.....	3
sugar	4
sulphur	1
syrops	32
tablets	2
talcum powder	1
tea	4
tomatoes (canned)	3
tomato soup	1
tongue	1
towel	1
toy	1
trional	1
turpentine	4
uranine	2
urine	37
vichy water	1
vinegar	1
viscera	3
vomit	2
water (carbonic)	2
water (cellar)	44
water (bact. examination)	89
water (sanitary analyses)	477
whiskey	1
white lead	2
wine	16

Total number of analyses..... 9,956

Number of—	
lactometers tested	213
thermometers tested	162

Work Performed by the Milk Inspectors.

Number of—	
inspections of milk.....	7,148
specimens of milk examined.....	6,858
samples of milk collected.....	1,562
quarts adulterated milk destroyed.....	115
arrests	76
persons held on bail.....	65
persons discharged	11
Amount of fines.....	\$1,100

The number of dead animals removed from the streets and the quantity of offal, etc., removed from the markets and slaughter-houses by the contractors was—

Horses	17,575
Mules	22
Colts	34
Steers	2
Cows	427
Bulls	2
Ponies	8
Pigs	9
Donkeys	5
Calves	2,297
Sheep	582
Goats	123
Hogs	46
Alligators	1
Rats	15
Cats and dogs.....	115,251
Dogs from Public Pound.....	40,832

Total number of animals..... 177,231

Offal, barrels of.....	16,980
Poultry, barrels of.....	911
Rabbits, barrels of	5

Pork livers, barrels of.....	9
Fish, barrels of.....	15,394
Beef, quarters of.....	211
Veal, quarters of.....	863
Moose, quarters of.....	4
Meats, boxes of.....	1,801
Rabbits, boxes of.....	1
Livers, boxes of.....	2
Assorted meats, pounds of.....	6,050
Calves' heads, pounds of.....	170
Ox tails, pounds of.....	150

REPORT OF PATIENTS TREATED AT RECEPTION HOSPITAL.

BOROUGH OF MANHATTAN.

General Statement.

1903.	MALES.	FEMALES.	TOTAL.	NATIVE.	FOREIGN.	TOTAL.	ACCOMPAN- PANYING.
Remaining in Hospital, Dec. 31, 1902	7	3	10	6	4	10	....
Admitted.....	903	828	1,731	1,174	557	1,731	109
Total.....	910	831	1,741	1,180	561	1,741	109
Discharged.....	66	70	146	92	44	136	19
Transferred.....	800	724	1,524	1,022	502	1,524	90
Died.....	41	37	78	64	14	78	....
Total.....	907	831	1,738	1,178	560	1,738	109
Remaining in Hospital, Dec. 31, 1903	3	....	3	2	1	3	....

REMAINING DECEMBER 31, 1902.

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 16 Years.	Over 16 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Measles.....	2	..	2	1	..	1	1	2	3	4
Pertussis.....	2	..	..	2	..	2	..	..	..	2
Diphtheria and measles.....	1	..	..	..	..	..	1	..	1	1
Diphtheria and pertussis.....	1	..	..	1	..	1	..	..	..	1
Total.....	6	..	2	4	..	4	2	2	4	8
For observation.....	..	2	..	1	1	2	..	..	..	2

ADMITTED.

Diphtheria.....	20	8	8	15	15	30	1	5	6	36
Scarlet fever.....	274	404	110	318	294	612	82	94	176	788
Measles.....	236	96	75	99	110	209	97	101	198	407
Smallpox.....	3	1	24	9	9	18	6	4	10	28
Varicella.....	14	19	10	20	16	36	2	5	7	43
Pertussis.....	19	2	1	9	12	21	..	1	1	22
Diphtheria and scarlet fever.....	27	18	7	23	19	42	2	8	10	52
Diphtheria and measles.....	47	5	2	23	27	50	..	4	4	54
Diphtheria and varicella.....	6	..	..	3	3	6	..	..	..	6
Diphtheria and pertussis.....	4	..	..	1	2	3	1	..	1	4
Diphtheria and erysipelas.....	1	..	2	2	..	2	..	1	1	3
Scarlet fever and varicella.....	1	1	..	..	1	1	1	..	1	2
Scarlet fever and pertussis.....	1	..	..	..	1	1	..	..	..	1
Measles and pertussis.....	2	..	..	1	1	2	..	..	..	2
Measles and varicella.....	1	..	..	..	1	1	..	..	..	1
Diphtheria and mumps.....	1	..	..	..	1	1	..	..	..	1
Diphtheria, measles and pertussis.....	..	1	..	..	1	1	..	..	..	1
Scarlet fever and mumps.....	..	1	..	1	..	1	..	..	..	1
Mumps.....	2	2	13	3	3	6	9	2	11	17
German measles.....	..	4	3	2	2	4	2	1	3	7
Tuberculosis.....	1	1	139	48	14	62	59	20	79	141
Varicella and pertussis.....	1	..	..	..	1	1	..	..	..	1
Total.....	661	563	394	577	533	1,110	262	246	508	1618
For observation.....	30	28	55	37	27	64	27	22	49	113
Accompanying.....	16	3	90	5	16	21	8	80	88	109

DISCHARGED.

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 16 Years.	Over 16 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Diphtheria	3	3	6	5	3	8	1	3	4	12
Scarlet fever.....	6	4	6	5	9	14	1	1	2	16
Measles	1	4	3	5	2	7	..	1	1	8
Smallpox.....	1	1	4	1	4	5	1	..	1	6
Varicella	3	1	2	3	3	6	..	..	..	6
Pertussis.....	7	2	..	4	5	9	..	..	..	9
Diphtheria and measles.....	1	..	1	1	..	1	..	1	1	2
Measles and varicella	1	..	..	..	1	1	..	..	..	1
Mumps	1	..	1	..	1	1	..	1	1	2
German measles .....	..	4	..	1	2	3	1	..	1	4
Tuberculosis .....	..	..	8	4	1	5	1	2	3	8
Total	24	19	31	29	31	60	5	9	14	74
For observation	12	15	35	19	13	32	13	17	30	62
Accompanying	3	3	13	4	10	14	1	4	5	19

TRANSFERRED.

Diphtheria.....	14	5	1	10	10	20	..	..	..	20
Scarlet fever	258	391	99	302	278	580	77	91	168	748
Measles	232	91	74	90	107	197	98	102	200	397
Smallpox.....	2	..	20	8	5	13	5	4	9	22
Varicella	10	18	8	17	13	30	2	4	6	36
Pertussis.....	8	..	1	4	4	8	..	1	1	9
Diphtheria and scarlet fever	20	13	7	18	14	32	1	7	8	40
Diphtheria and measles.....	32	2	..	15	17	32	..	2	2	34
Diphtheria and varicella.....	4	..	..	1	3	4	..	..	..	4
Diphtheria and pertussis.....	4	..	..	1	2	3	1	..	1	4
Diphtheria and erysipelas .....	..	..	2	1	..	1	..	1	1	2
Scarlet fever and varicella	1	1	..	..	1	1	1	..	1	2
Scarlet fever and pertussis	1	..	..	..	1	1	..	..	..	1
Measles and pertussis	2	..	..	1	1	2	..	..	..	2
Mumps	1	2	12	3	2	5	9	1	10	15

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 16 Years.	Over 16 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Varicella and pertussis	1	..	..	..	1	1	..	..	..	1
Diphtheria and mumps	1	..	..	..	1	1	..	..	..	1
German measles.....	..	..	3	1	..	1	1	1	2	3
Scarlet fever and mumps.....	..	1	..	1	..	1	..	..	..	1
Tuberculosis	1	1	131	44	13	57	58	18	76	133
Total	592	525	358	517	473	990	253	232	485	1475
For observation	16	13	20	18	14	32	12	5	17	49
Accompanying	13	..	77	1	6	7	7	76	83	90

DIED.

Diphtheria	3	..	1	..	2	2	..	2	2	4
Scarlet fever.....	10	9	5	11	7	18	4	2	6	24
Measles	4	1	..	4	1	5	..	..	..	5
Varicella	1	..	..	..	..	..	..	1	1	1
Pertussis	6	..	..	3	3	6	..	..	..	6
Diphtheria and scarlet fever	7	5	..	5	5	10	1	1	2	12
Diphtheria and measles.....	15	3	1	7	10	17	1	1	2	19
Diphtheria and varicella.....	2	..	..	2	..	2	..	..	..	2
Diphtheria and pertussis.....	1	..	..	1	..	1	..	..	..	1
Diphtheria and erysipelas.....	1	..	..	1	..	1	..	..	..	1
Diphtheria, measles and pertussis.....	..	1	..	..	1	1	..	..	..	1
Total	50	19	7	34	29	63	6	7	13	76
For observation.....	1	1	..	..	1	1	1	..	1	2

REMAINING DECEMBER 31, 1903.

Measles	1	..	..	1	..	1	..	..	1	1
For observation	1	1	..	..	1	1	1	..	1	2

RECAPITULATION.

	REMAINING DEC. 31, 1902.		ADMITTED.		DIS- CHARGED.		TRANS- FERRED.		DIED.		REMAIN- ING DEC. 31, 1903.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Diphtheria .....	...	...	16	20	6	6	10	10	...	4	...	...
Scarlet fever.....	...	...	400	388	6	10	379	369	15	9	...	...
Measles.....	2	2	196	211	5	3	188	209	4	1	1	...
Small pox.....	...	...	15	13	2	4	13	9	...	...	...	...
Varicella.....	...	...	22	21	3	3	19	17	...	1	...	...
Pertussis.....	2	...	9	13	4	5	4	5	3	3	...	...
Diphtheria and measles.....	1	...	23	31	1	1	15	19	8	11	...	...
Diphtheria and scarlet fever.....	...	...	25	27	...	...	19	21	6	6	...	...
Diphtheria and varicella.....	...	...	3	3	...	...	1	3	2	...	...	...
Diphtheria and pertussis.....	1	...	2	2	...	...	2	2	1	...	...	...
Diphtheria and erysipelas.....	...	...	2	1	...	...	1	1	1	...	...	...
Diphtheria and mumps.....	...	...	...	1	...	...	1	...	...	...	...	...
Diphtheria, measles and pertussis.....	...	...	...	1	...	...	...	...	...	1	...	...
Scarlet fever and varicella.....	...	...	1	1	...	...	1	1	...	...	...	...
Scarlet fever and pertussis.....	...	...	...	1	...	...	...	1	...	...	...	...
Scarlet fever and mumps.....	...	...	...	...	...	...	1	...	...	...	...	...
Measles and pertussis.....	...	...	1	1	...	...	1	1	...	...	...	...
Measles and varicella.....	...	...	...	1	...	1	...	...	...	...	...	...
Varicella and pertussis.....	...	...	...	1	...	...	1	...	...	...	...	...
Mumps .....	...	...	12	5	...	2	12	3	...	...	...	...
German measles.....	...	...	4	3	2	2	2	1	...	...	...	...
Tuberculosis .....	...	...	107	34	5	3	102	31	...	...	...	...
Total	6	2	839	779	34	40	770	705	40	36	1	...
For observation.....	1	1	64	49	32	30	30	19	1	1	2	...
Accompanying.....	...	...	13	96	5	14	8	82	...	...	...	...

REPORT OF PATIENTS TREATED AT THE WILLARD PARKER HOSPITAL.

BOROUGH OF MANHATTAN.

General Statement.

	MALES.	FEMALES.	TOTAL.	NATIVE.	FOREIGN.	TOTAL.	ACCOMPANYING.
Remaining in Hospital Dec. 31, 1902.	26	21	47	39	8	47	..
Admitted.....	634	600	1,234	1,011	223	1,234	12
Total.....	660	621	1,281	1,050	231	1,281	12
Discharged.....	409	374	783	589	194	783	11
Transferred.....	54	48	102	98	4	102	1
Died.....	182	174	356	334	22	356	..
Total.....	645	596	1,241	1,021	220	1,241	12
Remaining in Hospital Dec. 31, 1903.	15	25	40	29	11	40	..

REMAINING DECEMBER 31, 1902.

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 16 Years.	Over 16 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Diphtheria	25	14	8	21	18	39	5	3	8	47

ADMITTED.

Diphtheria	636	338	260	530	431	1,011	104	119	223	1,234
Accompanying	2	3	7	5	3	8	1	3	4	12

DISCHARGED.

Diphtheria	261	277	245	316	273	589	93	101	194	783
Accompanying	2	3	6	5	3	8	1	2	2	11

TRANSFERRED.

	AGE.			NATIVE.			FOREIGN.			Total
	Under 5 Years.	6 to 16 Years.	Over 16 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Diphtheria.....	81	19	2	53	45	98	1	3	4	102
Accompanying.....	1	1	1	1

DIED.

Diphtheria	298	47	11	170	164	334	12	10	22	356
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REMAINING DECEMBER 31, 1903.

Diphtheria.....	21	9	10	12	17	29	3	8	11	40
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RECAPITULATION.

	REMAINING DECEMBER 31, 1902.		ADMITTED.		DISCHARGED.		TRANS-FERRED.		DIED.		REMAINING DECEMBER 31, 1903.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Diphtheria.....	26	21	634	600	409	374	54	48	182	174	15	25
Accompanying.....	..	..	6	6	6	5	..	1	..	..	..	..

REPORT OF PATIENTS TREATED AT THE RIVERSIDE HOSPITAL.

BOROUGH OF THE BRONX.

General Statement.

1923.	MALES.	FEMALES.	TOTAL.	NATIVE.	FOREIGN.	TOTAL.	ACCOM- PANYING.
Remaining in Hospital Dec. 31, 1902.	28	47	75	47	28	75	8
Admitted.....	839	776	1,605	1,033	522	1,605	101
Total.....	867	813	1,680	1,130	550	1,680	109
Discharged.....	645	504	1,239	828	411	1,239	94
Died.....	138	122	260	184	76	260	..
Total.....	783	716	1,499	1,012	487	1,499	94
Remaining in Hospital Dec. 31, 1903.	84	97	181	118	63	181	15

REMAINING DECEMBER 31, 1902.

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 16 Years.	Over 16 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Scarlet Fever.....	10	20	13	14	19	33	4	6	10	43
Measles.....	14	1	2	1	5	6	5	6	11	17
Small-pox.....	2	2	2	2	..	2	..	4	4	6
Diphtheria and scarlet fever.....	5	2	..	1	5	6	..	1	1	7
Diphtheria and measles.....	1	..	..	..	..	..	..	1	1	1
Scarlet fever and measles.....	1	..	..	..	..	..	1	..	1	1
Total.....	33	25	17	18	29	47	10	18	28	75
Accompanying.....	..	..	8	..	..	..	1	7	8	8

ADMITTED.

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 10 Years.	Over 10 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Diphtheria.....	52	17	2	35	34	69	..	2	2	71
Scarlet fever.....	285	446	105	343	302	645	86	105	191	836
Measles.....	169	60	50	46	62	108	92	88	180	288
Small-pox.....	2	..	20	4	6	10	10	2	12	22
Varicella.....	1	2	..	1	2	3	..	..	..	3
Mumps.....	1	4	11	4	3	7	8	1	9	16
Diphtheria and scarlet fever.....	83	50	8	54	53	117	7	17	24	141
Diphtheria and measles.....	51	3	..	17	19	36	12	6	18	54
Scarlet fever and measles.....	19	3	1	9	10	19	1	3	4	23
Scarlet fever and varicella.....	4	1	..	2	2	4	..	1	1	5
Scarlet fever, diphtheria and measles.....	1	..	..	1	..	1	..	..	..	1
Measles and pertussis.....	1	..	..	..	1	1	..	..	..	1
Measles and varicella.....	..	1	..	..	..	..	1	..	1	1
Measles, diphtheria and petussis.....	1	..	..	..	..	..	..	1	1	1
Scarlet fever and mumps.....	..	1	..	1	..	1	..	..	..	1
Tuberculosis.....	1	4	136	44	18	62	61	18	79	141
Total.....	671	592	342	561	522	1,083	278	244	522	1,605
Accompanying.....	15	..	86	2	7	9	7	85	92	101

DISCHARGED.

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 10 Years.	Over 10 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Diphtheria.....	25	11	2	23	9	32	2	4	6	38
Scarlet fever.....	230	393	101	286	285	571	70	83	153	724
Measles.....	134	46	45	27	39	66	86	73	159	225
Small-pox.....	4	2	19	3	5	8	12	5	17	25
Varicella.....	1	2	..	1	2	3	..	..	..	3
Diphtheria and scarlet fever.....	39	37	5	31	39	70	2	9	11	81
Diphtheria and measles.....	17	1	..	4	9	13	3	2	5	18
Scarlet fever, diphtheria and measles.....	1	..	..	1	..	1	..	..	..	1
Scarlet fever and mumps.....	..	1	..	1	..	1	..	..	..	1
Scarlet fever and measles.....	9	3	1	7	6	13	..	..	..	13
Scarlet fever and varicella.....	4	1	..	2	2	4	..	1	1	5
Measles and pertussis.....	1	..	..	..	1	1	..	..	..	1
Measles and varicella.....	..	1	..	..	..	..	1	..	1	1
Mumps.....	2	3	11	5	2	7	7	2	9	16
Tuberculosis.....	..	3	84	31	7	38	40	9	49	87
Total.....	467	504	268	422	406	828	223	188	411	1239
Accompanying.....	12	..	82	2	7	9	6	79	85	94

DIED.

Diphtheria.....	15	3	..	6	12	18	..	..	..	18
Scarlet fever.....	52	27	3	35	28	63	11	8	19	82
Measles.....	30	2	..	11	11	22	5	5	10	32
Small-pox.....	1	..	2	1	..	1	..	2	2	3
Diphtheria and scarlet fever.....	34	8	..	17	19	36	3	3	6	42
Diphtheria and measles.....	35	2	..	13	10	23	9	5	14	37
Scarlet fever and measles.....	9	..	..	2	4	6	1	2	3	9
Measles, diphtheria and pertussis.....	1	..	..	..	..	..	..	1	1	1
Tuberculosis.....	..	1	35	9	6	15	15	6	21	36
Total.....	177	43	40	94	90	184	44	32	76	260

REMAINING IN HOSPITAL DECEMBER 31, 1903.

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 16 Years.	Over 16 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Diphtheria.....	12	3	..	4	11	15	..	..	..	15
Scarlet fever.....	16	44	13	35	16	51	10	12	22	73
Measles.....	17	13	18	7	23	30	8	10	18	48
Diphtheria and scarlet fever.....	15	8	2	7	10	17	2	6	8	25
Scarlet fever and measles.....	2	..	..	..	..	..	1	1	2	2
Tuberculosis.....	1	..	17	3	2	5	7	6	13	18
Total.....	63	63	50	56	62	118	28	35	63	181
Accompanying.....	3	..	12	..	..	..	2	13	15	15

RECAPITULATION.

	REMAINING DEC. 31, 1902.		ADMITTED.		DIS-CHARGED-		TRANS-FERRED.		DIED.		REMAINING DEC. 31, 1903.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Diphtheria.....	...	...	35	36	25	13	...	...	6	12	4	11
Scarlet fever.....	18	25	429	407	356	368	...	...	46	36	45	28
Measles.....	6	11	138	150	113	112	...	...	16	16	15	33
Small-pox.....	2	4	14	8	15	10	...	...	1	2	...	..
Varicella.....	...	...	1	2	1	2	...	...	...	...	...	..
Mumps.....	...	...	12	4	12	4	...	...	...	...	...	..
Diphtheria and scarlet fever.....	1	6	61	80	33	48	...	...	20	22	9	16
Diphtheria and measles.....	...	1	29	25	7	11	...	...	22	15	...	..
Scarlet fever and measles.....	1	...	10	13	7	6	...	...	3	6	1	1
Scarlet fever and varicella.....	...	...	2	3	2	3	...	...	...	...	...	..
Scarlet fever, diphtheria and measles.....	...	...	1	...	1	...	...	...	...	...	...	..
Measles and pertussis.....	...	...	...	1	...	1	...	...	...	...	...	..
Measles and varicella.....	...	...	1	...	1	...	...	...	...	...	...	..
Measles, diphtheria and pertussis.....	...	...	...	1	...	...	...	...	...	1	...	..
Scarlet fever and mumps.....	...	...	1	...	1	...	...	...	...	...	...	..
Tuberculosis.....	...	...	105	36	71	16	...	...	24	12	10	8
Total.....	23	47	839	766	645	594	...	...	138	122	84	97
Accompanying.....	1	7	9	92	8	85	...	...	...	...	2	13

DIED.

	AGE.			NATIVE.			FOREIGN.			Total.
	Under 5 Years.	5 to 16 Years.	Over 16 Years.	Males.	Females.	Total.	Males.	Females.	Total.	
Diphtheria	32	10	3	22	21	43	1	1	2	45
Scarlet Fever	17	7	3	11	7	18	3	6	9	27
Measles	45	2	2	21	13	34	10	5	15	49
Varicella	2	..	..	2	..	2	..	..	..	2
Pertussis	8	..	..	2	4	6	1	1	2	8
Diphtheria and scarlet fever	6	2	..	7	1	8	..	..	..	8
Diphtheria and measles	14	1	..	5	6	11	2	2	4	15
Diphtheria and varicella	2	..	..	2	..	2	..	..	..	2
Diphtheria and pertussis	1	..	..	1	..	1	..	..	..	1
Scarlet fever and measles	5	4	..	2	..	2	1	6	7	9
Scarlet fever and pertussis .....	..	1	..	..	1	1	..	..	..	1
Measles and pertussis	1	..	..	1	..	1	..	..	..	1
Small-pox .....	..	..	1	..	..	..	1	..	1	1
Total	133	27	9	76	53	129	19	21	40	169
Accompanying .....	..	..	..	..	..	..	..	..	..	1

REMAINING IN HOSPITAL DECEMBER 31, 1903.

Diphtheria	2	6	1	5	3	8	..	1	1	9
Scarlet fever	3	20	5	16	8	24	..	4	4	28
Measles	1	3	2	3	1	4	2	..	2	6
Small-pox .....	..	..	1	1	..	1	..	..	..	1
Varicella	1	12	1	8	6	14	..	..	..	14
Diphtheria and scarlet fever .....	..	1	..	..	1	1	..	..	..	1
Diphtheria and pertussis	2	..	..	1	..	1	1	..	1	2
Scarlet fever and pertussis	1	..	..	..	1	1	..	..	..	1
Pertussis	3	1	..	2	2	4	..	..	..	4
Total	13	43	10	36	22	58	3	5	8	66

RECAPITULATION.

	REMAINING DEC. 31, 1902.		ADMITTED.		DIS- CHARGED.		TRANS- FERRED.		DIED.		REMAIN- ING Dec. 31, 1903.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Diphtheria.....	4	12	164	150	138	135	2	1	23	22	5	4
Scarlet fever.....	13	28	108	123	86	125	5	1	14	13	16	12
Measles	21	17	260	193	235	176	9	15	31	18	5	1
Small-pox .....	..	1	29	8	27	9	..	..	1	..	1	..
Varicella	1	2	47	32	38	28	..	..	2	..	8	6
Pertussis .....	..	1	8	24	3	17	..	1	3	5	2	2
Diphtheria and scarlet fever.....	1	3	17	4	11	5	..	..	7	1	..	1
Diphtheria and measles.....	4	1	14	12	11	5	..	..	7	8	..	..
Diphtheria and varicella .....	..	..	2	2	..	2	..	..	2	..	..	..
Diphtheria and pertussis	1	..	2	..	..	..	..	..	1	..	2	..
Scarlet fever and measles.....	3	4	13	19	13	17	..	..	3	6	..	..
Scarlet fever and varicella.....	1	..	3	1	4	1	..	..	..	..	..	..
Scarlet fever and pertussis.....	..	..	1	2	1	..	..	..	..	1	..	1
Scarlet fever, diphtheria and } measles .....	..	1	..	..	..	1	..	..	..	..	..	..
Measles and pertussis.....	..	..	3	..	2	..	..	..	1	..	..	..
Measles and varicella .....	..	..	2	2	2	2	..	..	..	..	..	..
Total	49	70	673	572	572	523	16	18	95	74	39	27
Observation.....	..	..	14	15	14	14	..	1	..	..	..	..
Accompanying .....	..	13	4	126	..	138	3	1	1	..	..	..

Respectfully submitted,

CHAS. F. ROBERTS, M. D.,
Sanitary Superintendent.

December 7, 1903.

Hon. ERNST J. LEDERLE, Ph.D., President, the Board of Health, New York City:

Dear Sir—I have the honor to forward the Annual Report for the hospitals under the immediate care of the Superintendent of Hospitals.

The appointment of a Superintendent at the beginning of the year began the gradual elimination of old hospital methods. This was completed in May by the appointment of Superintendents of Nurses for the three institutions—Willard Parker, Riverside and Kingston Avenue hospitals. With these appointments came a material decrease in waste, better nursing, and many changes in the nursing staff to overcome old prejudices and to make a satisfactory beginning. At the present time the patients are always in the care of Nurses, as nursing is insisted upon, and mere waiting upon the patients is not considered sufficient. Whenever it has been found necessary the number of Nurses has been increased to meet the demands of the new system, and a report on the conditions of the hospitals and the plan of nursing is made by the Superintendent every week.

The changes in the Medical Department of the hospitals have been principally among the Hospital Physicians in charge. Dr. Bryant, of the Willard Parker, and Dr. Murray, of Kingston Avenue Hospital, were transferred as Diagnosticians. Dr. Beery, resigned from the Riverside Hospital, was reappointed, and is now in charge of the Kingston Avenue Hospital. Dr. Nicholas, formerly Assistant, was appointed Resident Physician to Riverside Hospital, and Dr. Burckhalter was placed in charge of the Willard Parker Hospital.

The only new appointees were Dr. Watson and Dr. Eberle, respectively, at Kingston Avenue and Willard Parker hospitals.

In all the institutions great consideration has been shown to the parents and friends of the patients, and I can safely say that in this kindness there has been a great improvement, and, at the same time, no ill results have been observed.

The religious interest of the patients and employees has received due consideration, and at Riverside Hospital we have been able to fit up two chapels for the resident Roman Catholics and Protestants, where regular Sunday services are conducted.

The general work of the hospitals has been brought under several heads of divisions, and rules governing their work established, the whole being placed under the Physician in charge.

During the past year a sanitarium for tuberculosis was established at Riverside Hospital, and it has met with wonderful success. The improvement in the patients and the general work of this branch of the institution has been made in

separate reports. I wish to call your special attention to the fact that there is no doubt but that the Department has shown itself capable of producing the best results with means which would have been considered inadequate.

Changes have been made in the ambulance service whereby a Physician is always in attendance. The stable and ambulance system has been made a division of the hospitals, and a capable employee has been placed in charge. In consequence the stables have been well kept, and the horses show a great improvement. Ambulances and wagons have been kept in good repair and newly done over. The repairs made on the Kingston Avenue Hospital ambulances, by lightening their weight and replacing the ordinary axles with the ball-bearing variety, have given us two one-horse where formerly two-horse ambulances were necessary.

For the Borough of the Bronx, a stable has been established at One Hundred and Thirty-fourth street, near the new dock at the foot of East One Hundred and Thirty-second street, so that ambulance calls hereafter will be made by the Physicians from Riverside Hospital. By establishing this stable the heaviest part of the work of ambulances and goods wagon will be done away with, as the building which has been erected at that dock at the foot of East One Hundred and Thirty-second street has a sterilizing and disinfecting plant, and a small reception hospital where patients may remain in safety until called for by the boat.

A fire alarm system has been inaugurated in all the hospitals and the employees properly drilled to meet all emergencies. This service has been very satisfactory, and was so effective in the one fire which we had that only a corner of an old unused building was burned.

The boat service of the "Franklin Edson" has been good, but the necessity for greater accommodation must be met this coming year. With the erection of the new buildings on the Willard Parker Hospital site, the old laundries will be replaced by a modern laundry building at Riverside, and all the washing of the old and new institutions must be carried back and forth. This will entail additional service to one, which at the present time is quite heavy. A new and larger steamer will be needed in addition to the present facilities.

At the beginning of the year all the employees were put in uniform. The Laborers were furnished their overall suits by the Department, as were the Nurses and Ward Helpers. The attending result of uniforming the force has elevated it and made the whole body of employees more careful in their work as in their general appearance.

The following improvements have been made or are under way at the three hospitals:

WILLARD PARKER HOSPITAL.

Metallic ceiling in basement.

Introduction of Kern lights.

Painted throughout.

All wards have been renovated—new supplies furnished.

Roofs, gutter, leaders, etc., are now being put in good order.

Removal of Matron's office and storeroom.

The establishment of new office facilities.

Opening of a new dining room for hospital employees.

Ward 1 (Annex) has been divided.

All plumbing on the premises has been overhauled and is now in first-class condition.

All boilers have been relined with fire brick, arch plates reset.

The McClave improved grates and Argand steam blowers have been installed under the boilers.

A medical library has been provided for the staff.

A new instrument case has been put in.

Willard Parker Annex has been provided with new awnings in wards 1, 3 and 5. At Reception Hospital two new awnings were provided and six old ones recovered.

All wards at Reception Hospital are now provided with new blankets.

The use of mattresses at Willard Parker and Reception Hospitals has been abolished as being unsanitary; blankets substituted.

All old beds and cribs at Willard Parker have been condemned and replaced with 30 new beds and 25 adjustable cribs.

All male patients are now provided with pajamas.

All old crockery and glassware have been condemned and replaced by crockery of new pattern, special design and monogram of Department.

All wards at Reception Hospital have been numbered with white enamel figures.

Buildings Removed.

The Morgue, which was formerly situated east of Willard Parker, has been removed to north side near river.

Reception kitchen was moved 60 feet to north; the same has been repainted inside and outside. New sink and refrigerators provided. Floors recovered with linoleum and rug for Nurses' dining room.

The dock at Reception has been thoroughly repaired and a new dock has been constructed on the north side of grounds.

Suitable signs for the several buildings of the Department were provided.

The drug room has been remodeled, renovated, and is now in good condition.

The Annex (Avenue C House) has been completely overhauled, repaired and refurnished and is now in first-class condition. Is occupied by Nurses and female help of Willard Parker and Reception.

A new gate house has been built at entrance Sixteenth street through which all employees enter. A proper record of the arrival and departure is recorded.

Two new iron gates with locks were provided at ambulance entrance.

New shed for wagons and ambulances of the department has been built.

A new coal yard has been constructed for boilers at Willard Parker.

There is in course of construction a new scarlet fever pavilion, 140 feet by 75 feet, six stories high, which will accommodate when completed about 200 patients.

Stable.

Renovate and repainted.

New toilet and bath rooms provided for drivers.

Two double vans, four single vans and two coupes have been repaired and put in first class condition.

Improved hanging harness for ambulances has been provided.

Five new sets brass mounted harness have been purchased.

Four new horses have been purchased.

A new fruit wagon and a new cart and harness have been purchased.

One van, one wagon, one ambulance and two buggies are now in repair shop.

Stablemen have been provided with rubber boots.

Seventeen horses have been clipped.

The stable is now in first class condition.

Specifications have been drawn by the architect for the following new buildings:

New administration building.

New laboratory building.

Addition to disinfecting building.

Waiting room and awning at the reception hospital.

Various repairs to the disinfecting building and Willard Parker building, including fireproof doors to close off the hall of the last named building and a westerly entrance and porch.

Preliminaries studies for a boiler house.

RIVERSIDE HOSPITAL.

Repairs to roofs of all pavilions, boiler house, kitchen and administration building.

New plumbing in pavilions Nos. 3, 4, 5, 6, 7, 8, 10, 11 and 12, and administration building.

Painting all buildings and general repairs.

Remodeling of pavilions 3, 6, 8, 9, and 10, extensions with 12 bathrooms added to the last three buildings, also additional heating facilities. Large hot water tank provided in boiler room to supply the entire island.

New floor in boiler room.

Remodeling boilers to burn small coal.

Repairs to steam plant.

Two new washing machines, new sterilizer.

Addition to disinfecting building.

Telephone in pavilions.

Removal of old Ducker pavilions.

Filling ice house.

Repairs to "Franklin Edson."

Altering stable building.

Tents, swings, etc., for tuberculosis cases.

New sewer for laundry.

Plans for improved roadways.

New store house and wagon shed.

New Nurses' home.

New summer house.

New shed on dock.

Coal house.

Laundry building.

Isolating cottages.

New dock.

New dock at One Hundred and Thirty-second street and building.

Stable, One Hundred and Thirty-fourth street and Willow avenue.

Porte cochere and solarium on pavilion 1 planned.

New plumbing in pavilion 1.

Remodeling disinfecting building.

Preliminary plans for new boat house.

KINGSTON AVENUE HOSPITAL.

The grounds have been generally improved and cleared of rubbish and condemned articles, and cottage "A" removed. A new wire fence has been built on the north and south sides of the hospital property and a wooden fence built and whitewashed on the east side. The settling tanks have been cleaned and refuse removed, the system of cesspool sewage abolished and the cesspools filled in.

A new iron stack has been built for garbage crematory, tight inclosures built for toilets and bath rooms on tent platform and the plumbing of same repaired.

In the ambulance disinfection station, steam radiators have been replaced by steam coils and a new steam formaldehyde generator installed for the disinfection of ambulances.

The roofs of the wagon sheds have been repaired and the buildings painted inside and out.

The plastering in the Nurses' home has been repaired, the building painted inside and out, also a new slate roof.

The store house has been painted outside, tin roof repaired, plumbing repaired, new clothes closets and clothes racks erected.

The plastering of the administration building has been repaired, the building painted inside and out, slate roof repaired, coping reset and masonry pointed. New bath room for Matron.

In all the frame pavilions, the metal roofs have been repaired and painted, the woodwork repaired, the buildings painted inside and out, new plumbing, bath and toilet fixtures installed and spaces between foundation piers closed by wood sheathing.

Pavilion No. 7 was painted and the roof repaired.

The cottages have been painted outside, the woodwork repaired and plumbing repaired.

Wire screens have been made for windows of all ward buildings.

New brick boiler house.

New brick stack.

150 horse power boiler.

Sewage pump, boiler feed pump and receiver installed.

New brick disinfecting station and laboratory.

New disinfecting chamber.

Stationary wagon scales.

Two sets of double harness and 1 set of single harness.

Three new horses purchased.

Ambulances have been remodeled and repaired.

Disinfecting wagons and truck have been repaired and painted.

New furniture for Nurses' home.

Five refrigerators for wards.

Additional beds, cribs, chairs and tables for wards.

Blanket beds have been substituted for mattresses.

New Nurses' home.

New pavilion.

New coal storage building.

Preliminary drawings for an ice house.

Repairs to steam pipe in administration building.

Repairing and painting of the store house and laundry building.

Repairing and painting outside and in of pavilions Nos. 1, 2, 3, 4, 5 and 6, also the isolation cottages and kitchen.

New plumbing in pavilions Nos. 2, 3, 4, 5 and 6.

Plans for the development of the entire grounds.

BOROUGH OF QUEENS.

Preliminary drawings for administration building, two pavilions and stable, laundry and disinfecting building.

BOROUGH OF RICHMOND.

New disinfecting building.

Preliminary drawings for two new pavilions.

Miscellaneous.

New disinfecting building on dock at One Hundred and Thirty-second street.

Repairs to Trachoma Hospital, One Hundred and Eighteenth street and Pleasant avenue.

New plumbing and repairs to building at Avenue C and East Sixteenth street.

Respectfully submitted,

G. T. STEWART, M. D., Superintendent of Hospitals

DIVISION OF INSPECTIONS.

Department of Health—City of New York,
 Southwest Corner of Fifty-fifth Street and Sixth Avenue, }
 Borough of Manhattan, New York, December 16, 1903.

To the Assistant Sanitary Superintendent:

Sir—I have the honor to submit the following report of the work performed in this division during the year 1903.

The number of Inspectors on the force has ranged from 49, in the beginning of the year, to 34 at the present time. Early in the year there were in the division 18 Food Inspectors and 31 detailed to sanitary work, the milk work having been placed under the direction of the Chemist and carrying with it the services of 5 Food Inspectors. Reduction at various times in the staff of Sanitary Inspectors has left the division with but 21 Inspectors of this class. The work has been carried along the same lines as those followed last year so far as possible with the means at hand.

SANITARY INSPECTIONS.

Stables.

During the first part of the year it was discovered that a considerable number of cases of glanders had broken out among horses that were found in stables that were not in a good sanitary condition. A systematic inspection of all the stables in the borough was then set in motion, resulting in the discovery of many places requiring improvements. In quite a large number of instances it was found that horses were stabled in cellars, where there was little or no ventilation and where the drainage was inadequate or defective. As a result of this inspection there have been issued up to date 1,343 orders requiring improvements of various kinds in these places. Besides this, a new section was adopted and added to the Sanitary Code requiring all cellar stables to obtain a permit from this Department as a prerequisite to their occupancy for such purposes. The total number of inspections of this class to date made by Sanitary and Police Inspectors amount to 16,905.

The effect of this supervision has been to very greatly improve the sanitary conditions of the stables. In a number of cases where the structures were old, and where it would not pay to improve the property, the buildings have been vacated and in some instances demolished.

Cow Stables.

There are in the Borough of Manhattan fifty-seven cow stables, and these require a systematic inspection at regular intervals in order to maintain their sanitary condition, to observe the conditions under which the milk is produced, to prevent overcrowding, and to examine the physical condition of the cows themselves, etc.

Since 1896, when the examinations of cows and cow stables was first undertaken, the sanitary conditions have been improved. One fact of interest is that the number of cows kept has been increased, in some cases even doubled, where the herds were small and the size of the stable allowed of increase. Another fact is apparent, namely, that very few are going into the business of keeping cows who have not at some time or another been engaged in the same.

Most all herds now kept below One Hundred and Twenty-fifth street are kept by persons of foreign birth. In many instances the owners are widows of men who started the business years ago, and while they have a certain practical knowledge they are not always careful in the application of sanitary rules in the conduct of the business.

What the requirements are for a sanitary stable for milch cows must ever remain for the Department of Health to enforce and supervise. In several cases it seemed necessary to recommend orders for the removal of the cows, the sanitary condition being considered impossible to improve, or the condition of the stable entirely unfit for the keeping of cows. When, however, the owner found that the removal of the cows meant the cessation of his income he made extraordinary efforts to comply with the orders and rules of this Department, and, on the whole, succeeded, and while there will no doubt be a tendency to relapse into negligent conditions, still the improvements made will remain, and at each future inspection neglected sanitary conditions will be comparatively easy to establish again, and such improvements as cemented floors and proper sewer connections will be permanent. A semi-yearly or yearly inspection is, however, necessary to keep cow stables in good sanitary condition.

Below One Hundred and Twenty-fifth street there are at present located 41 cows of the 158, which is the total number on Manhattan Island. The number of herds is gradually diminished as the sites of the stables are being improved. Above One Hundred and Twenty-fifth street the stables are usually of a better quality and in better condition, for the reason that the stable buildings are of better material, better constructed, with improved sanitary plumbing, etc. The herds below One Hundred and Twenty-fifth street number 14; above One Hundred and Twenty-fifth street 43. The total number of cows is 158: 41 below One Hundred and Twenty-fifth street and 117 above One Hundred and Twenty-fifth street. The physical condition and the care of the cows is really quite good. It does not pay to keep a poor cow for milking purposes under stable-fed conditions within the city limits. Croton water is now generally used for watering cows and cleaning utensils wherever possible. The milk produced is usually sold within a short distance of the stable almost immediately after milking—very little remains over. Milk utensils are well and cleanly kept.

Lodging Houses.

A constant and careful supervision of the lodging houses has been observed. Instead of having one man detailed to inspect them as heretofore, each Inspector has been required to submit a monthly report of the condition of each lodging house in his district. The permit of one such place has been revoked during the year, the building having been torn down to make way for improvements, and one new permit has been issued for a boys' lodging house, thus leaving the total number the same as it was last year. During the year there have issued 86 orders requiring minor changes in the sanitary condition of these places.

There is one class of buildings to which I desire to direct attention, and that is what is known as the "Raines Law Hotel." A lodging house, as defined by the Charter of Greater New York City, would include all hotels and boarding houses, as well as what is generally considered to be bona fide lodging houses.

In the opinion of the Corporation Counsel it was within the province of the Board of Health to determine the character of lodging-houses that should be operated under a permit. This resulted in the adoption of section 21 of the Sanitary Code, in which it is required "For all lodging houses in The City of New York containing rooms in which there are more than three beds for the use of lodgers, or in which more than six persons sleep, a permit from the Board of Health shall be required."

It was found that in a number of cases Raines Law Hotels, besides having the 10 rooms required by the Excise Law, had fitted up lofts with dwarf partitions and let out the rooms to lodgers. In each instance where this condition has been found an order has been issued requiring a discontinuance of the use of the building as a lodging-house without a permit from this Department.

As the buildings do not conform to the requirements in respect to lodging-houses, this virtually means the abandonment of this part of the business. These orders have been resisted on the ground that these places are hotels specially designated by legislative enactment, and that, therefore, they cannot be classified as lodging-houses.

It seems to me it would be well to have a test case in court in order that a decision may be reached upon which the department may authoritatively act.

Smoke Nuisances.

In the report of last year reference was made to the prevalence of this character of nuisance on account of the strike in the anthracite coal regions, and the resultant use of bituminous coal. For some time after the supply of hard coal was available many manufacturers and apartment-houses continued the use of the soft coal, and failed to provide means to reduce the volume of smoke caused by its use, or to take the necessary precautions in firing, etc. It was found, therefore, that active meas-

ures must be taken to overcome the difficulty. In every case the offenders were first notified of the violation of the law, and, where the written order was not promptly obeyed, an arrest was made. The total number arrested for maintaining this nuisance was 116; of these 70 were discharged in the Magistrate's Court, and 46 were held for trial in the Court of Special Sessions, and the disposition of the cases in that Court was as follows:

32 sentence suspended.
 8 fined.
 6 not disposed of.
 Total number of fines, \$260.

This action led to a very great reduction in the number of those formerly creating a nuisance, so that now there exist only a few sporadic instances.

Sunken and Vacant Lots.

Early in the spring of the year a thorough inspection was had of the unimproved property throughout the borough for the purpose of determining all premises on which water might collect, and, with the object of issuing orders to abate nuisances occasioned by such a condition and to prevent the propagation of mosquitoes. The inspectors were directed to note all cases requiring attention that came under their observation in their various districts and file complaints wherever it was found necessary. The number of inspections made of this character amounted to 2,739. The most difficult section with which we had to deal was that located in Inwood, at the northern end of the island, a section lying between Broadway and the Harlem river, and north of Dyckman street. Here new streets had been cut through and culverts that had been originally provided had become clogged up, resulting in the formation of large ponds.

Through the co-operation of the Department of Highways and the improvements made by the property owners, the culverts were opened, lots were filled in or drained by sewer connections, until now the conditions are so changed for the better that much property at one time completely submerged has been entirely cleared of all water.

Slaughter-houses.

Further changes of an important character have been made in these establishments. As far as possible all woodwork so situated as to be exposed to saturation and liable to become offensive, has been largely removed. The floors of the pens in which the animals destined for slaughter are kept have been asphalted, and in many cases fences erected consisting of iron tubing. The means of ventilation and for the disposition of odors arising from rendering processes have been very greatly improved.

These places have been under the constant supervision of a Sanitary Inspector and also of the Meat Inspectors, who are detailed to these particular sections. I am not aware of a single complaint having been received during the year against the slaughter-houses, the method of conducting the business being such as to preclude the discharge of offensive odors into the neighborhood.

Chicken Slaughter-houses.

All of the chicken slaughter-houses are now in the best possible condition that can be expected of premises used for such purposes.

A regular weekly inspection is made of them by the Sanitary Inspectors to note whether the rules and regulations governing their proper conduct are properly observed. On account of the consolidation of the business in the hands of a few two slaughtering establishments were abandoned and their permits revoked.

The condemnation of Centre Market has resulted in the termination of a business of this kind that was formerly conducted there.

Plans were recently approved for the fitting up of a new place at No. 415 Water street by the people who formerly carried on the business in Centre Market.

The new location is much less objectionable and better conditions will necessarily prevail, so that the exchange is a decided improvement.

Bathing Establishments.

An inspection of a number of bathing establishments in the early part of the year disclosed the necessity for improving their conditions. In many places on the lower east side it was found that small pools or mikvers were in use, and that these were often crowded to their utmost limit. Most of these pools being furnished with water from the Croton supply, the desire to save led to the practice of using water for a number of days without changing it. And then these pools were constructed in large part of wood that became saturated and filthy. Wooden floors, textile mats, cushions and mattresses were in use and were dangerous sources of infection.

In the larger baths where immense quantities of water are used, sunken wells are provided; in each instance where this was the case a sample of water was taken for analysis. In almost every case it was found that the water from these wells was impregnated to such an extent as to require the provision of a process of filtration before it could be properly used. The result of these investigations was an amendment to the Sanitary Code, requiring every such establishment to secure a permit from the Board of Health.

The following rules were adopted and are required to be observed in conducting the business :

1. A permit from the Board of Health to conduct a bathing establishment, stating the number of tubs and pools that are to be used on the premises, and the rules of the Board of Health governing bathing establishments must be posted conspicuously on the wall.
2. The pools, plunges and mikvers must be emptied daily, and the bottom and side walls of same thoroughly scrubbed before refilling.
3. A shower-bath must be provided and all persons required to take a shower-bath before entering the pool.
4. The floors of bathrooms must be made impervious to dampness. The side walls of bathrooms must be painted with two coats of white enamel paint, or covered with a non-absorbent material, for a height of at least six feet above the floor.
5. When mats are used, they must be made of rubber.
6. Stairs and stair supports leading to pools must be made of metal, stone or cement.
7. All cushions and mattresses must be covered with non-absorbent material.
8. Clean towels must be provided for each person.

The total number of permits issued amount to 92.

The effect of the enforcement of these rules has been to do away with many abuses and the adoption of more sanitary methods.

Mercantile Establishments.

Since my last yearly report important changes have been made in the Child Labor Law, which very greatly enlarges the scope of the work. Hitherto the application of the law had been confined to mercantile establishments and factories. Under the law as amended by the last Legislature all working children under certain ages came under its operation. Children employed in street trades are looked after by the Department of Education, and those in factories by the State Factory Inspector; those employed in any other capacity come under the jurisdiction of the Board of Health. This includes not only mercantile establishments but also business offices, telegraph offices, restaurants, hotels, apartment houses, or those engaged in the distribution or transmission of merchandise or messages. This means a personal visitation of every such place and an investigation of the working force in each case to see that, in the first place, no children are employed without a certificate, and, in the next place, to ascertain whether the law is being complied with in respect to hours of labor.

The amended law has reduced the number of hours that children between the ages of 14 and 16 years of age shall be employed from 60 hours per week to 54; and from

10 hours per day to 9 hours, so that it will be necessary to systematically inspect mercantile establishments as well as those that are newly brought under its provisions.

As far as can be done with the force at hand this work is receiving attention. The larger firms have been notified and the inspectors are daily investigating and reporting cases in their various districts.

The law as it now stands does away with the issuance of vacation certificates in cities of the first and second class, but as a larger number of employments are now included there will be little or no diminution in the total number of applicants.

In order to remove the congestions at the central office, due to the large demand for employment certificates during certain periods of the year, and also to accommodate the children and their parents so that they would not have so far to travel, a branch office was established for the issuance of employment certificates at Nos. 68 and 70 Elm street.

A large majority of the children applying for these certificates live on the lower East Side, and there is thus almost within walking distance of their homes means provided for securing such certificates.

During the year there have been 15,591 inspections of mercantile establishments, and 465 orders have been issued against violations of the law.

Number of children applying for certificates.....	26,808
Number of certificates granted	12,579
Number of certificates denied	4,116
Number of duplicate certificates issued.....	301

Sanitary Police.

The Sanitary Police have been engaged in enforcing orders issued by the Board, and also such sections of the Sanitary Code as can be enforced by instant arrest; such as prohibiting spitting in public conveyances; the discharge of smoke; the unlawful exposure of meat, fish and candy; the unloading of manure across the sidewalk, and the discharge of dust from buildings in the process of demolition, and also the inspection of tenement houses at night for overcrowding.

Their efforts have resulted in 919 arrests for the following causes:

	Number of Arrests.	Number Fined.	Number of Discharges.	Sentence Suspended.	Not Disposed of.	Amount of Fines.
Section 16.	1	1	..	..	..	60 days.
Section 17.....	2	2	..	..	..	\$100 00
Section 27.....	1	..	1	..	..	.....
Section 43.....	1	..	1	..	..	.....
Section 45.....	34	15	12	1	..	90 00
Section 46.....	70	32	29	2	7	85 00
Section 48.....	8	7	1	..	..	60 00
Section 53.....	6	5	1	..	..	85 00
Section 56.....	24	2	20	2	..	35 00
Section 55.....	2	1	1	..	..	10 00
Section 78.....	84	51	33	..	..	290 00
Section 80.....	1	..	1	..	..	.....
Section 87.....	3	1	2	..	..	5 00
Section 96.....	116	3	70	32	6	260 00
Section 97.....	27	18	9	..	..	98 00
Section 101.....	1	1	..	..	..	10 00
Section 100.....	2	2	..	..	..	2 00
Section 103.....	2	..	2	..	..	.....
Section 116.....	7	2	5	..	..	4 00
Section 118.....	35	19	16	..	..	107 00
Section 121.....	7	5	2	..	..	29 00
Section 125.....	5	..	5	..	..	.....
Section 141.....	1	..	1	..	..	.....
Section 178.....	474	298	176	..	..	47 00
Section 180.....	1	..	..	..	1	.....
Section 1262 of Charter.....	2	..	2	..	..	.....
Section 385, Penal Code.....	2	..	2	..	..	.....
Total.....	919	470	398	37	14	\$ 1,740 00

19,115 inspections have been made for overcrowding, and orders to the number of 200 have been issued in cases where overcrowded apartments were found. At regular intervals a number of these officers have been sent out in citizens' clothes to make arrests of those persons violating the spitting ordinances, and as a result of their activity this practice has been reduced to a minimum. It is now much more difficult to find offenders than was the case at the beginning. In a large number of cases the ferry companies have provided spittoons in the waiting-rooms and on the boats, and the L road has furnished them on a number of their stations. It is expected that all the stations will be equipped in the near future.

FOOD INSPECTIONS.

Milk.

The supervision of milk inspection has been transferred from this division and placed under the direction of the Chemist of the department. In the appended statement the number of inspections made, samples collected, arrests for adulteration, and fines imposed while in this division, will be found.

In addition to the inspection of the milk the work of enforcing general cleanliness in places where milk is sold, and insisting on compliance with the rules and regulations governing the sale and storage of milk, has been done by the Sanitary Inspectors. These inspections result in the frequent revocal of permits on the discovery of unsanitary conditions, which are only reissued after proper measures have been taken to conform to requirements of the department.

The following table will give an idea of the number of places visited, although this only shows those stores for which applications are made:

Number of milk applications.....	2,872
Number of applications denied	548
Number of permits granted.....	2,291
Number of permits revoked.....	4,598

Fruit.

There has been but little change in the methods of fruit inspection, except that at department purchased a covered wagon in the early summer and supplied it with covered metal cans. This wagon has been used to great advantage on the east and west sides of the City above Fourteenth street. With it the Inspectors have been able to cover more ground in a day and in addition have been able to secure a more prompt removal of the condemned material. This method has had a good effect in making dealers more careful as to the character of food-stuffs offered for sale, for they do not care to have it known that they are exposing for sale articles of food that are worthy of condemnation.

In the push-cart market on the lower east side the Inspector in charge has frequently reported during the summer that he has not in years found so little material to condemn and has stated that as a whole the conditions existing are more favorable.

The segregation of the push-cart fish peddlers within a limited area adjoining the approach of the new East River Bridge, suggests the possibilities of similar treatment for other push-cart peddlers who deal in food-stuffs. There will be a considerable area available under the same bridge between the point now occupied by the fish peddlers and the river, and it would be a good thing to set apart this space for purposes of this character. This would relieve street congestion and at the same time render the control of the traffic much easier. Among the wholesale trade the Inspectors have been busily engaged in scrutinizing the produce as it comes to market, and their efforts have been effective in preventing quantities of unwholesome fruit and vegetables being sent out for human consumption. Over nine millions and a quarter pounds have been con-

denmed since the first of the year by the various Inspectors. The methods employed for collecting and removing the waste-matter at the Manhattan Market in West Thirty-fourth street, in the railroad yard at West Thirtieth street, and at the Harlem Market on the upper east side, have markedly improved. The material is now promptly gathered up and removed to the dumps.

Meat and Fish.

There are five Meat Inspectors and one Fish Inspector.

One Meat Inspector is detailed to the west side slaughter houses, one to the east side slaughter houses, one to Washington and West Washington Markets, one to the stock yards at the foot of West Sixtieth street, and one is engaged in visiting butcher shops, small markets, and the ice-boxes in which large quantities of meat are stored, and to the investigation of citizens' complaints against this character of food.

Total for the ten months ending October 31, 1903:

West Side Slaughter Houses.	
Beeves	54,460
Sheep	759,178
Calves	87,821
Hogs	628,400
<hr/>	
East Side Slaughter Houses.	
Beeves	234,370
Sheep	489,492
Calves	153,476
<hr/>	

The Fish Inspector covers Fulton Market and the push-cart and wagon peddlers and "Paddy's Market," and attends to complaints coming from all parts of the borough relating to this subject.

The importance of this character of work may be realized when it is stated that over eleven hundred thousand pounds of fish and various kinds of meat have been condemned thus far this year.

The following table gives the number of animals slaughtered in the slaughter-houses in this borough during the present year:

West Side Slaughter Houses.

	BEEVES.	SHEEP.	CALVES.	HOGS.
January	4,867	78,388	3,271	72,974
February	4,974	62,522	3,287	59,718
March	5,792	54,891	6,937	62,267
April	4,662	57,071	12,047	57,786
May	4,882	64,126	14,723	58,917
June	6,476	105,516	16,589	60,067

	BEEVES.	SHEEP.	CALVES.	HOGS.
July.....	4,765	95,456	11,703	57,621
August	4,558	77,278	7,439	56,600
September.....	6,284	86,541	6,781	66,063
October.....	5,194	77,389	5,244	76,387

East Side Slaughter Houses.

	BEEVES.	SHEEP.	CALVES.
January.....	22,615	47,070	13,330
February.....	22,100	47,477	6,768
March	22,082	42,709	10,680
April	26,468	45,541	22,298
May	23,058	37,282	22,657
June	26,573	46,909	20,435
July	26,112	58,650	17,910
August	23,589	48,047	15,047
September	29,006	61,729	12,738
October.....	12,767	54,078	12,403

During the year a market place has been fitted up at the entrance to the new East River Bridge for the use of push-cart peddlers. This has had the effect of driving this kind of business from the public streets and also limits the business within a certain area. Besides, the space which the market occupies is cemented and graded to sewer-connected drains, so that the liquid matter readily flows off. At the close of the day the whole space is flushed out with fresh water and thus kept in a cleanly condition.

Carbonated Waters.

The inspection of buildings in which carbonated waters are manufactured is still in progress. New places are frequently being discovered and required to conform with requirements of this department in relation to their sanitary surroundings and the establishment of proper methods in the manufacture.

During the year the number of applications acted upon has been as follows:

Number of applications.....	134
Number granted on first application.....	104
Number denied	24
Number granted on reinspection.....	24
Number of applications pending.....	6
Number of permits revoked.....	1

SUM

Sanitary Police

YEAR 1903.	Inspections.	Citizens' Complaints Returned for Order.	Citizens' Complaints Returned Negative.	Reinspections.	Tenement Houses.	Lodging Houses.	Private Dwellings.
Inspectors.....	26,139	3,994	3,449	8,710	1,003	163	726
Police.....	35,336	1,513	525	2,926	3,987	20	1,049
First Quarter.....	62,475	5,417	3,974	11,696	4,995	183	1,775
Inspectors.....	25,017	3,103	2,864	9,455	682	38	1,750
Police.....	27,855	1,667	1,105	3,655	4,685	12	1,007
Second Quarter.....	52,872	4,770	3,969	13,110	5,377	50	2,757
Inspectors.....	21,526	2,656	2,125	8,446	656	284	574
Police.....	25,169	1,226	1,269	2,689	3,852	187	1,193
Third Quarter.....	46,695	3,882	3,395	11,135	4,508	471	1,767
Half of Fourth Quarter.....	28,853	1,977	1,717	6,240	3,193	673	1,188

MARY.

and Inspectors.

Mercantile Establishments.	Manufactories and Workshops.	Stables.	Manure Dumps.	Sunken and Vacant Lots.	Miscellaneous.	Total.	Arrests.	Bail.	Discharged.	Trials.	Fines.
5,741	1,085	691	....	474	7,521	17,429	....	....	....	....	.....
....	576	4,751	1,387	688	20,939	33,350	317	223	94	253	\$340 00
5,741	1,661	5,442	1,387	1,132	28,460	50,779	317	223	94	253	\$340 00
4,592	1,337	2,533	....	298	4,322	15,562	....	....	....	....	.....
....	1,166	1,878	1,314	391	13,747	24,200	232	171	39	94	\$77 00
4,592	2,503	4,411	1,314	689	18,079	39,762	232	171	39	94	\$77 00
2,965	626	1,318	....	222	6,435	13,080	....	....	....	....	.....
....	826	3,174	1,329	337	11,582	22,480	279	98	98	....	\$124 00
2,965	1,452	4,492	1,329	559	18,017	35,560	279	98	98	....	\$124 00
2,293	791	2,560	721	329	10,830	22,613	70	18	29	....	\$37 00

Milk

MILK.	Inspections.	Specimens Examined.	Specimens Taken.	Destroyed.	Citizens' Complaints Received.
First Quarter	8,238	7,192	500	6	38
Second Quarter	6,647	6,149	1,743	50	29
Third Quarter	2,773	2,723	1,376	5	26
Half of Fourth Quarter.....	315	....	....	....	4

Fruit

FRUIT.	Inspections.	Vegetables.	Groceries.	Confectionery.	Citizens' Complaints Received.
First Quarter.....	76,319	536,922	10,664	2,236	32
Second Quarter.....	81,300	242,725	14,854	5,155	47
Third Quarter	85,043	79,746	14,760	462	120
Half of Fourth Quarter.....	38,935	84,505	4,680	225	25

Meat and

MEAT AND FISH.	Inspections.	Permits to Lead Cows.	Tuberculin Certificates Examined.	Meat Condemned.	Fish Condemned.	Citizens' Complaints Received.	Original Complaints.	Citizens' Complaints for Order.	Citizens' Complaints, Negative.	Arrests.
First Quarter.....	16,725	560	578	295,546	10,971	58	....	13	25	16
Second Quarter.....	14,614	698	620	187,741	47,700	77	17	19	70	10
Third Quarter.....	13,070	501	333	225,595	37,245	69	2	13	31	8
Half of Fourth Quarter.....	8,498	336	363	141,080	34,177	21	7	1	11	2

Inspectors.

Citizens' Complaints Returned for Order.	Citizens' Complaints Returned Negative.	Special Day Inspections.	Arrests.	Bail.	Discharged.	Trials.	Fines.	Reinspections.	Original Complaints.
27	11	1,527	64	54	10	57	\$1,525	..	16
5	24	1,713	168	133	7	149	2,949	90	2
..	25	828	41	30	2	52	265	..	20
1	3	2	6	6	..	8	75	..	34

Inspectors.

Originals.	Citizens' Complaints for Order.	Citizens' Complaints, Negative.	Arrests.	Bail.	Discharged.	Trials.	Fines.	Reinspections.	Fruit Condemned.	Total.
..	18	14	2	1	1	1	\$15 00	....	741,430	1,290,652
3	12	35	1	1	....	....	.....	18	2,214,747	2,477,481
6	18	101	41	37	10	29	132 00	....	4,814,570	4,909,538
....	8	19	6	6	1	6	20 00	....	510,385	599,795

Fish Inspectors.

Bail.	Discharged.	Trials.	Fines.	Beef Condemned.	Veal Condemned.	Mutton Condemned.	Hogs Condemned.	Assorted Meat Condemned.	Poultry Condemned.	Game Condemned.	Total Condemned.
15	1	10	\$70 00	122,650	24,237	18,703	52,826	1,168	43,736	2,226	402,517
8	....	8	60 00	70,580	42,728	5,912	37,390	2,287	28,505	15	235,441
6	....	9	60 00	76,525	44,360	9,940	38,225	8,850	47,655	....	329,270
2	....	1	10 00	35,920	25,865	13,660	23,740	1,919	39,976	....	175,257

Respectfully submitted,

H. E. BRAMLEY, Chief Sanitary Inspector.

Department of Health,
Division of Contagious Diseases, Borough of Manhattan, }
Fifty-fifth Street and Sixth Avenue, New York. }

To the Assistant Sanitary Superintendent:

Sir—I herewith forward a report of the work performed by the Division of Contagious Diseases for the year 1903:

Cases of Contagious Disease Reported to the Department of Health During the Years
1901, 1902, 1903.

	1901.	1902.	1903.
Diphtheria	6,774	9,679	10,568
Scarlet fever	10,113	6,895	6,705
Measles.....	7,592	11,645	7,283
Smallpox	1,198	755	30
Typhoid fever.....	1,860	2,524	2,342
Tuberculosis	8,692	9,130	10,332

	FIRST QUARTER	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTAL.
Number of visits to cases of contagious disease.....	25,678	34,982	20,668	23,084	104,412
Number of cases visited for special diagnosis.....	1,243	1,460	719	1,505	4,927
Number of school notices sent.....	4,009	4,634	401	3,516	12,560
Number of visits to tenement houses	33,457	36,598	37,259	35,958	143,282
Number of visits to hotels.....	146	194	111	55	506
Number of visits to schools and institutions	20,614	24,386	4,535	38,310	136,372
Number of visits to private houses	1,131	1,271	638	754	3,794
Number of visits, miscellaneous	5,041	6,500	7,907	3,757	23,205
Total number of visits.....	60,383	68,949	50,450	78,844	258,632
Number of primary vaccinations	3,229	6,998	2,115	3,849	15,191
Number of revaccinations.....	37,727	26,395	18,192	39,068	121,382
Number of vaccinations in schools	6,774	8,760	528	10,106	16,168
Total number of certificates of vaccination issued	976	1,108	1,412	3,441	6,937
Number of visits to infected houses	18	.....	.....	.....	18
Number of visits to sick children	4	.....	.....	.....	4
Number of prescriptions filed	4	.....	1	.....	5
Number of animals examined.....	3,711	15,497	13,323	10,086	42,522

	FIRST QUARTER.	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTAL.
Number of post-mortems on animals.....	95	138	27	26	286
Number of glandered horses condemned.....	157	365	263	190	975
Number of inspections and reinspections.....	862	1,752	981	861	4,456
Number of persons removed to Contagious Disease Hospital.....	610	819	480	505	2,414
Number of dead bodies to Morgue.....	12	6	6	3	27
Number of houses visited for disinfection.....	4,932	7,761	5,474	5,131	23,298
Number of infected rooms disinfected.....	8,622	13,713	10,021	8,776	40,132
Number of times ambulances, etc., disinfected.....	521	559	387	414	1,881
Number of pieces infected goods disinfected.....	8,469	22,752	11,799	14,586	57,606
Number of pieces infected goods destroyed.....	2,909	10,351	5,138	3,761	22,159
Total inspections.....	66,183	78,462	56,995	84,836	286,386
<i>Diagnosticians.</i>					
Number of visits to cases.....	1,299	1,759	853	1,852	5,693
Number of visits to cases for special diagnosis.....	1,235	1,460	718	1,505	4,918
Number of school notices sent.....	.....	20	.....	3	23
Number of visits to tenement houses.....	631	870	457	704	2,662
Number of visits to hotels.....	41	32	5	9	87
Number of visits to schools and institutions.....	255	195	108	43	611
Number of visits to private houses.....	74	47	18	31	170
Number of visits, miscellaneous.....	141	291	156	361	949
Total visits.....	1,152	1,435	744	1,148	4,479
<i>Medical Inspectors.</i>					
Number of visits to cases.....	24,459	33,223	19,815	21,222	98,719
Number of visits for special diagnosis.....	8	.....	1	.....	9
Number of school notices sent.....	4,009	4,614	401	3,513	11,537
Number of visits to tenement houses.....	32,826	35,728	36,802	22,766	128,124
Number of visits to hotels.....	105	162	105	46	419
Number of visits to schools and institutions.....	20,349	24,191	4,427	13,057	62,024
Number of visits to private houses.....	1,057	1,224	620	723	3,624
Number of visits, miscellaneous.....	4,900	6,209	7,751	1,380	13,240
Total number of visits.....	59,237	67,514	49,706	37,972	212,429
<i>Total Medical Inspectors and Diagnosticians.</i>					
Number of visits to cases.....	25,678	34,982	20,668	23,084	104,412
Number of visits to cases for special diagnosis.....	1,243	1,460	719	1,505	4,927
Number of school notices sent.....	4,009	4,634	401	3,516	12,560
Number of visits to tenement houses.....	33,457	36,598	37,259	23,470	130,784
Number of visits to hotels.....	146	194	111	55	506

	FIRST QUARTER.	SECOND QUARTER.	THIRD QUARTER.	FOURTH QUARTER.	TOTAL.
Number of visits to schools and institutions.....	20,614	24,386	4,535	13,100	62,635
Number of visits to private houses.....	1,131	1,271	638	754	3,794
Number of visits, miscellaneous.....	5,041	6,500	7,907	1,741	21,189
Total number of visits	60,389	68,949	12,045	39,120	218,908
<i>Disinfectors and Ambulance Drivers.</i>					
Total inspections.....	66,133	78,462	56,905	84,836	286,386
Number of persons removed to hospital	610	819	480	505	2,414
Number of bodies to Morgue..	12	6	6	3	27
Number of houses visited.....	4,932	7,761	5,474	5,131	23,298
Number of rooms disinfected.....	8,622	13,713	10,021	8,776	41,132
<i>Vaccinators.</i>					
Number of Primary vaccinations.....	32,229	6,998	2,115	3,849	16,191
Number of revaccinations.....	37,727	26,395	18,192	39,068	121,382
Number of vaccinations in school.....	6,794	8,760	528	10,106	26,188
Total.....	47,730	42,153	20,835	53,023	165,741
Number of vaccination certificates issued.....	976	1,108	1,412	3,441	6,937
Number of visits to infectious houses.....	18	.....	.....	.....	18
Number of visits to sick children.....	4	1	.....	.....	5
Number of prescriptions filled.....	4	3	.....	.....	7
<i>Veterinarians.</i>					
Number of animals examined.....	3,711	15,497	13,328	10,086	42,622
Number of post mortems on animals.....	95	138	27	26	286
Number of glandered horses destroyed.....	157	365	263	14,586	15,371
Number of inspections and reinspections.....	862	1,752	981	3,761	7,356
<i>Disinfecting Station.</i>					
Number of times ambulances and other vehicles disinfected	521	559	387	414	1,881
Number of pieces of goods disinfected.....	18,469	22,752	11,799	861	53,881
Number of pieces of infected goods destroyed.....	2,909	10,351	5,138	190	18,588

The following report has been submitted by Dr. J. J. Cronin, Assistant Chief Medical Inspector, who has supervised the work of the Medical School Inspectors, Summer Corps and vaccinating work:

The plan of conducting the examination of school children for presence of contagious disease continued the same as instituted at the beginning of the school year 1902—that is, the regular morning inspection of all schools and the weekly routine inspection of classes as far as possible. The nursing system also continued as originally adopted. The wisdom of adopting the nursing system was so evident that the corps of Nurses was increased from nine Nurses to sixteen Nurses in the Borough of Manhattan in the third week of February.

It was now evident with the Nurses in the schools that the majority of children who had to be excluded from class attendance on account of some minor contagious affection could very well be allowed to attend class while under the professional care of the school Nurse. This fact gave rise to the necessity of some system of record whereby each child affected with any contagious affection could be recorded, ordered and kept under treatment until the case was cured. Such a system was adopted and put in operation on March 30, 1903, and known as the "Card Index System." This system provides a card for each class. When the Inspector makes his routine inspection of a class the card is identified by room number, class number and school number of that class. The name of each child found with any contagious affection is written on the class card with the code number of the disease for which treatment is ordered and the date of inspection made by the Medical Inspector. On a separate blank card is written the code number of the disease, which is given to the child, with instructions to report to the Nurse for treatment if it is a proper case for the Nurse to look after. When the child has been seen by the Nurse and treated, the Nurse dates the card sent with the child by the doctor, and the child returns to class. Forty-eight hours after the Inspector returns to these same class rooms, calls out the name of the children recorded on class index card and inspects them to see if his orders have been fulfilled. If the child has been under treatment the class index card is marked with date of the reinspection under the heading "Under Treatment." If the child has not received treatment, the child is excluded from school attendance forthwith, and class index card is dated under the heading "Excluded." This child is not allowed to return to the classroom until readmitted by the Medical Inspector in charge of the school. As soon as the child returns to school with evidence that treatment has been established, the child is readmitted to school and index card is dated under the heading "Readmitted." In the remark column is put the date on which the child is pronounced cured. In case of trachoma, the date of operation and date of cure. (Children living in the vicinity of the Trachoma Hospital are advised, when affected with trachoma, to go to the Department Eye Hospital and Dispensary at the foot of Gouverneur street.)

The form of the class index card is given below :

CLASS..... ROOM..... SCHOOL No.....

NAME.	Dis- ease.	Ordered Under Treatment.	Under Treatment.	Excluded.	Readmitted.	Remarks.
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						

.....Medical Inspector.

When a child is excluded from school, a properly filled out exclusion card is given to the Principal, who gives the card, in a sealed envelope, to the child. This card gives the name, age, address, school number and reason for exclusion on the face. The back of the card gives "Notice to the Parents" of the reason for the exclusion and the date on which the child should return to school.

In cases of contagious disease of serious nature, as measles, diphtheria, scarlet fever, variola, varicella, mumps, the child is sent home at once; in minor affections, such as trachoma, pediculosis, etc., the children are allowed to continue in class until the next recurring recess when they are handed the exclusion card in a sealed envelope. The form of exclusion card is here shown:

Front.

**DEPARTMENT OF HEALTH,
BOROUGH OF MANHATTAN.**

New York, *190*

Name *Age*

Address

IS ORDERED TO DISCONTINUE ATTENDANCE at

School No. *, located at*

REASON:

Medical Inspector.

Back.

NOTICE TO PARENTS.

The disease mentioned on the other side of this card is a contagious affection and liable to be transmitted to other children. The child should receive prompt treatment by any physician (or at any dispensary), and should return to school..... 190, for re-examination by the Medical Inspector of the Department of Health. If found free from contagion at this time, he may resume attendance at school.

A daily report is forwarded each day to the Central Office by the Medical Inspector for each school under his charge. A duplicate report is left at the school for the use of the School Nurse and Principals. This report states the date and time of the visit to the school, the number examined in the morning inspection, and on weekly routine inspection; also the name, age and address and reason for exclusion of each child excluded.

A weekly report is forwarded each week by each Inspector giving a summary of the work of the entire week.

Investigation of Causes of Absence from School.

Since the first week in March the Medical Inspectors have been required to ask for the names and addresses of all children who have been absent from school for four or five days for unknown reasons, and who, in the opinion of the Principals, may be sick. These visits to houses have been very fruitful in the discovery of contagious diseases which have not been reported to the Department of Health.

WORK PERFORMED BY MEDICAL INSPECTORS, SCHOOLS.

Public Schools, Quarter Ending 1903.

QUARTER ENDING 1903.	DAILY ATTENDANCE.	NUMBER OF SCHOOL DAYS.	NUMBER OF SCHOOLS.	NUMBER OF VISITS TO SCHOOLS.	NUMBER EXAMINED.	NUMBER EXCLUDED.
March 1.....	225,307	58	139	11,973	2,088,838	22,813
June 30.....	225,307	59	139	13,892	1,279,028	8,091
September 30.....	236,326	10	140	2,439	281,558	1,101
December 31.....	237,182	61	141	14,690	1,737,104	4,097

Parochial Schools, Quarter Ending 1903.

QUARTER ENDING 1903.	DAILY ATTENDANCE.	NUMBER OF SCHOOL DAYS.	NUMBER OF SCHOOLS.	NUMBER OF VISITS TO SCHOOLS.	NUMBER EXAMINED.	NUMBER EXCLUDED.
March 31.....	32,823	58	46	2,793	215,580	2,275
June 30.....	32,823	59	46	2,510	141,650	601
September 30.....	34,585	10	45	508	36,430	90
December 31.....	34,585	60	44	2,740	178,487	170

American Female Guardian and Industrial Schools, 1903.

QUARTER ENDING	DAILY ATTENDANCE.	NUMBER OF SCHOOL DAYS.	NUMBER OF SCHOOLS.	NUMBER OF VISITS TO SCHOOLS.	NUMBER EXAMINED.	NUMBER EXCLUDED.
1903.						
March 31	12,203	58	30	1,555	97,000	1,536
June 30	12,203	59	31	1,581	50,519	440
September 30	11,623	10	29	327	13,518	55
December 31	11,606	61	30	1,376	59,618	222

Kindergarten Schools, Quarter Ending 1903.

QUARTER ENDING	DAILY ATTENDANCE.	NUMBER OF SCHOOL DAYS.	NUMBER OF SCHOOLS.	NUMBER OF VISITS TO SCHOOLS.	NUMBER EXAMINED.	NUMBER EXCLUDED.
1903.						
March 31	2,861	58	41	1,927	24,018	201
June 30	2,969	59	42	1,589	13,056	96
September 30	2,703	10	34	340	2,168	7
December 31	2,703	61	41	1,491	16,917	26

Private Schools, Quarter Ending 1903.

QUARTER ENDING 1903.	DAILY ATTENDANCE.	NUMBER OF SCHOOL DAYS.	NUMBER OF SCHOOLS.	NUMBER OF VISITS TO SCHOOLS.	NUMBER EXAMINED.	NUMBER EXCLUDED.
March 31	80	53	1	51	61	3
June 30	80	41	1	30	151	..
September 30	92	6	1	6	84	..
December 31	393	61	3	80	551	2

Table Showing Diseases for Which Children Were Excluded in All Schools.

	QUARTER ENDING 1903.			
	March 31.	June 30.	September 30.	December 31.
Diphtheria	365	78	4	62
Scarlet fever	12	20	5	8
Measles	31	87	4	46
Varicella	254	271	8	140
Pertussis	103	70	7	21
Miscellaneous	3,247	1,094	36	351
Parasitic	5,339	1,952	231	1,154
Contagious eye disease.....	16,550	5,167	919	2,628
Contagious skin disease	926	483	39	107
Total	26,878	9,228	1,253	4,517

Under the card index system the number of exclusions has been reduced almost ninety-eight per cent.

The following table shows the number of cases on index cards in the school year 1902 and 1903 and in school year 1903 and 1904:

	MAY 31, 1903.	SEPT. 25, 1903.
Diphtheria	42	2
Measles	37	3
Scarlet fever	4	3
Pertussis.....	38	4
Varicella	138	4
Mumps.....	426	3
Pediculosis.....	52,571	20,888
Trachoma.....	17,710	9,605
Acute conjunctivitis.....	3,066	2,364
Acute coryza.....	1	6
Scabies.....	82	56
Ringworm.....	602	181
Impetigo.....	238	180
Favus.....	39	14
Molluscum contagiosum.....	21	14
Tonsillitis.....	457	39

A culture is taken from the throat of each child showing evidence of tonsilitis, and the patient is excluded from school. If the culture shows the presence of Klebs-Loeffler bacilli, the Medical Inspector of the school is notified and the child is entirely under the supervision of the district Medical Inspector of Contagious Diseases; if the culture proves negative the report is sent to the Medical Inspector of the school who visits the child at its home, and if nothing further of a contagious nature has developed the child is permitted to return to school.

Children showing acute nasal discharge are treated as suspicious diphtheria until the result of the culture is received.

Trial Cultures.

On January 10, 1903, the Medical Inspectors of schools were ordered to take culture from all cases showing slight redness of the throat and hypertrophied tonsil. From January 10, 1903, until April 4, 1903, the following results were obtained:

Number of cultures.....	11,451
Number showing Klebs-Loeffler bacilli.....	757
Number showing no Klebs-Loeffler bacilli.....	10,376
Number showing doubtful bacilli.....	318
	<u>11,451</u>

School Nursing System.

Consists of a Supervising Nurse and School Nurses.

The Supervising Nurse arranges the schools in groups and assigns thereto a Nurse and has general control of the work.

At a definite hour each day the Nurse must be present at her school. Her duties are to attend to the children sent to her by the Medical Inspector in charge of the school.

A record is kept by the Nurse of all children treated and the number of revisits that are made to her.

The following cases are the only ones which the Nurse is to treat: Pediculosis, conjunctivitis, ringworm, impetigo, favus, molluscum contagiosum, scabies. Each disease is known by a code number.

Definite rules are set down for the treatment of these, a copy of which is given to each Nurse for each of her schools.

Children who had been excluded by the Inspector and do not return on the day stated on back of the exclusion card, are visited by the Nurse to ascertain the cause of absence. Advice is given to the parents as to the proper procedure in the case, and if the child still refuses to return to school, the case is treated as one of truancy.

When not otherwise assigned the Nurses are to visit families and instruct parents in hygiene and nursing.

Table Showing Work Performed by the School Nurses.

	QUARTER ENDING, 1903.			
	March 31.	June 30.	September 30.	December 31.
Number of treatments to cases of pediculosis.....	10,204	45,427	6,921	94,334
Number of treatments to cases of contagious eye affection....	29,300	36,687	2,615	37,655
Number of treatments to cases of eczema.....	1,458	827	127	967
Number of treatments to cases of ringworm.....	2,083	3,974	82	2,359
Number of treatments to cases of scabies.....	75	87	30	142
Number of treatments to miscellaneous.....	4,092	1,639	113	4,594
Total number of treatments to cases.....	47,213	88,641	9,888	140,051
Old cases.....	*.....	7,209	5,075	114,996
New cases.....	*.....	17,432	4,803	25,055
Visits to tenement-houses.....	3,232	4,754	299	4,606
Visits to schools.....	2,272	3,662	574	4,590
Visits, miscellaneous.....	*.....	*.....	17	276
Total number of visits.....	5,504	8,416	890	9,472

* Not recorded.

Trachoma Hospital.

After the first four weeks of routine inspection of schools had passed, the number of cases of trachoma excluded from school on account of this disease was so great that the special hospitals and dispensaries throughout the borough were so overcrowded with these cases that it was almost impossible to treat any other class of patients within the allotted time. This condition was not satisfactory to the hospital authorities nor was it agreeable to the Health authorities, inasmuch as these children were deprived of the opportunity of education until they could show satisfactory evidence of treatment.

It was then that the Department conceived the idea of founding a special hospital for the treatment of trachoma. Such a hospital was opened on December 16, 1902, at the foot of Gouverneur street. The beneficial results that have been attained at this hospital, the great number of patients treated and the fact that not one accident has occurred in all the operations that have been performed in the hospital under ether anaesthetization, is a source of gratification to the Department of Health.

Dr. H. W. Wootton, who has had supervision of the work at the Trachoma Hospital, has forwarded the following report in regard to the ophthalmological work of the Department for the year 1903:

"Shortly after January 1, on account of the rapid increase in the number of patients applying for treatment at the Department Hospital for Contagious Eye Diseases,

the staff was considerably enlarged. Operations were performed both in the morning and afternoon, four operators being employed and four anaesthetists. In the dispensary, two physicians were in attendance in the morning and two in the afternoon, in order to conduct the subsequent treatment of cases operated upon, and to treat those cases of trachoma in which operation was not considered necessary. The staff of nurses was increased to six, two for ward duty, two for duty in the operating room, and two in the dispensary. This arrangement was continued until June, during which time 12,839 patients were treated, of which 2,761 were submitted to operation. In June, on account of the fact that the term of service of three men had expired, the staff was reduced, the operators being three in number, and during the month of June, 1,008 patients were treated, 279 of whom were operated upon. With the closing of the schools from July 1 until September 15, the attendance at the hospital naturally diminished, there being no means by which the Department could compel patients to attend. Nevertheless, 353 cases of trachoma and 763 cases of acute catarrhal conjunctivitis applied for treatment, and of the cases of trachoma 150 were operated upon. The staff was still further reduced during this period on account of vacations allowed to the attending physicians, but one operator being in attendance. From September 15 to November 20, the staff consisted of five oculists and two anaesthetists. Two of the oculists performed the operations, the other three treated the patients in the dispensary. During this time 1,924 cases of trachoma were treated, 719 of whom were operated upon. The statistics of the hospital from January 1 to November 20, are, therefore, as follows:

	TRACHOMA.	OPERATIONS.
January 1 to June 1.....	12,839	2,761
June 1 to July 1.....	1,008	279
July 1 to September 15..	353	150
September 15 to November 20.....	1,924	719
Total.....	16,124	3,909

During this period, 2,331 children with eye affections other than trachoma visited the hospital. This number consisted for the most part of cases of acute catarrhal conjunctivitis, which disease was especially prevalent during the summer months. Adding this number to the number of cases of trachoma, we see that 18,455 children applied for treatment during the period mentioned. In practically all of these cases it was necessary for the patients to visit the hospital many times, and the total number of visits to the hospital during this period equalled 106,040.

Tedious and unsatisfactory as the treatment of trachoma undoubtedly is, and deceptive as statistics of necessity frequently must be, a comparison of the work done in the earlier with that of the later months, would seem to show that considerable progress has been made in diminishing the prevalence of this disease among the school children of this city. The fairest comparison is that of the number of new cases applying for treatment in January and February with the number applying in September and October, in both of which periods, from the fact that the figures represent the results of the first inspections during two successive school terms, the proportion of cases might be expected to be greater than during subsequent periods and to be fairly comparative. During the first period, the number equalled 5,212; during the second, 1,641, a reduction of two-thirds, which, with all due allowance for statistical errors, must be regarded as being exceedingly satisfactory.

In regard to the method of operating the consensus of opinion among the physicians in attendance seems to be that the best results are obtained by using first Jameson's trachomatomes, followed by the Noyes's and Prince forceps. The trachomatomes scarify the conjunctiva superficially, at the same time removing a large number of the superficial granules. Those more deeply situated are then expressed with Noyes's forceps and the Prince ring forceps are finally used to remove granules situated in the canthi, for which purpose their shape is particularly well adapted.

Bi-chloride of mercury (1-500) is rubbed into the lids after operation. All cases operated upon are treated subsequently in the dispensary until all hypertrophy of the conjunctiva has disappeared. The non-operative treatment has resulted in the comparison of three methods, that by sulphate of copper, by bi-chloride of mercury, and by formalin. Of these, the best results have been obtained with sulphate of copper. In regard to bi-chloride of mercury (1-500 rubbed in with a cotton pledget), I have not been able to convince myself that the results were due to anything more than friction and consequent gradual expression of the granules. In the first few days succeeding operation, however, this treatment is of service, I think, and tends to limit post-operative infection. Formalin (1-3000) seemed of little service, and its use has been abandoned.

A few remarks on the results obtained by operation may not be out of place. In general, the results have been very good, but an extended observation has convinced me that a careful selection of cases must be instituted if we are to hope for the greatest benefit to our patients. The common practice at present among oculists is to operate upon cases presenting many granules, and to treat those with fewer granules by non-operative means. I am convinced that the method is not the best to pursue. The probability of a successful result depends largely upon the proportion of hard granules to soft, and the surgeon will find that his chances of success increase in proportion as the latter exceed the former. It is frequently impossible to remove the harder granules, when deeply seated, by any means short of the actual destruction of the mucous membrane, and if any considerable number be left behind, we find frequently, in two or three weeks,

the patient will exhibit a relapse, and that his condition will be really worse than before operation. Cases in which the greater part of the palpebral conjunctiva is involved and which present a relatively large number of hard trachoma granules, are not, in my opinion, well adapted for operative treatment. Non-operative treatment by means of the pencil of sulphate of copper is often exceedingly satisfactory, but here again the chances of success depend apparently upon the presence of a relatively small number of hard granules.

The work of this hospital, as has been seen, has been very extensive, but it has drawn its patients largely from one section of the city. At the time of writing this report a second Trachoma Hospital is under construction by the Department. This hospital is situated at One Hundred and Eighteenth street and Pleasant avenue, and will be in the midst of a district the school children of which are extensively afflicted with the disease. It will be ready for operation about January 1, and, with both hospitals, the prospects seem very bright for a further reduction in the percentages of cases during the ensuing year.

Table Showing Results of Work at Trachoma Hospital.

	QUARTER ENDING 1903.			
	March 31.	June 30.	September 30.	December 31.
Number of children treated.....	7,913	4,924	11,135	1,963
Number treated by operation.....	1,563	1,454	405	915
Number treated without operation.....	6,350	3,470	731	1,048
Number of visits for subsequent treatment.....	25,088	38,998	26,719	39,025
Number of treatments.....	33,601	43,922	27,855	40,988
Number examined not having trachoma.....	*.....	505	1,571	1,045

* Not recorded.

Vaccinations.

Vaccinations are performed by the Medical Inspectors in districts and by special assignment.

The corps is divided into squads, and each squad is in charge of a Medical Inspector, who assigns the time and place for work to be performed. He receives the result of the day's vaccination from each Inspector in his squad, which is then forwarded to the Central Office.

Special Assignments.

1. School vaccinating.
2. Central and branch office vaccinating.
3. Daily vaccinating at the Municipal Lodging House.
4. Vaccinating in Workhouse on Blackwell's Island daily, except Sunday.
5. Special assignments to vaccinate in houses or place from which a case of smallpox has been removed and at his place of business.

Table Showing the Number of Vaccinations Performed in Districts, Schools, Special Vaccinations and Office and Number of Places Visited.

QUARTER ENDING 1903.	Number of Primary Vaccinations.	Number of Recorded Vaccinations.	Number of Vaccinations in Schools.	Total.	Number of Vaccination Certificates Issued.	Visits to Tenements.	Miscellaneous Visits.
March 31.....	3,229	37,727	6,774	47,730	976	9,533	3,313
June 30.....	6,698	26,395	8,760	42,153	1,108	7,399	797
September 30.....	2,115	18,192	528	20,835	1,412	563	41
December 31.....	3,849	39,068	10,106	53,023	3,411	7,822	1,209

District vaccinations are performed on Saturdays and school holidays by the Inspectors who are assigned to school duty.

Summer Corps.

In beginning the summer corps work of 1903 it was thought that better results could be obtained by visiting the parents of all children the record of whose birth had been reported at the Bureau of Vital Statistics from August 1, 1902, to June 30, 1903.

These names were written on file cards, with record number of birth, name of the father of the child, the nationality of the father, and date of birth with address. In addition an envelope addressed to the father was also made out. In these envelopes was inclosed a pamphlet, "How to Keep the Baby Well," and mailed to the father. These pamphlets were written in English, Italian, Yiddish and German, appropriate pamphlets being sent according to the nationality. This is the form and information issued:

DEPARTMENT OF HEALTH OF THE CITY OF NEW YORK,

55th STREET and SIXTH AVENUE,

(Telephone, 1204 Columbus.)

TO KEEP THE BABY WELL.

1. **NURSE it:** Nothing equals mothers' milk for a baby food. If you cannot nurse the baby use *fresh milk*, which in hot weather has *been boiled* and prepared according to directions. (A circular of directions will be sent on application to the Department of Health.) Nurse the baby part of the time, if you cannot nurse it all the time. Do not give it condensed milk or any prepared babies' food.

2. **FEED OR NURSE IT AT REGULAR INTERVALS**, not more than once in three hours after it is six weeks old. Don't feed it simply because it cries. Decrease the amount of milk on very hot days. Too much food and too frequent feeding are among the commonest causes of sickness.

3. **BATHE IT DAILY:** The glands of the skin carry off nearly as much poisonous matter as the bowels. They both must be kept open in hot weather. Dry the skin well after bathing.

4. **AIR it:** Out of door air is necessary. Keep the head shaded from the direct sunlight. In hot weather take the baby out early in the morning before 9 o'clock, when it is cool, and again late in the afternoon and *early* evening, but not late at night.

5. **KEEP IT COOL:** If it is bundled up too much in summer it will become overheated. The more nearly naked it is the better in extremely hot weather.

6. **KEEP IT IN A QUIET PLACE:** A baby's nerves are very sensitive. Continued noise sometimes causes sickness.

7. **GIVE IT WATER:** Between feedings give water freely, especially in hot weather. Use only water that has been boiled.

8. **GIVE NO FRUIT** to a baby less than a year old. In summer give no fruit to a baby less than two years old. Fruit kills many babies.

9. **GIVE NO SOLID FOOD** to a baby less than one year old. For the first year of life the food should be **ALL MILK**. For the second year **CHIEFLY MILK**.

10. Call your own doctor, or if you have none, in summer notify at once the Department of Health if the baby has diarrhoea, or is sick, and a doctor will be sent immediately.

11. **WHEN THE BABY HAS DIARRHOEA** stop all food and give only barley water until the doctor comes.

12. Use bottled or certified milk; Straus milk, or that prepared and furnished at the various dispensaries (not grocery milk), if you cannot nurse the baby.

NOTIFY the DEPARTMENT of HEALTH when you move, and **APPLY** to it for **FURTHER INFORMATION OR ASSISTANCE**.

ERNST J. LEDERLE, PH.D.,

President.

HERMAN M. BIGGS, M. D.,

Medical Officer.

MANHATTAN,	S. W. Cor. 55th St. & 6th Ave.	Tel. 1204 Columbus.
THE BRONX,	1237 Franklin Ave.,	" 975 Melrose.
BROOKLYN,	38-40 Clinton Street,	" 2201 Main.
QUEENS,	374 Fulton St., Jamaica,	" 51 Jamaica.
RICHMOND,	54-56 Water St., Stapleton, S. I.,	" 210 Tompkinsville.

When all records had been transcribed for the months of December, 1902, January, February, March and April, 1903, the cards were arranged in districts and were given to Inspectors to investigate.

On the third day of this work this method had to be changed; first, on account of the removals, almost thirty per cent.; second on account of the great number found who were not reported at the Bureau of Vital Statistics.

The Inspectors were then instructed to go from house to house and turn in a history of every child found under one year of age. All sick children of whatever age were to be treated if a proper case. A birth record card was to be made out for each child not listed on the regular record cards, stating the name of child, date of birth, place of birth, present address and name and address of attending physician or midwife. Below is a copy of the form of the history card:

Name.....	Age.....	Address.....		
Nationality.....	No. in family	{ Adults..... Children.....		
No. of rooms.....	Air space.....		Sanitary condition.....	
	Ventilation.....	{ Windows Air-shaft		
Nutrition.....	Digestion.....		Bowels.....	
Ill.....	Well.....	Vaccinated.....		
Nursed.....	Months.....	Intervals.....		
Artificial feeding.....	Months.....	Intervals.....		
Milk.....	{ Bottled Loose Sterilized Condensed	Solid food.....		
		Fruit		
Inspected.....		1903.		
			

Medical Inspector.

Six Medical Inspectors were selected on account of especial fitness to attend to children reported sick by the District Inspectors.

The orders for the treatment of these cases were carried out by the District Nurse who continued in attendance on the cases until the case was terminated by the Physician.

A form of blue card to be made out by these Physicians is given below :

Front.

Name		Age
Residence		Nationality
Family history		Alcoholism
Tuberculosis		Syphilis
Disease		Duration
Exciting cause		
How fed		
Source of milk supply		
Digestion—Poor.	Good.	Fruit given
Solid food given		Diarrhoea
Stools—Frequency		Character of stools
Treatment		

Medical Inspector.

Back.

Dates of visits:

.....

A form of cards used by the Nurse is given below :

Front.

Name	Age	Residence
.....
Date First Visit.....		
Condition of Child.....		
Treatment		
.....		
Date Second Visit.....		
Condition of Child.....		
Treatment		

District Nurse.

Back.

Date Third Visit.....
 Condition of Child.....
 Treatment

Date Fourth Visit.....
 Condition of Child.....
 Treatment

Date Fifth Visit.....
 Condition of Child.....
 Treatment

Case Dismissed.....Cured.....Improved.....
 Unimproved.....Dead.....

The parents of all artificially fed children were questioned as to the place where they obtained their milk. The grocery stores in the districts were all visited and a card filled out for each store examined as to the means used to keep their milk in proper condition.

The report of the condition of stores where milk was sold was made on special cards as below:

SUMMER CORPS.

.....M
1903
 Location
 Name
 Permit No.....Amount sold.....
 Cans are.....properly cooled
 Temperature of milk.....
 Dipper isclean
 Store does.....connect with { living rooms,
 { W. C. apartment.
 Communicable disease in rooms?.....

 Medical Inspector.

Diagram of Rooms

Reinspected
and sealed

.....1903
by.....

At each home was left a pamphlet on the "Care of Infants and Young Children During the Summer" and a "Card Hanger" giving the tables for the preparation of feedings for child. A copy of this hanger is here given.

Front

**Department of Health of The City of New York,
BOROUGH OF MANHATTAN.**

PREPARATION OF FOOD FOR BABIES.

KEEP THIS CARD AND HANG IT UP IN KITCHEN.

1. From a fresh quart bottle of milk, carefully pour off the amount of top milk directed in the table below, taking as much of the cream as possible. Place this with the sugar and barley water, or boiled water, in a clean jar or agate ware pail; place the jar or pail in a larger pail containing four or five inches of water; place this on the stove and allow the water surrounding the milk to boil for ten minutes; remove from the stove and allow to stand for ten minutes, then place in cold water so as to cool quickly. This is the whole day's milk supply for the baby. Keep this covered in the ice-box, and fill the baby's bottles, which had previously been cleaned, as needed.

2. Milk, specially prepared for babies, may be procured at the Straus' Milk Depots.

STRAUS' MILK DEPOTS.

151 Avenue C,	65 Market street,
241 East Fifty-ninth street,	235 West Sixtieth street,
Hebrew Institute Roof Garden (Jefferson street and East Broadway),	Foot of East Twenty-fourth street,
Foot of East Third street,	Foot of West Fiftieth street,
Foot of Barrow street, North river,	City Hall Park,
Battery Park,	Central Park (near Arsenal),
Tompkins square.	305 East One Hundred and Fourteenth street.

3. Ice may be obtained from Herald Free Ice Depots.

Under Three Months of Age.

Quantity for each feeding.	Mixture.
At birth, $\frac{1}{2}$ to $1\frac{1}{2}$ oz.	9 oz. of milk from top of bottle,
One month, 2 to $2\frac{1}{2}$ oz.	27 oz. of boiled water,
Two months, 3 to $3\frac{1}{2}$ oz.	$6\frac{1}{2}$ heaping teaspoonfuls of granulated or milk sugar.
Three months, 3 to 4 oz.	Feed every $2\frac{1}{4}$ hours during day, beginning at 6 a. m., and giving last feeding at midnight. (Nine feedings in 24 hours.)

(One half pint equals eight ounces. Two tablespoonfuls equal one ounce.)

From Three to Six Months.

Quantity for each feeding.	Mixture.
Four months, 5 oz.	16 oz. of milk from top of bottle,
Five months, $5\frac{1}{2}$ oz.	27 oz. of barley water,
Six months, 6 oz.	$6\frac{1}{2}$ heaping teaspoonfuls of granulated or milk sugar.
	Feed every three hours during the day, beginning at 6 a. m., and giving last feeding at midnight. (Seven feedings in 24 hours.)
	The barley water prepared by boiling an even tablespoonful of Robinson's barley flour in one pint of water for twenty minutes. Strain and add boiled water to make one pint.

From Sixth to Ninth Month.

Quantity for each feeding.	Mixture.
Seven months, 6½ oz.	24 oz. of milk from top of bottle,
Eight months, 7 oz.	24 oz. of barley water,
Nine months, 7½ oz.	6 heaping teaspoonfuls of granulated or milk sugar.
	Feed at three hour intervals. (Six feedings in 24 hours.)

From Ninth to Twelfth Month.

Quantity for each feeding.	Mixture.
Ten months, 8 oz.	35 oz. of milk,
Eleven months, 8½ oz.	10 oz. of barley water,
Twelve months, 9 oz.	6 heaping teaspoonfuls of granulated or milk sugar.
	Feed at 3½ hour intervals. (Five feedings in 24 hours.)

Back.

1. Feed the baby regularly and on time, and not whenever it cries.
2. Don't give the baby any kind of raw food, or any kind of fruit.
3. Don't give the baby coffee, tea, beer or any liquor, or any food, except as prescribed on the other side of this card.
4. Bathe the baby every morning in cool or lukewarm water, and in hot weather two or three times during the day. Always wash baby when the diaper is changed.
5. See that the baby's bowels move every day.
6. The baby should sleep alone in a crib.
7. For diarrhœa, give two teaspoonfuls of castor oil, **STOP THE MILK FOR 24 HOURS**, and give the baby barley water only.
8. Send for a doctor at once if the baby is sick.
9. If you cannot pay for a doctor, take the baby to the nearest dispensary, or telephone or send to the Board of Health, Sixth avenue and Fifty-fifth street, for a doctor. (Telephone, 1204 Columbus.)
10. The rooms should be free from garbage and clean. Remove soiled pieces of carpet and unnecessary clothing and furniture.
11. The fire should be put out as soon as possible, so as not to heat the rooms.
12. The bedding must be kept clean. All coverings for the child should be of washable material and kept clean and well aired. Heavy Comforters should not be used.

Sunstroke circulars are distributed in every house in the district.

A copy of the form of sunstroke circular is given below:

SEND AT ONCE FOR AN AMBULANCE AND THE NEAREST PHYSICIAN.

**Department of Health,
CITY OF NEW YORK.**

SUNSTROKE AND HEAT PROSTRATIONS.

CAUSE.

Sunstroke is caused primarily by excessive heat. The constant drinking of alcohol, or even a single excess, is one of the greatest of the contributing causes. Other contributing or predisposing causes are over exertion or exhaustion, excitement, loss of sleep, worry, lack of ventilation of sleeping or living rooms, overeating or the eating of indigestible foods. It is more apt to occur among those whose work exposes them to direct rays of the sun, and especially between the hours of 11 a. m. and 4 p. m.

PREVENTION.

Avoid, if possible, prolonged exposure to the sun's rays. On hot days wear thin clothing. If obliged to work in the sun, wear a light colored, well-ventilated hat, with at least an inch of space between the top of the head and top of hat. Wet the hair at frequent intervals with cold water. Have as much air as possible in sleeping rooms. Take baths often, at least once daily. Drink considerable quantities of cool water (*not ice water*), for the purpose of inducing perspiration. Free perspiration prevents the body from becoming overheated.

If a feeling of dizziness, headache, nausea, or exhaustion occurs, lie down in a shady place, and apply cold water to head, face and neck.

TREATMENT.

IF SUNSTROKE, THE SKIN WILL BE HOT AND DRY. Remove the patient to the nearest shade. Place in a sitting position against a tree, wall, or anything that will support the back; loosen collar, necktie, and all tight clothing. Pour cold water over the head and face, and if very hot, rub body with pieces of ice. If the patient is able to swallow, give cool drinks of water. *Do not give alcoholic stimulants.*

IF PROSTRATED BY EXHAUSTION AND EXCESSIVE HEAT, THE PERSON WILL BE PALE AND FAINT. Remove to the nearest shade, place on the back with head on a level with the body. Loosen all tight clothing. Rub the hands and feet until circulation is restored. Bathe face and body with warm water, and apply warm cloths to the latter. Give hot drinks, tea, coffee, milk or water.

BY ORDER OF THE BOARD,

ERNST J. LEDERLE, Ph. D., PRESIDENT.

EUGENE W. SCHEFFER, SECRETARY.

Dispensaries were established on five recreation piers and Physicians assigned to this duty from 3 to 5 p. m. each afternoon except Sunday.

Regular assignments were made of a Physician to examine all children before going on the boat of the St. John's Guild.

Special assignments were made to the various societies' outings requesting a Physician.

Special examinations were made of children in the summer schools for orthopaedic deformity and errors of refraction.

Table Showing Results of Summer Corps Works.

Number of visits to cases.....	29,772
Number history cards completed.....	29,772
Number gastro-enteric cases found.....	2,258
Number other diseases found.....	580
Number "Herald" free ice tickets distributed.....	523
Number circulars distributed.....	43,951
Number St. John's Guild tickets distributed.....	3,549
Number St. John's Guild tickets received on boat.....	544
Number children examined at pier for St. John's Guild.....	30,812
Number Straus milk tickets distributed.....	3,035
Number milk inspections.....	2,458
<hr/>	
Number visits to tenement houses.....	18,759
Number visits to schools and institutions.....	3
Number visits to hotels.....	1
Number visits to private houses.....	127
Number miscellaneous visits.....	6,739
<hr/>	
Total visits.....	25,629
<hr/>	

Table Showing How Children Under One Year of Age Were Fed.

Number of children examined.....	27,100
<hr/>	
Number nursed or fed with modified sterilized milk.....	23,078
Number fed with condensed milk and patented food.....	1,904
Number fed with loose milk.....	2,118
<hr/>	
	27,100
<hr/>	

Table Showing the Number of Births Not Reported to the Bureau of Vital Statistics.

(Statistics estimated from work performed from July 29, 1903, to September 11, 1903.)

Number of children examined who were born from January 1, 1903, to May 31, 1903.....	8,194
Number of children born at present address and not reported at the Bureau of Vital Statistics.....	763
Percentage of births not reported.....	<u><u>21 33-100</u></u>

Table Showing Result of Examination of School Children for Orthopaedic Deformity.

Total number examined.....	1,061
Total with deformity of feet.....	163
Total with deformity of spine.....	<u><u>326</u></u>

Refractive Errors.

Total number examined.....	981
Vision 20-30 or less in one eye.....	67
Vision 20-30 or less in both eyes.....	<u><u>228</u></u>

Glanders.

During March, 1903, the number of glandered horses having increased, the number of Veterinarians attached to this Division was increased to ten, and the following methods adopted to stamp out the disease. Three of the Veterinarians and three Sanitary Police Officers were detailed at the offal dock, at the foot of West Thirty-ninth street, in order to have at this place, at all hours of the day and night, a Veterinarian and a Sanitary Officer, and their duties were as follows:

A. To examine each dead horse brought by the "dead wagon" in order to ascertain whether death had been due to glanders. If, in their opinion, it was a glandered horse, the Sanitary Officer on duty at the offal dock was sent to verify the address from which the horse had been removed, as shown by the tag fastened to the ear of the dead horse by the driver of the "dead wagon."

If the address of the stable was not noted upon the tag, but only the locality from which the horse was removed, the officer endeavored to locate the stable by inquiry in that locality.

B. To examine every horse led to the offal dock to be destroyed (except those sent by a Veterinarian of this Division), and when a case of glanders was found, the Sanitary Officer accompanied the person who led the horse in order to verify the address of the stable from which the horse had been removed. The Sanitary Officer, before leaving the offal dock to verify the address of stables, notified the Twentieth

Precinct Police Station and had an officer relieve him at the dock and remain until his return.

When a person who led a glandered horse to the offal dock refused to give the stable address or pleaded ignorance of same, he was placed under arrest until he explained how he came in possession of the animal and gave information that led the Officer to locate the stable.

Every case of glanders (alive or dead) diagnosed at the offal dock by the Veterinarian, as soon as the stable address was verified by the Sanitary Officer, was reported to this office by telephone, the following facts being given: Description of horse, name and address of owner, location of stable, and name of the owner of stable. (A written report of each case was filed at the Central Office the following morning.)

When the report of a case of glanders (alive or dead) was received from the offal dock by telephone at this office, a Veterinarian was sent to the stable from which the case had been taken, and it was his duty to, first, examine all horses belonging to that stable (if some horses were out at his first visit, he must revisit stable), in order to ascertain whether or not any had been infected, and to condemn any that he found suffering from glanders. Second, to leave at the stable in a sealed envelope, for the Disinfector of the Department, a written order stating what was to be done in regard to the disinfection of the stall occupied by the glandered horse, the strength of the bichloride solution to be used in washing down the wood-work of the stall; what portions of the stall were to be torn out for removal and destruction, after disinfection; whether any of the following articles in the stable had been infected, viz.: Watering trough, harness, sponges, brushes, surcingle, halter, stable blanket, etc., and, if any had been infected, what was to be done in the way of disinfection or destruction. Also, what was to be done with infected metal feed boxes, watering troughs, etc., in the stable.

Every case of glanders and all suspicious cases reported to this Department were promptly visited (day or night) by a Veterinarian, and if a diagnosis of glanders was made the animal was condemned and sent to the offal dock to be destroyed. If a diagnosis could not be made, the case was kept under observation or a mallein test requested. In every instance where a horse was condemned, all the horses belonging to the stable were examined, and written instructions left for the Disinfector as noted above. When several cases of glanders, or several suspicious cases were found in a stable, all the horses in that stable were subjected to the mallein test. Three or four of the Veterinarians were detailed to attend to this duty, and the methods employed will be explained in full later on.

Regular visits were made by the Veterinarians to the large sales stables, immediately before their regular sales, and a Veterinarian was detailed with a Sanitary Officer to the horse sales at the "Rocks," an open lot at Ninety-ninth street and First avenue, every

Wednesday and Saturday, where the lowest class of licensed vender type exchange horses. When a glandered horse was found the Sanitary Officer accompanied the nominal owner and verified the address of the stable, and when this was done the Veterinarian visited the premises and proceeded as noted above.

At first, every animal condemned by a Veterinarian was led to the offal dock to be destroyed, and the person who led the horse received a card signed by the Veterinarian who diagnosed the case. On this card was noted the fact that the horse had been condemned on account of glanders and on that date, and this card was given to the Officer on duty at the offal dock. Later (about April 6), the Veterinarian who condemned a horse, left at the stable an official order for the destruction of the animal in front of the premises by an officer from the American Society for the Prevention of Cruelty to Animals. On this order the Veterinarian noted a description of the horse, location of stable, name and address of owner of horse, etc. As soon as this office was notified by the Veterinarian that a horse was to be destroyed, a request was telephoned to the American Society for the Prevention of Cruelty to Animals to send an officer to destroy the horse, and the local police precinct was requested to send an officer to watch the animal until removed in "dead wagon," and the offal dock was promptly notified to send wagon.

In order that the condemned glandered horse might be identified, the Veterinarian fastened a tag to the tail with colored tape and also left a tag to be attached to the ear of the animal after being shot; on this tag was noted the address of the stable and the name of the Veterinarian, etc.

A Sanitary Officer was sent to destroy every glandered horse condemned by one of our Veterinarians and the Officer now returns the order left by the Veterinarian (after signing it), and it is filed with other records of the case.

All infected harness, metal feed boxes and watering troughs were washed with hot soda solution (about $\frac{1}{2}$ lb. soda to 3 gallons of water), and also infected halters, brushes, sponges, stable sheets, blankets, etc. Infected wooden flooring, and sides of stalls, wooden mangers, etc., were washed down with 1-1,000 solution bi-chloride and torn out by the Disinfector and removed by the Department and burned.

The following report presents the results of the mallein test as applied during the months of March, April, May and June, 1903.

When, in the opinion of any of the Veterinarians, it was necessary to use the mallein test, one or more Sanitary Officers were sent to the stable about 4 or 5 a. m. to prevent the removal of the horse from the stable until the arrival of the Department Veterinarians. Where there were many horses in the stable to be tested, or where it was thought horses might be exchanged, they were branded on the hoof numerically.

The temperature of the horse, or horses, was taken every three hours for a period of twelve hours; a $2\frac{1}{2}$ cc. dose of mallein was then injected, subcutaneously, into the

neck of the horse and the temperature again taken every three hours for the twelve hours immediately following the injection. If the characteristic reaction of increased and persistent high temperature, accompanied by a large, tense and painful swelling at the site of injection ensued, the horse was condemned and shot, and, in all feasible cases, a post mortem examination made.

When reaction followed, but was not characteristic, the horse was kept under observation and subjected to a retest.

March.

Number of horses injected.....	90
Number died after injection	2
Number condemned, post mortem examination made.....	1
Number recovered, or "no case".....	87
(a) Reaction observed	30
(b) No reaction observed	56
(c) Kept under observation for retest.....	1

Post mortem results—

Bacillus mallei found, one case.

The two cases dying after injection gave results as follows:

1. Bacillus mallei not found, farcy buds developed after injection, no autopsy.
2. Autopsy negative.

April.

Number of horses injected.....	247
Number died after injection.....	1
Number condemned, post mortem examination made.....	16
Number condemned, specimen from post mortem not in condition for examination	7
Number condemned, no post mortem.....	8
Died from distemper, after injection.....	4
Number recovered, or "no case".....	211
(a) Reaction observed.....	33
(b) No reaction observed.....	158
(c) Kept under observation for re-test.....	20

Post mortem results—

Bacillus mallei found, eight cases.

Bacillus mallei not found, nine cases.

- (a) Few calcified nodules in lungs, submaxillary and bronchial nodes enlarged, one case.
- (b) Few staphylococci isolated from few softened ares in submaxillary gland, one case.

- (c) Few whitish centres in liver, one case.
- (d) Congested bronchial nodes, one case.
- (e) Few congested lymph nodes, one case.
- (f) Large abscess in lung tissue, one case.
- (g) Autopsy negative, three cases.

May.

Number of horses injected.....	191
Number condemned, post mortem examination made.....	20
Number recovered, or "no case".....	171
(a) Reaction observed.....	55
(b) Reaction not observed.....	105
(c) Kept under observation for re-test.....	11

Post mortem results—

- Bacillus mallei found, two cases.
- Bacillus mallei not found, eighteen cases.
- (a) Mediastinal glands slightly enlarged, one case.
- (b) Glands enlarged, grayish consolidation in lungs, one case.
- (c) Nodules in lungs, four cases.
- (d) Lungs congested, four cases.
- (e) Congested lungs with calcified nodules, one case.
- (f) Congested lungs with abscesses, one case.
- (g) Congested lungs with enlarged submaxillary and mediastinal glands, one case.
- (h) Autopsy negative, five cases.

June.

Number of horses injected.....	88
Number condemned, post mortem examination made.....	10
Number recovered, or "no case".....	78
(a) Reaction observed.....	75
(b) No reaction observed.....	2
(c) Kept under observation for retest.....	1

Post mortem results—

- Bacillus mallei found, three cases.
- Bacillus mallei not found, seven cases.
- (a) Lungs consolidated, two cases.
- (b) Nodules with whitish centers in lungs, one case.
- (c) Congested lungs with nodules, one case.
- (d) Calcified nodules in lungs, one case.
- (e) Autopsy negative, two cases.

Summary.

Total number of horses injected.....	616
Total number died after injection, post mortem examination made..	3
Total number condemned.....	62
(a) Post mortem examination made.....	47
(b) Specimen from post mortem not in condition for examination	7
(c) No post mortem examination made.....	8
Total number died from distemper, after injection.....	4
Total number recovered, or "no case".....	547
(a) Reaction observed	193
(b) No reaction observed	321
(c) Kept under observation for retest.....	33

Post mortem results—

Bacillus mallei found, fourteen cases.

Bacillus mallei not found, thirty-six cases.

(a) Characteristic lesions shown, twenty-five cases.

(b) Autopsy negative, eleven cases.

Table Showing, by Weeks, Number of Glandered Horses Condemned during 1903.

WEEK ENDING	WEEK ENDING	WEEK ENDING	WEEK ENDING
Jan. 3..... 5	Apr. 4..... 13	July 4..... 14	Oct. 3..... 18
" 10..... 13	" 11..... 20	" 11..... 24	" 10..... 14
" 17..... 9	" 18..... 53	" 13..... 30	" 17..... 26
" 24..... 17	" 25..... 51	" 25..... 14	" 24..... 17
" 31..... 12	May 2..... 14	Aug. 1..... 21	" 31..... 15
Feb. 7..... 8	" 9..... 34	" 8..... 30	Nov. 7..... 17
" 14..... 4	" 16..... 15	" 15..... 21	" 14..... 10
" 21..... 14	" 23..... 19	" 22..... 19	" 21..... 9
" 28..... 8	" 30..... 17	" 29..... 16	" 28..... 9
Mar. 7..... 6	June 6..... 22	Sept. 5..... 7	Dec. 5..... 12
" 14..... 7	" 13..... 38	" 12..... 13	" 12..... 14
" 21..... 21	" 20..... 25	" 19..... 29	" 19..... 15
" 28..... 27	" 27..... 31	" 26..... 25	" 26..... 11
First Quarter..... 151	Second Quarter..... 352	Third Quarter..... 263	Fourth Quarter..... 190

Glanders.

	1901.	1902.	1903.
Animals examined	18,423	19,862	42,622
Glandered horses condemned.	363	470	975
Post mortems	113	212	286

All stables visited by the Veterinarians that were found to be in bad sanitary condition were referred to the Division of Inspections, and many orders were made in regard to

- (a) Light and ventilation.
- (b) Sanitary flooring and drainage.
- (c) Storing and removal of manure.
- (d) Vacating of many stables, especially those in cellars.

Section 75 of the Sanitary Code was adopted during the summer of 1903 and is as follows:

“No cellar in The City of New York shall be occupied as a stable for horses, cattle or other animals without a permit from the Board of Health.”

There is no doubt that the infection of glanders is often spread by means of the watering troughs placed in various parts of the City, and it would be of great benefit to all concerned if an ordinance was passed compelling all drivers to carry pails and use them in watering their horses, and abolishing all watering troughs and fountains and substituting hydrants.

Respectfully submitted,

A. BLAUVELT, M. D., Chief Inspector.

Department of Health—Borough of Manhattan, }
 Division of Bacteriology. }

Dr. WALTER BENSEL, Assistant Sanitary Superintendent, Borough of Manhattan:

Sir—I have the honor to submit the following report of the work done during 1903 by the Diagnosis Laboratory and office of the Division of Bacteriology:

The present working staff consists of the Assistant Director, five Assistant Bacteriologists, twelve Medical Inspectors, five Clerks, two Office Boys, thirteen Laboratory Assistants and one Cleaner. The following changes and additions were made during the year:

Dr. C. M. Meyer, Assistant Bacteriologist, resigned March 5, 1903.

Dr. A. I. Weil, Assistant Bacteriologist, appointed April 17, 1903; services dispensed with October 5, 1903.

Dr. H. W. Patterson, Assistant Bacteriologist, appointed April 17, 1903.

Dr. L. Rosenwasser, Medical Inspector, dismissed on charges January 19, 1903.

Dr. H. B. Jones, Medical Inspector, assigned to Division June 1, 1903; transferred August 8, 1903.

Dr. H. G. MacAdam, Medical Inspector, assigned to Division September 1, 1903.

Dr. S. Tannenbaum, Medical Inspector, assigned to Division September 1, 1903.

Dr. P. Ernst, Medical Inspector, assigned to Division November 4, 1903.

Dr. E. G. Bryant, Medical Inspector, assigned to Division November 4, 1903.

Victor Koenig, Laboratory Assistant, appointed April 17, 1903.

John B. Byrne, Laboratory Assistant, appointed May 27, 1903.

William Goldfinger, Office Boy, appointed June 3, 1903.

A. B. Irving, Office Boy, appointed June 24, 1903.

The statistical report of the work done is given on a separate sheet; the figures are given from January 1, 1903, to October 1, 1903, and also for the whole of 1903. Wherever possible the corresponding figures are given for 1902. In some cases the particular work done was only begun in 1902 or 1903.

The routine work of the laboratory and office has progressed as usual. The number of complaints as to unsatisfactory nature of bacteriological diagnoses, incorrect and delayed reports, non-delivery of specimens from culture stations, etc., has been remarkably small. The general morale has been excellent; with but one or two exceptions, the inspection, laboratory and office force have taken pride and interest in their work and have cheerfully helped out in emergencies.

Attention is again called to the fact that enlargement of and improvements in the laboratory are urgently needed. At present, while the work done is satisfactory, the appearance of the laboratory and the facilities afforded the workers therein are far from a credit to the Department (See special report previously submitted). The

main laboratory is fumigated at regular intervals as a matter of precaution, although no case of infection with diphtheria, tuberculosis or typhoid fever among the laboratory force has ever occurred. A supply of surgical gowns has also been purchased and will be issued to the workers in the laboratory.

Diphtheria.

The collection, examination and reporting of diphtheria cultures from all the boroughs has gone on as formerly. The system of reporting results by telephone to the Physician and the borough offices gives great satisfaction. All cases of diphtheria in the Borough of Manhattan have been plotted on a large map, showing houses in which cases occurred.

In accordance with the conclusions arrived at in the report previously submitted by the Assistant Director on "The Value of Confirmatory Cultures in Diphtheria," the system of reporting the results of primary diphtheria cultures has been greatly modified and simplified, the end in view being to make a positive statement as to the presence or absence of diphtheria bacilli in as many cases as possible, so reducing the number of indecisive cases to a minimum. The present system is as follows:

Every positive culture, whether from a person suspected of having diphtheria or from one who has only been exposed to the disease, will be reported as showing diphtheria bacilli.

Every negative culture from persons suspected of having diphtheria, where the duration of the disease is ten days or less, will be reported as probably being not diphtheria, excepting under the following conditions, when a confirmatory culture will be asked for:

- (a) When there is no growth on the culture medium.
- (b) When the culture medium is completely contaminated and liquefied, and where the clinical diagnosis is diphtheria.
- (c) When suspicious or diphtheria-like bacilli are present.
- (d) When the membrane is limited to the larynx, the duration of the disease is five days or less, and the clinical diagnosis is croup or laryngeal diphtheria.

The system went into effect April 1, 1903, and the results have been most satisfactory.

Although the old system was in use for the first three months of 1903, yet the indecisive cases have been reduced from 12 per cent. in 1902 to 5 per cent. in 1903, as shown in table of statistics.

The following table shows the comparative results obtained for corresponding periods in 1902 and 1903 in Manhattan and The Bronx:

Table I.

	April 1 to October 1, 1902.	Confirmed Trues.	April 1 to October 1, 1903.	Confirmed Trues.	April 1, 1902, to January 1, 1903.	Confirmed Trues.	April 1, 1903, to January 1, 1904.	Confirmed Trues.
True	2,856	....	3,313	....	4,510	....	4,223	....
False	2,193	28	3,362	50	4,298	39	4,651	73
Doubtful	1,115	18%	438	6%	1,852	1%	609	6%
A (too late)	343	13	....	....	551	18	....	....
B (scanty growth).....	60	5	79	10	123	13	158	24
C (contaminated).....	99	14	32	7	205	31	59	11
D (dry).....	1	....	....	....	2	....	....	....
E (suspicious).....	422	55	248	48	618	87	305	66
F (laryngeal)	130	8	89	6	257	13	87	15
G (Antiseptic used).....	60	9	....	....	96	12	....	....
Total confirmed true.....	....	132	....	121	....	213	....	189

Comparison of the results will show that while the number of confirmatory cultures asked for in 1903 was much less than in 1902, yet the number of such confirmatory cultures showing diphtheria bacilli remained about the same, showing that such cases requiring a second culture are not overlooked.

So far not a complaint has been received as to any nonconformity of clinical and microscopical diagnosis, due to this new system. Further, mistakes on the part of the Assistant Bacteriologists have been much fewer.

Attention is called to the enormous increase in the number of cultures examined during 1903. During the first nine months of 1903, 64,000 cultures were examined as compared with 21,000 for the corresponding period of 1902. Even deducting the large numbers of trial cultures and those taken by Medical School Inspectors the increase is very great.

Medical School Cultures.

Early in the year the Medical School Inspectors began to pay special attention to taking cultures from the throats of school children; as a result the number of cultures submitted was very large, as shown in the table of figures. Epidemics of diphtheria also occurred in two large institutions (Hebrew Orphan Asylum and Protestant Episcopal Orphan Asylum) and hundreds of trial cultures were taken and examined. On one day over nine hundred cultures were examined in the laboratory. A special book of culture slips for Medical School Inspectors has been devised, the slips being sent in in duplicate, and one returned to the Inspector as a report, the other to the

Division of School Inspection—thus doing away with the clerical reporting of the cases.

The examination of cultures for diagnosis and discharge from Willard Parker and Riverside Hospitals was transferred from the Research Laboratory to the Diagnosis Laboratory on October 21, 1903. These cultures are examined at 9 a. m. and the results sent by a special messenger, so as to reach the Willard Parker Hospital by 10.30 a. m., in order that all records of diphtheria cases might be kept at main office.

Brooklyn.

The table of figures shows an increase of over one hundred per cent. in the number of cultures and other specimens submitted. This is largely due to better work on the part of the Inspectors. The number of trial cultures from school children has also greatly increased.

Queens.

An increase of almost 100 per cent. is shown in the cultures, specimens of sputum, etc., from this borough.

Richmond.

Numerous complaints having been received from physicians of the Borough of Richmond of the unsatisfactory condition of the culture service there, on May 7, 1903, a regular collecting route, similar to the one in Queens, was established, and a Collector, John B. Byrne, was appointed May 27, 1903, to visit all the stations daily, including Sunday. Stations were established as follows:

Richmond terrace and York avenue, Vredenburg.
 Bay and Thompson streets, Stapleton, Feeny.
 Richmond terrace, Port Richmond, Kerr.
 New York and St. Mary's avenues, Rosebank, Lenz.
 Main street, Tottenville, Lehman.
 Shore road, Mariner's Harbor, Jones.
 Sixth street, New Dorp, Brandenburg.

Collection begins at 3 p. m. from St. George, and specimens reach the Diagnosis Laboratory by 7 p. m. So far the service has given entire satisfaction.

As shown by table of statistics, a great increase has taken place in the number of specimens sent in for examination.

Administration of Diphtheria Antitoxin.

The free administration of antitoxin in cases of diphtheria, and the immunization of persons exposed to the disease has been carried out by the same Inspectors who have in charge the sanitary supervision of pulmonary tuberculosis. As the combined

work has grown too heavy to be properly attended to, two new Inspectors have been assigned to these duties and the Borough of Manhattan divided into ten districts. An extra Inspector, Dr. Bryant, late Resident Physician at Willard Parker Hospital, and thoroughly conversant with intubation, has been put in charge of all intubation cases. He answers all calls with the District Inspector and the Ambulance Physician of the Hospital, follows up all cases that do not go to the Hospital and instructs the District Inspectors in the methods of intubation. No cases of abscess formation following injection of antitoxin have occurred during the year, but to ensure the best results, special cases are now used in which the syringe and needles are always boiled before use.

The tabulation of the results obtained by the Inspectors is attached. Comparison of the same with those of 1902 shows a reduction in the case mortality from 7.5 per cent. to 4.9 per cent. If the cases which were moribund when injected are excluded, the rates are 4.9 per cent. and 3.8 per cent. respectively.

The tabulation of the results obtained by physicians using Department antitoxin in cases unable to pay for the same is attached. These cases show a mortality of 10.7 per cent. (moribund deducted, 8.5 per cent.) as compared with 9.9 per cent. (moribund deducted, 6.5 per cent.) for 1902.

The new system of reporting doubtful diphtheria cultures now excludes many cases which previously were included in above figures; such cases always recovered, so that had they been included the results would be even better.

Culture Tubes and Swabs.

A much larger number of tubes and swabs was used than during 1902 (see table).

Experiments have been made with a view to the rapid preparation and sterilization of serum tubes in the autoclave. The results so far have been very satisfactory, and it is hoped to utilize the method as a matter of routine early in the year. The tubes for the Borough of Richmond have been sealed with paraffine to prevent drying; the physicians express themselves as pleased with them. Rubber caps for sealing all tubes which may not be used for two or three weeks have been ordered, but have not as yet been received.

TUBERCULOSIS.

Sputum Examinations.

As shown in the table of statistics, the number of specimens of sputum examined during 1903 shows a great increase over 1902, this holding good for all boroughs.

During 1903 Ehrlich's method of staining for tubercle bacilli, as modified by H. T. Cronk, Assistant Bacteriologist, has been tried, and so far has proved superior to that now in use (Koch) for the following reasons:

1. Rapidity; specimens can be decolorized en bloc.
2. Heat not required.
3. Tubercle bacilli are not decolorized, while all other acid-fast bacilli apparently are.
4. Larger quantities of sputum can be used, and then even smears are not necessary.
5. Brighter and more distinctive staining of the tubercle bacilli. The method in brief is as follows: Thick smears on glass slides are stained with 5 per cent. carbolfuchsin for five to ten minutes, washed in water, dried with filter paper, and decolorized and counterstained with the following solution for five minutes, washed in water and dried. Ether nitrosi C. P., ether acetic C. P., and sat. sol. methylene blue in 95 per cent. alcohol, equal part of each. The specimen can remain in the decolorizing solution for 24 hours without harm. Further observations will be made and a full report submitted.

Sanitary Supervision of Tuberculosis.

The staff of eight Inspectors in charge of tuberculosis having been found insufficient, two more Inspectors were assigned to duty on November 1, 1903, and the City redistricted as follows:

Battery to Canal, Division and Grand streets, east and west, Dr. Hall.

Canal and Grand to East Houston, east of Broadway, Dr. Ernst.

East Houston to Fourteenth street, east of Broadway, Dr. Tannenbaum.

Fourteenth street to Forty-second street, east of Fifth avenue, Dr. Studdiford.

Forty-second street to Eightieth street, east of Fifth avenue, Dr. Koester.

Eightieth street to One Hundred and Sixteenth street, east of Park and Seventh avenues, Dr. Stevenson.

Canal to Twenty-third street, west of Broadway and Fifth avenue, Dr. Mahoney.

Twenty-third street to Fiftieth street, west of Fifth avenue, Dr. Sprague.

Fiftieth street to One Hundred and Sixteenth street, west of Park and Seventh avenues, Dr. McAdam.

North of One Hundred and Sixteenth street, Dr. Richardson.

Special Inspector, Dr. Bryant.

(Dr. Rosenwasser, who was dropped from the service on January 19, 1903, was replaced by Dr. Jones, who was transferred to Brooklyn, and in turn was replaced on August 28 by Dr. McAdam.)

The good results of the increase in the working force was at once shown by the greater promptness with which cases could be visited, and the necessary disinfection carried out. A time limit of three days has been set, but the majority of inspections are made the day following assignment.

The following table shows the work done by the individual Inspectors and Nurses:

Table II.

MEDICAL INSPECTORS AND NURSES.	New Cases Treated With Antitoxin.	Number of Curative Injections.	Number of Cases Im- munized.	Number of Cases In- tubated.	Total Number of Dipht- heric Inspections.	Living Cases of Tu- berculosis.	Dead Cases of Tuber- culosis.	Miscellaneous.	Total Inspections.	Original Complaints.	Special Reports.
Dr. Hall.....	334	334	364	16	971	985	270	34	2,260	114	132
Dr. Jones	158	170	257	9	450	546	232	38	1,266	87	31
Dr. Koester	270	305	910	23	962	675	371	384	2,142	217	132
Dr. MacAdam.....	22	8	9	....	60	43	26	1	130	4	7
Dr. Mahoney.....	185	181	203	2	493	1,097	535	187	2,312	292	98
Dr. Richardson.....	227	230	645	2	524	474	253	195	1,446	36	66
Dr. Rosenwasser	17	11	17	2	41	32	26	9	108	3	3
Dr. Sprague	193	229	1,003	19	656	756	494	114	2,020	70	308
Dr. Stevens	308	337	1,042	22	942	503	494	137	2,076	199	65
Dr. Studdiford.....	155	64	293	....	512	685	327	14	1,538	60	20
Dr. Tannenbaum	15	21	30	....	85	206	105	11	407	10	99
Miss Graham.....	....	....	....	....	....	....	....	....	1,123	....	....
Miss Belliss .....	....	....	....	....	....	....	....	....	960	....	....
Dr. Dembo .....	....	....	....	....	....	....	....	....	873	....	....

Every case seen by an Inspector has had a special record card filled out, and full instructions have been given to the patients and their families regarding the necessary precautions to be taken, etc. To this latter end the "Circular of Instruction to Consumptives," issued by the Department has been translated into German, Italian, Yiddish, Chinese, Ruthenian, Polish, Hungarian and Russian, and these circulars are distributed by the Inspectors and Nurses. Large numbers have also been forwarded to the Charity Organization Society for distribution. The "Circular of Information Regarding Pulmonary Tuberculosis" has been rewritten and largely added to and is now ready for distribution. Many cases have been sent into Metropolitan, Seton, St. Joseph's and other hospitals besides those admitted to Riverside Sanatorium (see later). Many cases have been referred to the Charity Organization Society, the Society for the Prevention of Cruelty to Children, etc., for aid of various kinds, and they have all been followed up to see that relief was obtained.

During the latter part of the year fumigation with sulphur has been largely used in place of formaldehyde. All bedding is now fumigated at the house previous to its removal for disinfection.

Nurses.

A corps of three nurses was organized March 1, 1903, their duties being to visit all cases reported as being incapacitated for work, to see that instructions are being carried out, to furnish spit cups, and render any assistance in their power. In addition they have made house to house inspections of cases of tuberculosis in order to learn what has become of the cases reported. A summary of the work performed is given in Table II.

Riverside Sanatorium.

On May 8, 1903, a sanatorium for pulmonary tuberculosis was opened at Riverside Hospital. The admission of patients was discontinued in August because of lack of funds. But in that short time the good results accomplished were very great. A special report, together with analyses of the cases, is attached. It is to be hoped that admission of patients will be resumed January 1, 1903.

Dispensary.

A building for the clinic for the treatment of pulmonary diseases has been erected next door to the Department of Health, and will be opened January 1, 1904. A special circular detailing its objects has been prepared for distribution and the necessary history blanks, reference cards, etc., have been printed. A copy of the circular is attached.

Registration of Tuberculosis.

The new system of registration of tuberculosis introduced on January 1, 1903, has proved better and simpler in every way than the old system, and it is recommended that steps be taken to introduce it into the other boroughs of the City. Every effort has been made towards securing complete notification of cases of tuberculosis. Weekly reports are sent in by all institutions receiving cases from Manhattan. The annual total of cases so reported is as follows:

Number of New Cases of Pulmonary Tuberculosis Reported by Institutions.

January 1, 1902, to October 1, 1902.....	6,796
January 1, 1903, to October 1, 1903.....	7,874
1902	8,976
1903	10,258

It will be seen that a substantial gain was made in 1903.

A census is taken twice a year of all cases in the institutions. The following table shows very well the good that has been accomplished, the number of "new cases" (i. e., previously unreported) having grown less at each census:

Table Showing Number of Cases of Tuberculosis in City Institutions on a Given Date.

	November 15, 1902.	January 1, 1903.	May 20, 1903.	October 15, 1903.
Total cases.....	952	899	1,170	1,303
New cases.....	233	166	36	229
Old cases.....	691	733	1,040	1,074

Every death from tuberculosis not previously reported as a living case is investigated and the reason for its not having been reported obtained from the attending physician. The number of "not previously reported deaths" has diminished in a most gratifying manner.

Between February 1 and October 1, 1903, letters have been written to three hundred and fifty-four (354) physicians relative to non-reporting of cases of tuberculosis previous to death. A certain proportion of these required a second letter and a still smaller proportion reference to the Corporation Counsel for letters. More or less satisfactory replies have been received after a time from all except three, and these cases are now in the hands of the Corporation Counsel.

Special efforts have been made to simplify the records, so as to have them represent (a) all living cases of tuberculosis in Manhattan; and (b) all such cases under observation by this Department. To this end house-to-house inspections are being carried on, and all the "not found" or dead cases eliminated from the records. The private cases previous to 1900 have been traced (by means of letters to the attending physicians), and in many of them permission to inspect has been granted. All cases in Manhattan have been plotted on the special large house maps referred to under diphtheria.

Special inspections as to the origin of tubercular disease in children under five, and as to the treatment received by consumptives in public institutions, have been made by this Division and the results already reported.

Typhoid Fever.

The number of specimens of blood and urine submitted during 1903 for examination by the Widal and Diazo reactions, as shown in the Table of Figures, has increased very greatly. During the year 11 cases of typhoid fever on the Croton watershed were investigated, and a canvass of physicians (75) carried out. Small epidemics of typhoid fever in the New York Deaf and Dumb Asylum and the New York Juvenile Asylum were investigated and reports submitted.

In November the inspection as to origin of cases of typhoid fever occurring in Manhattan was assigned to this Division. Attached is the report of Dr. B. H. Waters on the results so far attained.

Malaria.

After thorough trial of the Nocht, Romanowsky, Jenner, Carbol-Thionin and Goldhorn methods of staining for the malaria parasite, the last (Goldhorn) has proved to be the best and most reliable, and accordingly all specimens are so prepared.

A new circular on mosquitoes and malaria has been prepared and issued.

Culture Stations.

The culture stations throughout the City have been inspected at regular intervals and the proprietors instructed as to the necessity of keeping on hand a full stock of all tubes, etc., supplied by the Department. During 1903, 19 new culture stations were established and fourteen discontinued.

A special supply and collection case, made of white enamelled metal, has been devised for use in the Culture Stations of the Department. A sample was made and is at present in the Department, but, owing to lack of funds, no more could be obtained. It is far superior in capacity, cleanliness, convenience and beauty to the tin boxes at present in use.

Table of Statistics.

	JANUARY 1 TO OCTOBER 1, 1902.	JANUARY 1 TO OCTOBER 1, 1903.	1902.	1903.
<i>Diphtheria.</i>				
Whole City—				
Number bacteriological diagnoses suspected diph- theria.....	10,990	19,177	16,653	25,833
Number showing K. L. B.....	5,393	7,525	7,757	10,477
Number not showing K. L. B.....	4,115	10,660	6,887	14,190
Number indecisive.....	1,482	992	2,059	1,166
Number trial cultures.....	228	14,312	620	14,994
Number later cultures.....	10,273	17,547	14,483	23,077
Number Medical School cultures (from September } 13, 1902, to June 27, 1903)..... }	.....	13,165	.....	13,584
Number Medical School cultures, K. L. B.....	.....	946	.....	873
Number Medical School cultures, no K. L. B.....	.....	11,494	.....	11,404
Number Medical School cultures, indecisive.....	.....	417	.....	351
Manhattan and The Bronx.....	8,514	13,907	12,468	18,598
Number showing K. L. B.....	4,214	5,107	5,880	7,145
Number showing no K. L. B.....	2,950	8,257	4,970	10,627
Number indecisive.....	1,055	724	1,396	826
Brooklyn.....	2,324	4,944	3,940	3,332
Number showing K. L. B.....	1,118	2,260	1,785	2,972
Number showing no K. L. B.....	823	2,441	1,563	3,173
Indecisive.....	383	243	592	289
Queens.....	124	208	191	493
Number showing K. L. B.....	52	109	79	225
Number showing no K. L. B.....	34	84	59	242
Number indecisive.....	38	15	53	26
Richmond.....	23	118	54	306
Number showing K. L. B.....	9	49	13	133
Number showing no K. L. B.....	13	59	23	148
Number indecisive.....	6	10	18	25
Total number cultures.....	21,491	64,201	31,756	77,488
Number culture tubes prepared.....	.....	64,335	66,700	86,414
Number swabs prepared.....	.....	65,990	77,383	86,965
Number new cases treated with antitoxin.....	1,053	1,869	1,673	2,469
Number curative injections given.....	1,076	1,993	1,836	2,623
Number cases immunized.....	2,028	4,999	4,186	5,341
Number cases intubated.....	31	95	79	113
Total number diphtheria inspections.....	3,695	4,920	5,615	7,679

	JANUARY 1 TO OCTOBER 1, 1902.	JANUARY 1 TO OCTOBER 1, 1903.	1902.	1903.
<i>Tuberculosis.</i>				
Total number specimens sputum examined (Greater New York).....	5,443	8,598	7,587	11,859
Number showing tubercle bacilli.....	2,138	3,216	3,000	4,327
Number not showing tubercle bacilli.....	3,305	5,274	4,587	7,512
Total number cases reported, Manhattan and The Bronx..	7,008	7,738	9,130	10,247
Number deaths from tuberculosis.....	5,723	6,003	7,571	8,001
Number duplicates.....	2,660	3,451	3,623	4,998
Number tuberculosis inspect ons.....	4,979	11,545	9,128	12,514
Number living cases visited by Inspectors.....	3,064	5,787	6,039	8,503
Number dead cases visited by Inspectors.....	1,915	2,822	3,039	4,011
Number living cases visited by Nurses.....	.....	2,956	.....	5,028
Number of original complaints.....	921	1,094	1,319	1,338
Number of fumigations.....	.....	.....	.....	.....
Number of special reports.....	439	1,357	1,100	1,336
Number of cases referred to Charity Organization Society	3	172	5	226
Number of cases referred to hospital.....	16	103	17	193
<i>Typhoid.</i>				
Number specimens blood examined for Widal reaction...	2,029	2,907	3,369	4,231
Number showing reaction.....	583	750	1,179	1,125
Number not showing reaction.....	1,446	2,157	2,190	2,978
Number showing doubtful.....	.....	.....	.....	128
Number of specimens of urine examined for Diazo.....	203	509	402	739
Number showing reaction.....	.....	191	150	276
Number not showing reaction.....	.....	219	182	336
Number showing doubtful reaction.....	.....	99	70	127
Number inspections, cases of typhoid fever.....	.....	80	.....	365
<i>Malaria.</i>				
Number specimens blood examined.....	.....	464	89	658
Number showing plasm. malarix.....	.....	52	8	63
Number not showing plasm. malarix.....	.....	412	81	595
Number visits to collect specimens.....	.....	.....	16,025	18,226
Number of pneumonia inspections.....	.....	.....	.....	139

Respectfully submitted,

J. S. BILLINGS, JR., M. D., Assistant Director.

Tables Showing Injections of Antitoxin Made by Inspectors of the Department of Health from January 1, 1903, to October 1, 1903.

Total number of cases injected.....					1,813
Sent to Willard Parker Hospital.....				145	
False				460	
				<u>605</u>	
Total number of cases considered as diphtheria.....					<u>1,208</u>
K. L. B. present.....	1,140				
Doubtful	52				
No culture	16				
				<u>1,208</u>	
				72	5.9
Moribund deduct.....	26			26	
				<u>1,182</u>	
				46	3.8

TABLE I.

Laryngeal Cases.

Total cases.....	208	33	11.
Moribund deducted.....	20	20	
	<u>188</u>	<u>13</u>	<u>7.</u>

Operative Cases.

Total cases	37	8	21.6
Moribund deducted	2	2	
	<u>35</u>	<u>6</u>	<u>17.</u>

Non-operative Cases.

Total cases	171	25	14.6
Moribund deducted	18	18	
	<u>153</u>	<u>7</u>	<u>4.5</u>

TABLE II.

Location.

Tonsils	586
Pharynx	198
Larynx	208
Nares	206
Not stated	10
	<u>1,208</u>

TABLE III.

Character of Lesion.

Mild	282
Moderate	525
Severe	288
Septic	103
Not stated	10
	<u>1,208</u>

TABLE IV.

Cause of Death.

Pneumonia	7
Nephritis	3
Cardiac paralysis	19
Asphyxia	12
Sepsis	25
Scarlet fever	3
Exhaustion	1
Not stated	2
	<u>72</u>

TABLE V.

Showing Day of Disease, When First Injection Was Given and Mortality Percentage.

Day.	Number of Cases.	Deaths.	Mortuary Percentage.	Moribund Deducted.	LEAVES		Mortuary Percentage.
					Cases.	Deaths.	
First.....	168	4	2.3	2	166	2	1.2
Second	452	19	4.2	6	446	13	2.9
Third	315	18	5.8	3	312	15	4.8
Fourth	134	14	10.4	7	127	7	5.5
Fifth.....	61	8	13.	4	57	4	7.
Over five.....	66	8	12.	4	62	4	6.4
Not stated	13	1	7.7	..	13	1	7.7

TABLE VI.

Showing Number of Injections.

1 injection	1,046
2 injections	150
3 or more	8
Not stated	4
	<u>1,208</u>

Immunization.

Number of families.....	1,265	
Number of Individuals.....	3,120	
Number contracting disease before two or after thirty days.....	7	.022%
Number contracting disease between two and thirty days.....	18	.057%
Number exposed, not immunized, and contracting disease.....	9	
Rash	40	
Number of institutions in which immunization was performed..	7	
Total number of cases in institutions.....	<u>1,619</u>	

J. S. BILLINGS, M. D.

Report on Cases of Pulmonary Tuberculosis Treated at Riverside Sanitarium, from
May 8, 1903, to November 15, 1903.

On May 8, 1903, the Riverside Sanitarium for Pulmonary Tuberculosis was opened at Riverside Hospital, North Brother Island. The isolated wards at the south end of the island, used during the winter months for cases of scarlet fever, were thoroughly cleansed, disinfected and renovated, and a large tent was erected close by. Men and women were put in separate wards. The objects in view were as follows:

1. To provide hospital accommodations for the following classes of cases:

(a) Those who cannot or will not take the necessary precautions as to care of expectoration, mode of life, etc., and who are a menace to those about them, and at the same time refuse to go to any hospital. (Forcible removal cases.)

(b) The itinerant cases—mostly men and hard drinkers, who live in lodging houses, and when in bad condition go into a hospital for a week or two until somewhat improved. They then leave and resume their old life, to the detriment of themselves and those about them. Such cases are among the most dangerous sources of infection.

(c) Cases of a better class than the average inmates of the Metropolitan Hospital on Blackwell's Island.

(d) Incipient and other hopeful cases, expecting to leave the City after a time.

2. To provide an object lesson as to the necessity and utility of such an institution, to be conducted by the City. The Department of Charities has in the Metropolitan Hospital an admirable institution for the consumptive poor and moribund cases. But patients cannot be compelled to enter there, nor are they held there against their will. And, further, all cases for the Metropolitan Hospital pass through Bellevue Hospital, and it cannot be denied that the average New Yorker objects strongly to entering the latter.

The Inspectors and Nurses of the Department were instructed to report all cases suitable for admission. On receipt of such notice, an ambulance or coupe (patients were not allowed to use the street cars) was sent for the patient, and he was removed to the Reception Hospital, at the foot of East Sixteenth street, thence to go by boat to Riverside Hospital. Many cases made personal application at the Department of Health; others applied through their friends. It must be remembered that only cases coming under the above-mentioned heads were admitted. The great majority of applicants for hospital treatment were referred to the Department of Charities for admission to the Metropolitan or Seton Hospitals.

Treatment.

This was purely supporting and expectant. No cod liver oil, creosote or other special remedies for pulmonary tuberculosis were used. Iron and strychnia as a tonic, atropia for the night sweats and heroin for the cough, were the medicines most in use. The food constituted the treatment, and special efforts were made to supply these patients, not only with a generous full diet, but also with the best milk and eggs obtainable. They were urged to keep out of doors all day long, to play games and to fish from the sea wall. Requests for discharge were forwarded to the Department, and if the patient was returning to the City, the circumstances were investigated and the condition of the patient considered before permission to leave was granted.

Analysis of Cases.

The first case was admitted on May 8, 1903, and the last regular case on August 18, 1903. Since the latter date one or two special cases have been admitted.

At this date (November 15, 1903) 127 cases have been admitted. Of these 11 are still in the sanitarium, 32 died in the sanitarium and 84 were discharged. The case mortality was therefore 25 per cent. But some of the cases remained only a few days, and if we throw out all cases remaining in the sanitarium less than two weeks (20, of which 11 died) we have 107 cases and 21 deaths, a case mortality of 19 per cent.

Age—The average was 35 years. The oldest patient admitted was 80 years; the youngest 13 years.

Under 30 years.....	46
Between 30 and 50 years.....	47
Over 50 years.....	33

Sex—Male, 99; female, 27.

Occupation—The majority of the cases had led indoor lives, while those accustomed to the open air had mostly been exposed to all weathers—drivers, etc. Out of 95, 60 had led indoor lives and 35 outdoor.

Classified as to occupation we have:

Laborers	33
Trades	47
Clerks or professions.....	<u>12</u>

Habits—Information as to this point was obtained in 95 cases: 18 were heavy drinkers, 16 drank in moderation, while 61 did not drink.

Two patients were addicted to morphine.

Family History—Out of 93 cases the family history was negative in 76—81 per cent.

Of the remaining 17 (19 per cent)—

Father consumptive in.....	5
Mother consumptive in.....	7
Brothers or sisters in.....	<u>5</u>

Previous History—As would be expected a history of preceding pleurisy or pneumonia was frequent. Pleurisy had occurred in 24 cases, pneumonia in 15. In three cases there was a history of injury to the chest. Two patients had chronic valvular disease of the heart, both mitral. One patient had a tubercular joint.

Duration of Present Illness—The average duration was 14 months.

Hemorrhages Previous to Admission—These occurred in 30 instances.

Condition on Admission—This was good in 24, fair in 29, and bad in 65 (over 50 per cent).

Location of Lesion.

Upper right and left.....	45
Upper right	27
Upper left	10
Whole right and upper left.....	8
Whole left	6
Whole left and upper right.....	3
Whole right	4
Lower left	2
Whole left and lower right.....	2
Lower left and upper right.....	2
Intestines	1
Larynx (fatal 6).....	<u>12</u>

The above figures show that the involvement was:

Upper lobes in.....	107
Upper lobes alone in.....	82
Lower lobes in.....	27
Lower lobes alone in.....	2
Cavity in	31

Five cases had a hemorrhage while in hospital.

One case had pericarditis, probably tubercular.

All the cases were vaccinated with no harmful results.

Fever occurred in 71.

Result of Treatment—Of 95 cases:

Improved	70—73 per cent.
No change	20—21 per cent.
Worse	5—6 per cent.

Gained weight, 70 cases.

Average amount in 17 cases, 12 pounds.

Greatest individual gain, 37 pounds.

Stay in Hospital—Average, 5 weeks; shortest, 1 day; longest, 6 months.

Visited by Nurses—Of the 84 discharged cases, 71 returned to Manhattan. These were assigned to nurses for inspection with the following results:

Not found at addresses given.....	31
Dead	6
Found in good condition.....	25
Found in fair condition.....	2
Found in poor condition.....	7
Found able to work.....	14

In every single case the patient expressed the highest possible opinion of the treatment received at the sanitarium. There was no exception.

Dead Cases—These were 32 in number. The average age was 33, and duration of illness 7 months. In 4 out of 19 cases the whole of one lung was involved, in 12 both were involved, and cavity occurred in 14 out of 19. Of 14, 5 were heavy drinkers. Of 19, 18 were in bad condition on admission, 5 had laryngeal involvement.

The good reputation and knowledge of the sanitarium among the people at large is remarkable, considering the short time it was open and the comparatively small number of patients admitted. As shown above, in every instance the patients spoke in terms of the highest praise of the treatment received there. Such expressions as "The hospital saved my life," were heard time and again, and requests for admission

and inquiries as to when the hospital will reopen are constantly being received. Patients strongly adverse to entering the hospital soon changed their minds after admission. Bearing in mind the fact that these cases were for the most part in bad condition on admission, of bad habits, and with extensive involvement of the lungs, the results obtained were certainly satisfactory to the highest degree. Fresh air, sunshine, good food, and as far as possible absence of worry, were the main factors. Had any special line of treatment been followed how surely would the good results been attributed thereto.

J. S. BILLINGS, M. D.

Department of Health,
Southwest Corner Fifty-fifth Street and Sixth Avenue, }
New York, Nov. 19, 1903.

Dr. J. S. BILLINGS, Assistant Director:

Sir—I have the honor to report that on October 28 an investigation of cases of typhoid fever was undertaken by the Division of Bacteriology, with the view of determining, if possible, the source of the infection.

To date, 113 cases have been reported upon; of these 34 had been away from the city during a period of 4 weeks immediately preceding their illness; of the remaining 79, 15 were exposed to the disease. Milk was used habitually by 27. In 15 instances infection may have been carried by either food, milk or water; in 27 by milk or water, and in 7 by water or food. In only 12 cases could every source of infection except water be eliminated, and of these 10 used the direct supply (that is, not from tank) of Croton. In regard to 3 cases no information could be obtained, and 3 cases were found not to have been typhoid fever.

In no instance was infection clearly attributable to milk alone or food alone. Of the 42 people who may have been infected by milk, 18 bought it directly from large dairies (Borden's in 10 instances), 12 bought from different retailers and 12 from small grocery stores. Twenty-two people may have been infected by food; 6 by oysters, 5 by lettuce, 1 by oysters or lettuce, and 1 by oysters or clams. Four persons are stated to have bathed in the river.

In no instance (except where exposure is known to have occurred) has the source of infection been discovered, but in 3 instances a report of unsanitary conditions has been made to the Division of Sanitary Inspections; 2 other instances where bad sanitary conditions were reported, 1 case where oysters were obtained in a small, dirty shop, and 1 where water from a tank was used for drinking, represents the result of the work of three Inspectors for three weeks. Eighteen cases in which the first inspection seems to offer a clue to the source of infection are now being reinspected.

Respectfully submitted,

B. H. WATERS, M. D.,

Assistant Bacteriologist.

Department of Health, }
Borough of Manhattan. }

To the Assistant Sanitary Superintendent:

I herewith forward report of the work performed at the Vaccine Laboratory for the nine months ending September 26, 1903.

	JANUARY, FEBRUARY, MARCH.	APRIL, MAY, JUNE.	JULY, AUGUST, SEPTEMBER.
Number of specimens of vaccine virus tested bacteriologically.....	2,105	5,500	2,919
Number of animals vaccinated.....	27	15	25
Number of animals collected from.....	25	17	21
Number of grammes of vaccine virus collected.....	777.46	628.65	649.44
Number of cubic centimeters of liquid vaccine virus prepared.....	3,088	2,208	2,125
Number of spades charged with humanized virus.....	...	450	1,127
Number of capillary tubes of vaccine virus prepared.....	14,020	162.20	124.90
Number of small vials of vaccine virus prepared.....	994	1,145	725
Number of large vials of vaccine virus prepared.....	1,614	1,277	794
Number of mailing blocks prepared.....	32,790	5,310	3,900
Number of autopsies on animals.....	...	...	14
Number of white mice injected with vaccine virus.....	...	...	15
Number of other animals experimented upon.....	42	17	27
Number of clinical tests.....	240	365	279

Respectfully submitted,

J. K. HUDDLESTON, Director of the Vaccine Laboratory.

RESEARCH LABORATORY REPORT FOR 1903.

First Quarter.

	DIPH- THERIA.	TETANUS.	MALARIA.	DYSENTERY.
Number of inoculations of animals with toxins.....	77	6	..	27
Number of animals bled for antitoxic serums.....	16	..	..	4
Number of cubic centimeters of antitoxic serums produced....	47,590	..	..	..
Number of samples of toxin tested.....	46	4	..	..
Number of samples of antitoxic serums tested.....	78	..	..	..

Diphtheria cultures, positive.....	580
Diphtheria cultures, negative.....	652
specimens of milk.....	228
Disinfection tests.....	1,306
Pencils examined for diphtheria.....	20
Typhoid specimens, negative.....	1

Second Quarter.

	DIPH- THERIA.	TETANUS.	MALARIA.	DYSENTERY.
Number of inoculations of animals with toxins.....	66	5	..	11
Number of animals bled for antitoxic serums.....	14	..	..	3
Number of cubic centimeters of antitoxic serums produced....	100,593	14,730	3,000	..
Number of samples of toxins tested.....	50	5	..	..
Number of samples of antitoxic serums tested.....	61	..	..	..

Diphtheria cultures, positive.....	678
Diphtheria cultures, negative.....	832
Specimens of milk.....	546
Disinfection tests.....	2,400
Diphtheria bacilli tested.....	10

Third Quarter.

	DIPH- THERIA.	TETANUS.	MALARIA.	DYSENTERY.
Number of inoculations of animals with toxin.....	132	1	..	13
Number of animals bled for antitoxic serums.....	10	..	..	3
Number of cubic centimeters of antitoxic serums produced....	..	..	740	..
Number of samples of toxin tested.....	21	1	..	..
Number of samples of antitoxic serums tested.....	63	1	..	3

Diphtheria cultures, positive.....	305
Diphtheria cultures, negative.....	309
Specimen of milk.....	853
Disinfection tests.....	886
Diphtheria bacilli tested.....	81
Dysentery specimens examined.....	18
Vaccine virus tested.....	27
Feces.....	5
Urine.....	7
Water.....	8

Pasteur.

Cases treated.....	9
Number of injections made.....	49
Number of inoculations made.....	20
Diagnosis of hydrophobia.....	1
Number of animals inoculated for diagnosis.....	40
Number of animals received for diagnosis.....	17

Fourth Quarter.

Number of inoculations of animals with toxins.....	96
Number of animals bled for antitoxic serums.....	7
Number of cubic centimeters of antitoxic serums produced.....	84,395
Number of samples of toxin tested.....	96
Number of samples of antitoxic serums tested.....	56
Diphtheria cultures, positive.....	73
Diphtheria cultures, negative.....	60
Specimens of milk.....	155

Pasteur.

Cases treated.....	19
Number of inoculations made.....	34
Number of injections made.....	119
Number of animals inoculated for diagnosis.....	19
Number of animals received for diagnosis.....	4

Yearly.

Number of inoculations of animals with toxins.....	434
Number of animals bled for antitoxic serums.....	57
Number of cubic centimeters of antitoxic serums produced.....	250,948
Number of samples of toxin tested.....	223
Number of samples of antitoxic serums tested.....	262
Diphtheria bacilli tested.....	669
Vaccine virus tested.....	51
Diphtheria cultures, positive.....	1,636
Diphtheria cultures, negative.....	1,853
Specimens of milk.....	1,782
Disinfection tests.....	4,592

Pasteur.

Cases treated.....	28
Number of inoculations made.....	50
Number of injections made.....	168
Number of animals inoculated for diagnosis.....	58
Number of animals received for diagnosis.....	21

Respectfully submitted,

WM. H. PARK, M. D., Assistant Director.

Department of Health, }
Borough of Manhattan. }

To the Assistant Sanitary Superintendent :

I herewith forward report of the work performed by the Pathologist for the year 1903.

Quarters.	Inspections.	Autopsies, Human.	Autopsies, Animal.	Number of Bleedings for Anti- toxic Serum.	Number of Cubic Centi- meters of Serum Prepared.	Number of Injections of Animals.
First.....	40	67,710	112
Second.....	..	3	..	75	164,490	208
Third.....	..	3	1	36	103,215	115
Fourth.....	..	2	..	27	63,560	168

Character of Work.

Performance of autopsies in cases of doubtful infectious or contagious disease, and microscopical examination of organs from such cases.

Management of all antitoxin horses, including injections, bleedings and handling of serum in bulk.

Respectfully submitted,

GEO. P. BIGGS, Pathologist.

Department of Health,
Southwest Corner of Fifty-fifth Street and Sixth Avenue, }
New York, December 31, 1903. }

To the Assistant Sanitary Superintendent :

Sir—I have the honor to present the following report of the work performed by the Division of Chemistry during the year 1903:

At the present time the division staff consists of one Chemist, five Assistant Chemists, one Assistant Bacteriologist, five Laboratory Assistants, one Clerk and one Cleaner on duty in the laboratory, and eleven Food Inspectors assigned to milk inspection in the five boroughs of the City.

Since August 24 of this year the entire work of milk inspection has been under the direction of the Chemist, including the analytical work of the Borough of Brooklyn. It has been found advisable to transfer the Assistant Chemist, formerly on duty in the Borough of Brooklyn, with his Laboratory Assistant, to the Fifty-fifth Street Laboratory and have all the analytical work of the City conducted there. In this way an unnecessary duplication of plant is avoided, better supervision of the work is attained and the efficiency of the laboratory force considerably increased. The Assistant Chemist.

instead of confining himself solely to the milk analyses of the Borough of Brooklyn, is now able to take charge of the milk samples, not only from that borough, but also from the boroughs of Richmond and Queens, and in addition, can undertake the examination of occasional miscellaneous samples.

The character of the routine work of the laboratory has not differed materially from that described in the report of 1902. The following table will show the general character of the analytical work, giving the names of articles examined, what they were examined for and the reason for such examination:

Substance.	Number of Samples, to Nov. 14.	Examined For.	Reason for Investigation.
Alcohol.....	1	Purity.....	For Clerk's Supplies.
Ashes	1	{ Amount and character of organic matter..... { Character and injurious ingredients.....	For Department of Street Cleaning.
Baking powder.....	8		
Bay rum.....	76	Methyl alcohol	Systematic examinations.
Beer.....	9	Alcohol	For Police Department.
Blood stains.....	23	Character.....	For Police Department.
Borax	22	Adulteration.....	Systematic examinations.
Boric acid.....	12	Adulteration	Systematic examinations.
Brandy drops.....	1	Alcohol	Citizen's complaint.
Bread	2	Adulteration	Systematic examinations.
Breakfast food.....	1	Injurious ingredients.....	Citizen's complaint.
Butter	4	Adulteration.....	Citizen's complaint.
Buttermilk	1	Adulteration.....	Citizen's complaint.
Cake	1	Injurious ingredients.....	Citizen's complaint.
Camphor (spirits of).....	242	Methyl alcohol.....	Systematic examinations.
Candy	11	Injurious ingredients.....	Citizen's complaint.
Capsules.....	1	Character	Police Department.
Catsup.....	1	Injurious ingredients.....	Citizen's complaint.
Cereal.....	1	Injurious ingredients.....	Citizen's complaint.
Cherries.....	1	Injurious ingredients.....	Citizen's complaint.
Chloral hydrate	4	Identity.....	Police Department.
Chlorate of potash	12	Adulteration	Systematic examinations.
Chloroform.....	3	Identity.....	Police Department.
Chocolate	4	Adulteration.....	Citizen's complaint.
Cider.....	2	Adulteration.....	Citizen's complaint.
Cigarette.....	1	Injurious ingredients.....	Citizen's complaint.
Citrate of magnesia.....	48	Adulteration	Systematic examinations.
Coal	1	Character	Smoke nuisance.

Substance.	Number of Samples to Nov. 14.	Examined For.	Reason for Investigation.
Cocoa.....	9	Adulteration	Systematic examinations.
Codeine powders.....	6	Adulteration	Systematic examinations.
Coffee.....	6	Injurious ingredients	Citizen's complaint.
Corn (canned).....	1	Adulteration.....	Citizen's complaint.
Cream (adulterated).....	5	Adulteration	Systematic examinations.
Cream (unadulterated).....	56	Adulteration.....	Systematic examinations.
Cream of tartar.....	153	Adulteration.....	Systematic examinations.
Effluent.....	1	Character.....	Cause of nuisance.
Epsom salts.....	1	Adulteration	Citizen's complaint.
Excreta.....	2	Poison.....	Police Department.
Fat.....	1	Character	Cause of nuisance.
Floor oil.....	2	Character.....	Board of Education
Formaldehyde	10	Percentage strength.....	For Clerk of Supplies.
Fur.....	1	Injurious ingredients	Citizen's complaint.
Gelatin.....	1	Injurious ingredients	Citizen's complaint.
Ginger (essence of).....	1	Injurious ingredients	Citizen's complaint.
Grass.....	3	Injurious ingredients	Citizen's complaint.
Ham.....	2	Injurious ingredients	Citizen's complaint.
Herbicide.....	1	Composition.....	Citizen's complaint.
Herrings.....	1	Injurious ingredients	Citizen's complaint.
Honey.....	1	Injurious ingredients	Citizen's complaint.
Horse bal.....	4	Poison.....	For Society for the prevention of Cruelty to Animals. For Clerk of Supplies.
Hydrogen peroxid.....	1	Percentage strength.....	For Clerk of Supplies.
Ice.....	2	Purity.....	Systematic examinations.
Ice cream.....	1	Injurious ingredients	Citizen's complaint.
Iodine tinctures	48	Adulteration	Systematic examinations.
Iodoform.....	5	Adulteration	Systematic examinations.
Jamaica ginger (tincture)...	27	Adulteration	Systematic examinations.
Lacquer.....	1	Composition.....	Cause of nuisance.
Lard.....	2	Injurious ingredients	Citizen's complaint.
Laudanum.....	5	Adulteration	Systematic examinations.
Lemonade.....	1	Injurious ingredients	Citizen's complaint.
Lime water.....	1	Adulteration.....	Citizen's complaint.
Linseed oil.....	1	Adulteration.....	For Clerk of Supplies.
Liquid.....	4	Character.....	For Police Department.
Liquor.....	2	Alcohol.....	For Police Department.

Substance.	Number of Samples to Nov. 14.	Examined For.	Reason for Investigation.
Lithia tablets.....	1	Adulteration.....	Systematic examinations.
Meat.....	1	Injurious ingredients.....	Citizen's complaint.
Medicine.....	18	Composition.....	Citizen's complaint and for Police Department.
Milk (adulterated).....	2,324	Composition and preservatives...	Systematic examinations.
Milk (unadulterated).....	4,788	Composition and preservatives...	Systematic examinations.
Milk.....	125	Bacteriological purity.....	Systematic examinations.
Milk powder.....	10	Composition.....	Systematic examinations.
Milk (evaporated).....	4	Composition.....	Systematic examinations.
Milk (preserved).....	2	Bacteriological purity.....	Systematic examinations.
Milk (preserved).....	29	Composition.....	Systematic examinations.
Molasses.....	1	Injurious ingredients.....	Citizen's complaint.
Mud.....	2	Character.....	Cause of nuisance.
Opium paste.....	43	Character.....	For Police Department.
Paint dryer.....	1	Adulteration.....	For Clerk of Supplies.
Paraform.....	1	Percentage strength.....	For Clerk of Supplies.
Paris green.....	1	Character.....	Citizen's complaint.
Peas (canned).....	2	Injurious ingredients.....	Citizen's complaint.
Pepper.....	2	Adulteration.....	For Clerk of Supplies.
Peppermint (essence of).....	1	Adulteration.....	Citizen's complaint.
Phenacetin.....	192	Adulteration.....	Systematic examinations.
Pickles.....	2	Injurious ingredients.....	Citizen's complaint.
Pills.....	6	Character.....	For Police Department.
Plate with food scraps.....	2	Poison.....	For Police Department.
Potassium iodide.....	6	Adulteration.....	Systematic examinations.
Powder.....	3	Composition.....	Citizen's complaint.
Preservatives.....	3	Composition.....	Systematic examinations.
Preserves.....	11	Adulteration.....	Systematic examinations.
Quinine pills.....	1	Adulteration.....	Systematic examinations.
Rolled oats.....	1	Injurious ingredients.....	Citizen's complaint.
Rubber hose.....	4	Quality.....	For Department of Street Cleaning.
Salmon.....	1	Injurious ingredients.....	Citizen's complaint.
Salt.....	1	Injurious ingredients.....	Citizen's complaint.
Sardines.....	2	Injurious ingredients.....	Citizen's complaint.
Sediment.....	2	Character.....	Systematic examinations.
Smoked beef.....	1	Injurious ingredients.....	Citizen's complaint.
Soap.....	2	Injurious ingredients.....	For Navy Department.

Substance.	Number of Samples to Nov. 14.	Examined For.	Reason for Investigation.
Soap liniment.....	31	Adulteration.....	Systematic examinations.
Stink pots.....	2	Composition.....	Citizen's complaint.
Stomach and contents.....	3	Poison.....	{ For Society for the Prevention of Cruelty to Animals and Cor- oner.
Sugar.....	4	Injurious ingredients.....	Citizen's complaint.
Sulphur.....	1	Purity.....	For Clerk of Supplies.
Syrups.....	32	Adulteration.....	Systematic examinations.
Tablets.....	2	Composition.....	Citizen's complaint.
Talcum powder.....	1	Composition.....	Citizen's complaint.
Tea.....	4	Injurious ingredients.....	Citizen's complaint.
Tomatoes (canned).....	1	Injurious ingredients.....	Citizen's complaint.
Tomato soup.....	1	Injurious ingredients.....	Citizen's complaint.
Tongue.....	1	Injurious ingredients.....	Citizen's complaint.
Towel.....	1	Poison.....	For Police Department.
Toy.....	1	Poison.....	Citizen's complaint.
Trional.....	1	Composition.....	For Police Department.
Turpentine.....	4	Adulteration.....	For Department of Correction.
Uranine.....	2	Purity.....	For Clerk of Supplies.
Urine.....	35	Composition.....	Clinical purposes.
Vinegar.....	1	Adulteration.....	For Clerk of Supplies.
Viscera.....	3	Poison.....	{ For Society for the Prevention of Cruelty to Animals.
Vomit.....	2	Poison.....	Police Department.
Water (bacteriological ex- aminations).....	88	Number and character of organ- isms.....	Systematic examinations.
Water (chemical examinations).....	413	Sanitary Purity.....	Systematic examinations.
Water (carbonic).....	2	Composition.....	Systematic examinations.
Water (cellar).....	42	Character.....	{ To determine origin of water in cellars and excavations.
Whiskey.....	1	Alcohol.....	For Police Department
White lead.....	2	Adulteration.....	For Department of Correction.
Wine.....	13	Alcohol.....	For Police Department.
Lactometers tested.....	209	Accuracy of scale.....	{ For use of Inspectors and for citizens.
Thermometers tested.....	108	Accuracy of scale.....	For use of Inspectors.

Up to the present time, November 14, the Chemists have attended court, as expert witnesses, on one hundred and forty (140) days.

Methods of Analysis.

No material changes have been made in the methods adopted for the analysis of milk and water, they remaining as described in the report for 1902.

Bacteriological Work.

Owing to the resignation of the Assistant Bacteriologist early in the year, and no appointment being made to fill the vacancy until June, the systematic bacteriological work was seriously interrupted. This work was, however, resumed as soon as possible, and has been carried on until the present time.

Regular periodic examinations of the City water supplies have been conducted, both as to the number and the nature of the organisms present, special attention being given to such as are indicative of contamination. In addition to these periodic examinations, bacteriological analyses of well waters received at the laboratory have also been made in conjunction with the chemical work, making it possible to judge of the sanitary quality of such waters more intelligently than when the results of the chemical analysis alone are depended upon.

In addition to the systematic investigations of the water supplies of the various boroughs, bacteriological examinations of milk, and other miscellaneous food samples, have been made. Also determinations of the germicidal value of antiseptics received from this and other departments.

The experience and training of the Bacteriologist in the use of the microscope and the preparation of objects for microscopic examination have also been called into service in the general food work of the division, where such examinations were necessary. Valuable assistance was also rendered in cases received from the District Attorney's office, involving the identification of blood stains, etc.

Examination of Drugs.

A field of work not heretofore touched upon, which was begun late in December of last year and has been continued up to the present time, is the examination of drugs and medicines sold in the City, in search of substitutions, misrepresentation and adulteration. So far, the analyses of 1,076 samples have been completed, comprising bay rum, bismuth subnitrate, borax, boric acid, spirits of camphor, chlorate of potash, citrate of magnesia, codeine, cream of tartar, epsom salts, Jamaica ginger (tincture), hydrogen peroxide, tincture of iodine, iodoform, laudanum, lime water, lithia tablets, essence of peppermint, phenacetin, potassium iodide, quinine pills, soap liniment, talcum powder and trional.

The most widespread adulteration was found among the samples of phenacetin. The majority of powders received proved to be mixtures of phenacetin and acetanilid. In many cases pure acetanilid had been substituted for phenacetin, and other forms of substitutions were mixtures of phenacetin and sugar, phenacetin and starch, acetanilid and cane sugar, acetanilid and milk sugar, acetanilid and starch, antipyrin and quinine sulphate.

Later information received regarding these samples, through interviews with many retail pharmacists, revealed the fact that most, if not all, the powders found to be mixtures of acetanilid and phenacetin had been dispensed in good faith by the druggists as phenacetin; they themselves having been the victims of fraud through the purchase of packages purporting to be pure phenacetin, offered to them by irresponsible parties.

Another widespread form of substitution is that of using wood alcohol instead of grain alcohol in the alcoholic preparations, such as bay rum, spirits of camphor, tincture of iodine, soap liniment, etc. Approximately 20 per cent. of all the samples collected contained wood alcohol. Other forms of adulteration found were tincture of iodine (far below strength), bicarbonate of soda (sold as borax), citrate of magnesia (prepared in some cases with tartaric acid and soda, in others with tartaric acid and magnesia), mixtures of alum and phosphate of calcium (sold as cream of tartar), acetanilid (sold as trional), and quinine pills with quinine contents considerably below the labeled amount.

A few of the more flagrant cases have been prosecuted in the criminal courts, and convictions obtained; the others, comprising the majority of cases, have been warned. The results have shown the necessity of systematic inspection of drugs, and this work is now being continued as part of the regular routine of the laboratory.

Syrups.

During the past summer a considerable number of flavoring syrups were collected and examined for artificial colors and preservatives. Artificial colors are of almost universal occurrence in such preparations, and the use of preservatives was also found to be general. The preservatives found were sulphites, benzoates, salicylic acid and fluorides.

Milk Inspection.

On August 24 of this year the work of milk inspection for the five boroughs was transferred to this Division. This has made it possible to adopt uniform methods of inspection throughout the city, and to control the collection of samples, and their analysis, to better advantage, resulting in an increase in the general efficiency of the work.

At present there are five (5) inspectors on duty in Manhattan, three (3) in Brooklyn, two (2) in Richmond, and one (1) in the Bronx. There is no inspector regularly on duty in the Borough of Queens, milk inspection in that borough being done at irregular intervals by detailing a man from Manhattan. This makes the work there difficult and incomplete, and an inspector for that borough is urgently needed.

The following is a tabular summary of the work of the division for the first nine months of this year. The work of the milk inspectors is given for the whole nine months, although they have been under the direction of the Chemist only since August 24:

Number of Analyses, Inspections, Etc.	First Three Quarters, 1903.
Analyses of milk	5,232
Analyses of preserved milks	26
Analyses of cream	51
Analyses of water (sanitary examinations, bacteriological and chemical).....	399
Analyses of drugs and medicines	858
Analyses of samples received from other City Departments.....	134
Analyses of miscellaneous samples and experimental work	1,301
Total	<u>8,001</u>
Total number of inspections of milk	49,625
Total number of specimens of milk examined.....	49,925
Total number of samples of milk collected.....	6,923
Total number of quarts of milk destroyed.....	101
Total number of arrests.....	666
Total amount of fines	<u>\$9,754 00</u>

Respectfully submitted,

J. A. DEGHUEE, PH. D., Chemist.

SANITARY BUREAU.

BOROUGH OF THE BRONX.

To the Sanitary Superintendent:

I have the honor to submit the following report of work performed in the Borough of The Bronx for the three quarters ending September 26, 1903.

DIVISION OF INSPECTION.

Summary.

Number of inspections.....	21,985
Number of reinspections.....	6,494

Total.....	28,479

Number of complaints forwarded for orders.....	2,032
Number of citizens' complaints received.....	2,191
Number of citizens' complaints returned for orders.....	984
Number of citizens' complaints returned negative.....	1,257

Premises Inspected.

Number of tenement houses.....	400
Number of private dwellings.....	1,728
Number of mercantile establishments.....	425
Number of manufactories and workshops.....	64
Number of stables.....	1,059
Number of sunken and vacant lots.....	978
Number of miscellaneous.....	4,430

Total.....	9,084

Number of visits to stop work, close stores, etc.....	485
Number of specimens of milk examined.....	1,915
Number of specimens of milk collected.....	310
Number of pounds of foods condemned and destroyed.....	107,027
Number of permits issued.....	971
Number of arrests made.....	58
Number of persons held on bail.....	32
Number of persons discharged.....	10

Mercantile.

Number of children interviewed applying for certificates.....	1,965
Number of employment certificates granted.....	1,703
Number of employment certificates granted.....	161
Number of duplicate certificates issued.....	111
Number of milk inspections.....	2,321
Number of food inspections.....	10,312

DIVISION OF CONTAGIOUS DISEASES.

Summary.

Number of visits to cases of contagious diseases.....	7,459
Number of cases visited for special diagnosis.....	549
Number of cases treated with diphtheria antitoxin.....	206
Number of persons immunized with diphtheria antitoxin.....	475
Number of school notices sent.....	180
Number of complaints forwarded for orders.....	141
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Number of visits to tenement houses.....	4,496
Number of visits to hotels.....	7
Number of visits to schools and institutions.....	4,803
Number of visits to private houses.....	2,360
Number of visits miscellaneous.....	2,227
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Total number of visits.....	12,697
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Number of primary vaccinations.....	1,279
Number of revaccinations.....	3,029
Number of vaccinations in schools.....	508
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Total number of vaccinations.....	4,816
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Number of certificates of vaccination issued.....	1,473
Number of visits to infected houses.....	33
Number of animals examined.....	1,305
Numbered of glandered horses condemned.....	83
Number of persons removed to contagious disease hospitals.....	87
Number of dead bodies removed to Morgue.....	1
Number of houses visited for disinfection.....	1,055
Number of infected rooms disinfected.....	3,724

Number of times ambulances, etc., disinfected.....	219
Number of pieces infected goods disinfected.....	3,816
Number of pieces infected goods destroyed.....	658
	<hr/>
Total number of inspections.....	14,362
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Number of Communicable Diseases Reported.

Diphtheria	711
Scarlet fever	608
Measles	196
Tuberculosis	636
Typhoid fever	99
Croup	20
Chicken pox	161
Pertussis	39
Smallpox	1
Mumps	86
Erysipelas	2
Miscellaneous	4
	<hr/>
Total	2,563
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Sanitary Inspectors.

G. B. Ferguson, C. F. Spencer, G. A. Elliott, T. D. W. Pinkney, F. W. Loughran, J. H. Oberle, J. J. D. Sullivan, on duty, Manhattan Borough; C. G. Krichhof, on duty, Manhattan Borough; S. W. Clason, J. E. Higgins, A. J. Dodin, office.

Number of inspections.....	15,618
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Number of reinspections.....	1,945
Number of citizens' complaints received.....	1,415
Number of complaints forwarded for orders.....	1,211
	<hr/>

Character of Premises Inspected.

Tenement houses	97
Private dwellings	1,262
Mercantile establishments	421
Manufactories and workshops.....	22
Stables	156
Sunken and vacant lots.....	674
Miscellaneous	12,886
	<hr/>
Total	15,618
	<hr/>

Number of specimens of milk examined.....	1,915
Number of specimens of milk collected.....	310
Pounds of fruit condemned.....	41,530
Pounds of vegetables condemned.....	48,822
Pounds of groceries and canned goods condemned.....	135
Pounds of confectionery condemned.....	25
Pounds of meat condemned.....	12,061
Pounds of poultry and game condemned.....	4,454

Mercantile Establishments.

Number of children interviewed applying for certificates.....	1,965
Number of employment certificates granted.....	1,703
Number of employment certificates refused.....	161
Number of duplicate certificates issued.....	111
Number of arrests.....	19
Number held on bail.....	15
Number discharged.....	1

Sanitary Police.

Number of inspections.....	5,728
Number of complaints referred to inspectors.....	155
Number of complaints for orders.....	753
Number of nuisances abated by personal effort.....	224
Number of reinspections.....	4,549
Number of negative reports forwarded.....	755
Number of visits to stop work, close stores, etc.....	485

Character of Premises Inspected.

Tenement houses.....	303
Private dwellings.....	646
Mercantile establishments.....	4
Manufactories and workshops.....	42
Stables.....	532
Sunken and vacant lots.....	304
Miscellaneous.....	3,897
Total.....	5,828
Number of arrests made.....	39
Number of persons held on bail.....	17
Number of persons discharged.....	9
Number of persons fined.....	11
Number of citizens' complaints received.....	812

Veterinarians.

A. J. Dodin, W. F. Braisted, on duty, Manhattan Borough.

Number of inspections.....	639
Number of animals examined.....	1,305
Number of glandered horses destroyed.....	83
Number of stables inspected.....	371
Number of complaints forwarded for orders.....	68
Number of citizens' complaints received.....	3

Medical Inspectors.

W. W. Talley, C. A. Clinton, C. F. Spencer, G. B. Ferguson, T. D. W. Pinckney, G. A. Elliott, F. W. Loughran, J. H. Oberle, D. F. Kimmier, assigned to office Vaccination and Mercantile Bureau; M. Schiller, J. F. Bicak, B. G. Cooke, A. Michaels, I. A. Church, G. A. Lawrence, on leave of absence; J. E. Thompson, on leave of absence;

Number of visits to cases.....	7,459
Number of visits to cases for special diagnosis.....	549
Number of cases treated with diphtheria antitoxin.....	206
Number of persons immunized with diphtheria antitoxin.....	475
Number of school notices sent.....	180
Number of complaints forwarded for orders.....	141

Number of Visits.

Tenement houses.....	4,496
Hotels.....	7
Private dwellings.....	2,360
Schools and institutions.....	3,603
Miscellaneous.....	2,231
Total.....	12,697

Number of primary vaccinations.....	1,279
Number of revaccinations.....	3,029
Number of vaccinations in schools.....	508

Total number of vaccinations..... 4,816

Number of vaccination certificates issued.....	1,473
Number of visits to infected houses.....	33
Number of children examined.....	522,126
Number of children excluded from school.....	1,807
Number of schools visited.....	42

School Nurses.

E. M. E. Wall, B. E. Alcan.

Number of houses visited.....	416
Number of schools visited.....	417

Cases of Diseases Cared For.

Pediculosis	4,330
Conjunctivitis and other eye affections.....	3,834
Eczema	14
Ringworm	561
Scabies	17
Miscellaneous	455
Total cases.....	9,211

Summer Corps.

B. G. Cooke, A. Mihaelis, L. M. Oakley.

Number of visits to houses.....	1,322
Number of visits to families.....	1,228
Number of sick children treated.....	80
Number of milk inspections.....	67
Number of revisits.....	20
Number of miscellaneous inspections.....	9
Number of cases not found.....	4
Number of removals	118
Number of deceased.....	24
Number of vaccinations performed.....	6
Number of children examined.....	1,112

Medical School Inspection.

	PUBLIC SCHOOLS.	PAROCHIAL SCHOOLS.	TOTAL.
Total daily average attendance.....	37,723	1,660	39,383
Number of schools visited.....	40	2	42
Number of visits to schools.....	2,932	164	3,096
Number of pupils examined.....	482,105	40,021	522,126
Number of pupils excluded.....	1,742	65	1,807

Table Showing Disease for Which Children Were Excluded.

	PUBLIC SCHOOLS.	PAROCHIAL SCHOOLS.	TOTAL.
Measles	4	..	4
Diphtheria	7	..	7
Scarlet fever	11	..	11
Whooping cough	10	..	10
Mumps	78	3	81
Contagious eye diseases	470	19	489
Pediculosis	916	28	944
Chicken-pox	33	2	35
Contagious skin diseases	147	7	154
Miscellaneous	72	..	72
Total number excluded.....	1,748	59	1,807

Disinfecting Corps.

H. T. Ritter, W. Kasmire, E. Teichmann.

Number of persons removed to hospital.....	87
Number of bodies removed to Morgue.....	1
Number of houses visited.....	1,665
Number of rooms disinfected.....	3,724
Number of times ambulances and other vehicles disinfected.....	219
Number of pieces of infected goods disinfected.....	3,818
Number of pieces of infected goods destroyed.....	658

Summary of Work Performed.

Number of inspections and reinspections made.....	42,841
Number of inspections of mercantile establishments.....	425
Number of Inspectors' complaints made.....	1,081
Number of citizens' complaints received.....	2,191
Number of complaints forwarded for orders.....	2,173
Number of vessel permits issued.....	28
Number of miscellaneous permits issued.....	952
Total number of permits issued.....	980

Number of pounds of foods seized and condemned (fruit, fish, meat, etc.)....	107,027
Number of heads of cattle examined.....	1,305
Number of glandered horses destroyed.....	83
Number of visits to cases of contagious diseases.....	7,459

Number of primary vaccinations performed.....	1,279
Number of revaccinations performed.....	3,029
Number of vaccinations performed in schools.....	508
	<hr/>
Total number of vaccinations performed.....	4,816
	<hr/> <hr/>
Number of children examined.....	522,126
Number of children excluded from schools.....	1,807
Number of persons treated with diphtheria antitoxin.....	206
Number of persons immunized with diphtheria antitoxin.....	475
Number of persons removed to hospital.....	87
Number of dead bodies removed to Morgue.....	1
Number of pieces of infected goods disinfected.....	3,818
Number of pieces of infected goods destroyed.....	658
	<hr/> <hr/>

March 17 to September 15, 1903.

Note—Vacant property treated with crude oil for the eradication of mosquitoes, 6,744 city lots or 421½ acres. Number mosquito orders issued, 174.

Respectfully submitted,

EDWARD F. HURD, M. D.,
Assistant Sanitary Superintendent.

Department of Health,
No. 1237 Franklin avenue, Borough of The Bronx, }
New York, December 1, 1903.

CHAS. F. ROBERTS, M. D., Sanitary Superintendent:

Sir—In compliance with your instructions of November 7, 1903, I have the honor to submit herewith the annual report of this Department, Borough of The Bronx, for the year 1903.

The following list of cases of contagious diseases reported for the first three-quarters this year, as compared with the same period of 1902, will show a decrease in some cases and an increase in others. Regarding the latter, it must be remembered that the estimated increase in population is rated at 25,000:

	1902	1903
Diphtheria.....	496	711
Scarlet fever.....	638	608
Measles.....	1,892	196
Small pox.....	161	1
Tuberculosis.....	450	636

This year cases of measles have been inspected and fumigation performed, which was not the case last year. The increase in the number of cases of tuberculosis may be accounted for in the increased population and in the fact that strenuous efforts have been made to have all such cases reported, many physicians believing that the same was not included in the regular list of diseases to be reported.

During 1902 there were 215 cases of diphtheria injected with antitoxin and 445 immunized, while this year 253 cases were injected and 541 immunized.

The following is a comparative list of the number of deaths of measles, scarlet fever and diphtheria:

	1902	1903
Measles.....	151	29
Scarlet fever.....	167	134
Diphtheria.....	62	111

This year there have been but 1,890 primary vaccinations and 4,130 revaccinations performed. This small number is due to the fact that but one case of smallpox was reported, and the borough was thoroughly vaccinated in 1902.

In regard to the medical inspection of schools the following figures will show a remarkable increase in the number of children examined and a slight decrease in the number of exclusions. This may be accounted for in the fact that the parents are being educated up to the rules of the Department through the circulars of information issued and the instructions given by the nurses and doctors:

	1902	1903
Number of children examined.....	238,413	706,016
Number of children excluded.....	2,694	2,106

The comparative number of disinfections, etc., is as follows. It will be noted that although more houses were visited for disinfection this year and more infected goods disinfected and destroyed, there were fewer rooms disinfected, which seems to indicate that quarantine has been more rigidly observed, and the fumigation of entire apartments has not been made necessary:

	1902	1903
Houses visited for disinfection.....	1,667	1,992
Rooms disinfected.....	4,427	4,359
Pieces of infected goods disinfected.....	1,596	4,291
Pieces of infected goods destroyed.....	401	832

The following number of cases of contagious diseases were removed to the hospital this year by our ambulance, as compared with 1902:

	1902	1903
Diphtheria.....	18	53
Scarlet fever.....	17	41
Measles.....	4	8
Total.....	39	102

Special attention has been paid this year to the inspection of infected stables and the enforcement of orders for the fumigation of same, with the following results:

	1902	1903
Number of glandered horses destroyed.....	105	89

The inspection of food, etc., has been carefully looked after, as the following results will show. It must be remembered that The Bronx has but one Inspector to cover this work:

	1902	1903
Pounds of food condemned and destroyed.....	76,985	136,720

The issuing of employment certificates increases yearly owing to the increased population, and under the workings of the new Labor Law the number of certificates refused will be necessarily much greater than before:

	1902	1903
Number of employment certificates granted.....	1,641	1,866
Number of employment certificates refused.....	70	189
Number of duplicates issued.....	93	129

There is a slight decrease in the number of citizens' complaints received and the number of orders issued. This is due to the fact that during 1902 the provisions of the new Tenement House Act were enforced by this Department, and all complaints

relating to tenements were received and inspected. This year the Tenement House Department has become operative and a large part of the sanitary work formerly done by this Department has been transferred to them.

A special feature of the Department work this year has been the attempt to stamp out as far as practicable the mosquito plague. This work was carefully carried out, with the following result:

Vacant lots treated with crude oil.....	6,744
Number of mosquito orders issued.....	174

The cow stables in the borough have been carefully inspected and kept under observation this year, and compliance with the Department rules regarding same have been rigidly enforced. It was found upon investigation that the milk was not properly handled, and it took some time to educate the owners of these stables up to the new rule and regulations adopted by the Board.

	1902.	1903.
Inspections of stables.....	273	1,174

Respectfully submitted,

EDWARD F. HURD, M. D., Assistant Sanitary Superintendent.

BOROUGH OF BROOKLYN.

New York City, November 30, 1903.

To the Sanitary Superintendent:

Sir—I have the honor to submit the following report of work performed in the Borough of Brooklyn for the three quarters ending September 26, 1903:

Number of inspections and reinspections.....	236,151
Number of tenement house inspections (house to house).....	3,514
Number of inspections of mercantile establishments.....	463
Number of Inspectors' complaints.....	168
Number of citizens' complaints received.....	9,450
Number of vessel permits issued.....	1,448
Number of miscellaneous permits issued.....	1,925
Total number of permits issued.....	3,373
Number of pounds of food seized and condemned (fruit, fish, meat, etc.)...	127,287
Number of heads of cattle examined.....	672
Number of glandered horses destroyed.....	233

Number of analyses made.....	989
Number of primary vaccinations performed.....	10,273
Number of revaccinations performed.....	13,479
Number of vaccinations performed in schools.....	12,476
Number of visits to schools.....	20,924
Number of children examined	2,768,418
Number of children excluded from schools.....	14,436
Number of diagnoses of suspected diphtheria.....	3,491
Number of secondary diagnoses of suspected diphtheria.....	4,643

DIVISION OF INSPECTIONS.

To the Assistant Sanitary Superintendent:

I herewith forward report of the work of the Inspectors for the three quarters ending September 26, 1903:

	Sanitary Inspectors.	Sanitary Police.	Food Inspectors.	Total.
Number of inspections	21,033	28,110	93,026	142,169
Number of reinspections.....	9,404	2,387	134	11,925
Total.....	30,437	30,497	93,160	154,094
Number of citizens' complaints received.....	6,024	3,251	175	9,450
Number of citizens' complaints returned for orders.....	4,278	819	89	5,186
Number of citizens' complaints returned negative.....	4,007	2,583	57	6,647
Number of police complaints referred to Inspectors.....	.....	168	.....	168
<i>Premises Inspected.</i>				
Number of tenement houses.....	2,873	641	.....	3,514
Number of shore inspections	1,422	.....	.....	1,422
Number of lodging houses.....	35	373	.....	408
Number of private dwellings	4,273	2,151	.....	6,434
Number of mercantile establishments.....	341	122	.....	463
Number of manufactories and workshops.....	437	308	.....	745
Number of slaughter houses .....	.....	105	.....	105
Number of stables.....	629	3,817	.....	4,446
Number of manure dumps .....	.....	1,280	.....	1,280
Number of sunken and vacant lots.....	2,575	4,554	.....	7,129
Number of miscellaneous	8,448	14,749	.....	23,197
Number of nuisances abated by personal effort.....	.....	1,731	.....	1,731

	Sanitary Inspectors.	Sanitary Police.	Food Inspectors.	Total.
Number of specimens of milk examined .....	.....	.....	26,883	26,883
Number of specimens of milk for analysis .....	.....	.....	1,052	1,052
Number of pounds of foods condemned and destroyed .....	.....	.....	127,287	127,287
Number of permits issued .....	.....	.....	3,373	3,378
Number of arrests	1	468	322	791
Number of persons held on bail	1	450	297	748
Number of persons discharged .....	.....	16	25	41
Number of veterinary inspections .....	.....	.....	205	205
Number of dairy inspections .....	.....	.....	808	808
Number of analyses made .....	.....	.....	989	989
Number of children interviewed applying for certificates .....	.....	.....	8,169	8,169
Number of employment certificates granted .....	.....	.....	5,864	5,864
Number of employment certificates refused .....	.....	.....	1,844	1,844
Number of duplicate certificates issued .....	.....	.....	461	461
<i>Mercantile.</i>				
Number of citizens' complaints received	4	.....	.....	4
Number of citizens' complaints returned for orders	1	.....	.....	1
Number of citizens' complaints returned as negative	3	.....	.....	3
Number of original complaints returned for orders	141	.....	.....	141

Milk inspections	24,391
Meat inspections	32,031
Food inspections	35,286
Dairy inspections	808
Veterinary inspections	505

Total..... 93,021

Chemists' analyses

989

Food Condemned.

Fruit, pounds	8,355
Food, pounds	70,141
Meat, pounds	48,081
Fish, pounds	710

Total..... 127,287

DIVISION OF CONTAGIOUS DISEASES.

To the Assistant Sanitary Superintendent:

I herewith forward report of the work of this Division for the three quarters ending September 26, 1903.

Number of visits to cases of contagious diseases.....	28,960
Number of cases visited for special diagnosis.....	1,415
Number of cases treated with diphtheria antitoxin.....	261
Number of persons immunized with diphtheria antitoxin.....	240
Number of school notices sent.....	2,662
Number of visits to tenement houses.....	18,995
Number of visits to hotels.....	59
Number of visits to schools and institutions.....	24,970
Number of visits to private houses.....	9,171
Number of visits, miscellaneous.....	17,005
Total number of visits.....	70,200
Number of primary vaccinations.....	10,273
Number of revaccinations.....	13,479
Number of vaccinations in schools.....	12,476
Total number of certificates of vaccination issued.....	8,283
Number of visits to infected houses.....	961
Number of visits to sick children.....	6
Number of prescriptions filled.....	6
Number of animals examined.....	672
Number of post mortems on animals.....	1
Number of glandered horses condemned.....	233
Number of inspections and reinspections.....	4,682
Number of persons removed to Contagious Disease Hospital.....	1,097
Number of houses visited for disinfection.....	7,175
Number of infected rooms disinfected.....	9,073
Number of pieces infected goods disinfected.....	23,482
Number of pieces of infected goods destroyed.....	9,840
Total inspections.....	82,057

Number of Communicable Diseases Reported.

Diphtheria.....	4,104
Scarlet fever.....	2,150
Measles.....	3,642
Tuberculosis.....	2,509
Typhoid fever.....	691
Chicken pox.....	408
Whooping cough.....	248
Small pox.....	*8
Total.....	13,760

*One of these cases is credited to Quarantine.

SANITARY BUREAU.

BOROUGH OF BROOKLYN.

Division of Medical School Inspection.

To the Assistant Sanitary Superintendent:

I herewith forward report of the Medical School Inspectors for the three quarters ending September 26, 1903.

Schools.	Average Total Daily Attendance.	School Days.	Average Number of Schools Visited.	Number of Visits to Schools.
Public Schools.....	153,783	127	136	15,619
Parochial Schools.....	20,872	130	44	5,305
Total.....	174,655	130	180	20,924

	Number Examined. Total.	Number Excluded.
Public Schools.....	2,420,210	12,754
Parochial Schools.....	348,208	1,682
Total.....	2,768,418	14,436

Table Showing Diseases For Which Children Were Excluded.

Schools.	Measles.	Diphtheria.	Scarlet Fever.	Whooping Cough	Mumps.	Contagious Eye Diseases.	Parasitic Diseases of Head.	Chicken-pox.	Skin Diseases.	Total Number Excluded.
Public Schools.....	60	5	8	81	454	3,683	6,852	115	1,496	12,754
Parochial Schools.....	3	..	..	4	13	469	1,076	12	105	1,682
Total.....	63	5	8	85	467	4,152	7,928	127	1,601	14,436

New York, December 1, 1903.

To the Chief, Division of Inspections:

Sir—During the three quarters ending September 26, 1903, the following offensive material has been cared for by the Shore Inspectors:

Dogs	73
Cats	76
Horse	1
Rats	155
Fish	216
Calves	6
Goat	1
Sheep	19
Fowl	108
Offal	126
Bedding	120
Clothing	147
Garbage	20
Mattresses	110
Hogs	2
Meats	240
Human bodies	2

Department of Health, }
New York, November 30, 1903. }

To the Sanitary Superintendent:

Sir—In accordance with your instructions of November 7, I forward herewith the annual report for the current year, together with the statistical portion of the same for the first three quarters of the year, with two columns left at the right hand side of the page for the addition of the last quarter and the total.

During the year 1903 the Sanitary Bureau has consisted of two divisions, the Division of Contagious Diseases and that of Inspections.

Division of Contagious Diseases.

Diphtheria—The report of this division for the year shows that the reported cases of diphtheria have considerably exceeded those of the year 1902 by about 1,400. The number of deaths from this disease up to the present time has also been in excess of those of 1902 to the number of about 100. The death rate per 100,000 of inhabitants does not materially differ from that of 1902; but there has been a marked decrease in the case fatality, the reduction being from 18 per cent to 14.73 per cent. This marked decrease shows that the physicians during the year 1903 have reported the cases of

diphtheria coming under their professional care to a greater extent than during any year since 1888, which is the farthest that the records have been examined for this purpose. An additional factor in the increased number of cases reported may also be found in the fact that a considerable number of trial cultures have been made in the schools. The present year has also been characterized by an increased use of antitoxin both as a curative agent in diphtheria and also for immunizing purposes. The total number of curative antitoxin injections is 273, while 281 persons have been immunized.

I desire in this connection to call attention to the relatively small number of culture stations in the Borough of Brooklyn. While there are in the boroughs of Manhattan and The Bronx 172 of these stations there are in the Borough of Brooklyn but 30. Repeated demands have been made during the year for an increase in this number, some of which have been denied upon the recommendation of this Bureau, inasmuch as there seemed to be no demand for the establishment of culture stations at the points for which application was made; on the other hand a number of these stations were, in the opinion of this borough office, very much needed, and recommendation for their establishment was forwarded, but was not favorably acted upon. This I understand to be due to the inability on the part of the Department on account of financial reasons to increase the number of collectors. Inasmuch as statistics show that physicians in the Borough of Brooklyn are not as alert to use antitoxin in cases of diphtheria, or for immunizing purposes, as are those of Manhattan, I deem it very important that every inducement should be offered to lead them to adopt this now thoroughly accepted method of the treatment of diphtheria, and I would, therefore, most urgently ask that the matter of the location of culture stations be again thoroughly considered, and that new stations be established wherever necessary, in order that physicians may have every opportunity of obtaining antitoxin without having to travel long distances.

Scarlet Fever—The cases of scarlet fever reported during 1903 were 3,265. This is an increase of 858 cases over 1902. During the same period, however, the deaths for 1903 were but 209, as compared with 256 for 1902. This would show that either the disease during the present year has been very much milder than it was during the past year, or what is probably the case, the physicians have reported the cases of scarlet fever attended by them to a much fuller extent.

Measles—The total number of cases of measles reported during 1903 is 4,018. This is a decrease of 1,279 over the previous year.

Small-pox—The number of cases reported to date in this borough is 15. This includes two cases, one from Ellis Island and the other from the Borough of Manhattan. This is 484 cases less than were reported during 1902.

The total number of vaccinations amounted to 26,686, being a decrease of 136,775. This decrease is, of course, to be accounted for by the fact that in the absence of small-pox in considerable proportions it is difficult to obtain vaccinations, and also to

the fact that the vaccinating force is not what it was a year ago. There should, however, in my judgment, be no considerable let up in the matter of vaccination. Especially is this true in the public schools, and I would therefore recommend that at least three Vaccinators be appointed who shall devote their entire time to vaccination in the public schools. This vaccination can, to a certain extent, be done by the regular Medical School Inspectors, but it diverts them from their regular duties, and the work will not be, in my judgment, as satisfactorily done as if performed by a corps of Vaccinators who shall systematically go through the public schools offering vaccination to the children.

Tuberculosis—Three thousand and forty-two cases of tuberculosis were reported during the present year, an increase of 490 cases over 1902. This is, in my judgment, an indication that physicians are reporting their cases of tuberculosis much more completely than heretofore. It is certainly true that the physicians are taking advantage to a greater extent than formerly of having the sputum of their patients examined by the Department.

Typhoid Fever—The number of cases of typhoid fever reported this year, 890, is exactly the same as reported in 1902.

Chicken-pox—Nine hundred cases of this disease were reported during 1903, an increase over last year of 462.

Whooping-cough—The reported cases of this disease amounted to 293. Inasmuch as whooping-cough was not required to be reported prior to this year there are no corresponding records of 1902 to be quoted.

Fumigation and Disinfection—The work performed by the fumigating and disinfecting corps has been very satisfactory. Although, unless the force employed for this purpose is increased, I fear that the promptness which has heretofore characterized this work will not prevail to such an extent in the future as it has prevailed in the past.

There is also an increased demand for Drivers of the goods wagons. Both of these matters have already been called to your attention in requisitions which have been forwarded. There is no doubt but that the force at the present employed is entirely inadequate.

Medical School Inspection—This work has gone on during 1903 in as complete a manner as is possible for such work to be carried on, considering the paucity of the force employed. Some of the Medical School Inspectors in this borough have assigned to them ten or twelve schools, and it is impossible for them to cover these schools satisfactorily by a daily inspection. To do the work adequately would require at least ten additional Inspectors.

The work of the Medical School Inspectors has been very materially aided by the efficient services of the Nurses employed in connection with this work.

Summer Corps—The work of the Summer Corps during the summer months of the year 1903 was most satisfactorily performed. In connection with this subject, it is very interesting to note the reduction of the death rate of children under five years of age from diarrhoeal diseases during the months of June, July, August and September on a yearly basis for the following series of years:

1898.....	5,670
1899.....	4,468
1900.....	4,527
1901.....	4,331
1902.....	3,414
1903.....	2,652

The deaths of children under five years of age during the months of July and August, 1903, in the Borough of Brooklyn were 1,703, which is the smallest number of deaths in that age period in any year since 1881, when there were 1,184, notwithstanding the fact that the population in Brooklyn in 1881 was 587,241, whereas in 1903 it is 1,291,597. In this connection it is interesting to note that the census of 1900 showed that Brooklyn had a higher percentage of children under five years of age than Manhattan and The Bronx, the figures being 11.4 per cent. for Manhattan and The Bronx and 11.6 per cent. for Brooklyn.

Division of Inspections.

During the current year there has been a great increase in the number of complaints received. Up to November 30, 11,355 citizens' complaints and 2,300 original complaints by Inspectors have been entered on the records, as against 10,929 of both classes for the year 1902. The investigation of this large number of complaints, together with other work, entailed a severe tax on the Inspectors of this Division. The territory comprised in the Borough of Brooklyn is so large that a given number of inspections represents a much greater expenditure of time than the same number in less scattered districts. The work has been promptly performed, however, delay in reporting upon citizens' complaints being very rare.

Enforcement of Orders—In my last annual report I set forth the unsatisfactory conditions relative to the enforcement of orders of the Department, because of the lack of a proper agreement as to methods between the Law Department and the Department of Health. After several conferences between representatives of these Departments, a method of procedure was evolved, as contained in the following communication from Mr. James McKeen, Assistant Corporation Counsel in charge:

"I desire to bring to the attention of your Department certain matters connected with the cases which are being transmitted by you to this office for prosecution for violation of sanitary ordinances.

"A month ago, I understand, your Department changed the system which had hitherto been in vogue in handling cases for violation of ordinances. Prior to that time these cases had not been sent to this office until your Department had exhausted its authority and was powerless to compel obedience to its orders. Some time since, however, as I understand, your inspection force was reduced, and it then seemed expedient to you, somewhat in lieu of the more rigid inspections which were hitherto had, to send out formal notice over the name of the Corporation Counsel threatening prosecution if the orders of your Department were not complied with.

"You have, in accordance with this system, sent to me in the past two or three weeks papers in a large number of cases, some forty or fifty a day, these amounting at the present time, I suppose, to over five hundred. Upon receipt of the first of these orders this office prepared and sent out notices to the delinquents over my name, stating that if the order of your Department was not complied with within five days, a prosecution would result, and the papers were thereupon returned to your office for reinspection in each case.

"We have found, however, and doubtless your Department has also found, that this plan does not work well, and if continued will only result in inefficiency. Persons who receive notices call at this office after the papers in the case have gone back to your office, and they call at your office when the papers are here, in either event no proper disposition of the case can be made, and there is always a chance for an embarrassing conflict of authority. Moreover, this office is not equipped to maintain a record of some forty or fifty cases a day in these matters, nor in my judgment is this necessary, since probably not one in ten of the cases will reach a point where a legal prosecution is necessary.

"It has, therefore, seemed to me best after consideration and consultation with your Department, that a system somewhat as follows should be adopted:

"In those cases where your Department is of the opinion that a notice in the name of the Corporation Counsel should be sent to delinquents, your Department should prepare such a notice upon printed forms substantially such as are now used in the Borough of Manhattan, or in such form as may be agreed upon. These notices having been prepared every day or so, Mr. Wilson, the Assistant assigned to this duty, will call at your office, look over the papers in each case and sign the letters. The letterheads will bear the address of your office and most of the delinquents will doubtless call there, and the cases will, I suppose, usually be adjusted at your office.

"When, after exhausting your efforts to compel a compliance with your orders, your Department decides finally upon a prosecution, civil or criminal, all the papers in the case should, I suggest, be sent to this office. Mr. Wilson will, upon certain specified dates, or at such other times as may be convenient, meet your Inspectors

at your office or here, and draw complaints. In the criminal cases your officers may then procure a summons or warrant, attend to the arraignment of the prisoners and set a time for examination or trial. Someone connected with your Department should keep a calendar of the various proceedings, and two or three days in advance notify Mr. Wilson, who will attend and conduct the proceedings, I should suggest that, as far as possible, the prosecution be brought in the district where they occur, not only because the statute seems to require this, but because in a meritorious case a magistrate is more likely to hold for an offense committed in his own district than for one committed elsewhere. This would render advisable, if it can be accomplished, reserving certain days for certain courts and setting down as many cases as possible in one court on one day.

“Under some such general system as this, I think the business in this office coming from your Department can be expeditiously and efficiently disposed of, and if this plan meet with the approval of the Board of Health, I would suggest that it adopt, if such be necessary, suitable resolutions to allow it to be put into effect.”

The following modification of the method of procedure outlined above was suggested:

“I have examined the proposed method of procedure with Health Department orders, as outlined in a communication from Mr. McKeen, Assistant Corporation counsel in charge, dated October 7. I desire to call your attention to a portion of this plan (page 3), as follows:

“When, after exhausting your efforts to compel a compliance with your orders, your Department decides finally upon a prosecution, civil or criminal, all the papers in the case should, I suggest, be sent to this office. Mr. Wilson will, upon certain specified dates, or at such other times as may be convenient, meet your Inspectors at your office, or here, and draw complaints.”

“In my opinion it would be preferable not to send the papers to the Corporation Counsel’s office. I do not see that anything is gained by so doing, as an interview with the Inspector is necessary, in order to draw the complaint, as complaints cannot be drawn from the papers. It would, therefore, appear to me, that forwarding papers to the Corporation Counsel’s office would result in delay and confusion. When the Corporation Counsel was prepared to act in a given case, it would, under this plan, be necessary for him to communicate with this office, and to arrange to have the Inspector here.

“I would therefore suggest that instead of forwarding papers to the Corporation Counsel’s office, Mr. Wilson should designate two days per week, on which days he would be here at specified hours. I would then arrange to have the Inspectors who have had cases in which a prosecution was necessary, on hand. These cases would have been reinspected beforehand, and the complaint could be drawn at once.”

The method of procedure set forth above having been approved by the Board, was adopted. Its practical operation is somewhat as follows:

When orders are returned after reinspection not complied with, a "Counsel's Notice," threatening prosecution, is prepared. These notices are signed by an Assistant from the Corporation Counsel's office, and mailed to the persons against whom the orders have been issued. The orders are held for one week, after which they are issued for reinspection. If again returned not complied with, the order is referred to a Police officer, with the following directions:

New York, 19

Refer to _____ with directions to obtain evidence of ownership, and notify that unless complied with forthwith, prosecution will be commenced.

The object of this reference is twofold :

1. To secure compliance with the order, if possible, by bringing it to the direct attention of the responsible person.
2. To secure the necessary legal evidence of responsibility should proceedings in court become necessary.

When the order is returned by the officer with the evidence of responsibility, it is held for one week, and then issued for reinspection with the following directions:

These premises are to be reinspected, and if order has not been complied with, report is to be made to the Chief Inspector and Assistant Corporation Counsel in person at office, _____ at 2 p. m.

If upon reinspection the order is found to be still not complied with, the Inspector reports the facts to the Chief Inspector and the Assistant Corporation Counsel, who is at the office of the Department of Health once a week for the purpose of receiving these reports and preparing complaints upon which warrants are obtained.

As a means of ultimately securing compliance with orders, this method has proved fairly effective, as is shown by the fact that it was found necessary to institute criminal proceedings in but 356 cases during the eleven months ending November 30, 5,050 orders having been issued during this period. In some few cases, such as non-resident owners, impossibility of securing evidence of ownership, property in litigation, etc., it fails.

As a means of securing prompt abatement of nuisances, however, the method is sadly deficient. In ordinary cases about six weeks elapses between the receipt of a complaint and the arrest of the delinquent, when arrest becomes necessary. A month generally elapses from the arrest to the disposition of the case in court. In some cases the nuisance continues even after conviction, necessitating a repetition of the legal proceedings. It is small consolation to a citizen into whose premises sewage is flowing from neighboring premises to be informed that the matter is in the hands of the

Corporation Counsel, or that the responsible person has been arrested. What he wants is the abatement of the nuisance and he properly believes that the function of the Department of Health is to abate it, as well as to punish the responsible person. Vacation of the premises by the Board is a slow, cumbersome and often ineffective method of dealing with urgent cases of nuisance. Ample power to promptly abate most nuisances seems to be conferred on the Board of Health by the sections of the Charter giving the Board power to execute its orders through its own agents.

A system of procedure which would make possible the prompt use of these powers in urgent cases, and at the same time would protect property owners against the unreasonable exercise of these powers, would largely enhance the appreciation of the efficiency of the Department by citizens.

Sanitary Inspection of Places Where Milk is Sold.

During the year two Inspectors have been assigned exclusively to the sanitary inspection of places where milk is sold. These Inspectors examine all places for which application is made for permits to sell milk. When not so engaged they make systematic inspections of stores where milk is sold throughout the borough. The rule prohibiting the sale of milk in apartments used for sleeping or domestic purposes has been rigidly enforced. Orders to discontinue the sale of milk because of violation of this rule or because of filthy surroundings have been issued. Several hundred permits were revoked because of failure to comply with the above mentioned rules. If the offenders still persisted in selling milk, arrests were made.

Mosquito Extermination.

During the summer months one Inspector with two Laborers was assigned to the duty of oiling stagnant pools which might serve as breeding places for mosquitoes. A volunteer inspector, with the co-operation of the Department of Public Works, undertook the work of extermination in the Paerdegat basin section, in which oiling and some draining was done. The force available for this work was so inadequate, however, that little was accomplished beyond the demonstration of the fact that the problem of mosquito extermination in this borough is a very large one, and that if anything material is accomplished, it will be by the employment of a large force and the expenditure of a large amount of money. The Sanitary Inspectors were also required to report all stagnant pools which might serve as breeding places in their respective districts. By this means and through the work of Dr. B. F. Knause, specially assigned to this work, a systematic survey of the field was obtained.

Orders were issued to nearly all owners of land upon which stagnant water accumulates, to "remove all accumulations of water therefrom, and to keep the land permanently free from such accumulations." Practically nothing in the way of securing compliance with these orders was done. Owners are naturally exceedingly reluctant to

make expenditures on non-productive property; further the Assistant Corporation Counsel has held that when land is in a state of nature, the owner having done nothing to create a nuisance thereon, he cannot be held liable in legal proceedings for the accumulation of water thereon. If, therefore, this Department is to succeed in having such stagnant pools filled or drained, it would appear that it can only be accomplished through the co-operation of the Borough President and the Department of Street Cleaning.

Smoke.

After the termination of the great strike in the coal fields, many consumers of coal continued to use bituminous coal, with the usual result of large volumes of smoke. When the Department became assured that anthracite coal was readily obtainable, orders directing the abatement of the smoke nuisance were issued wherever this nuisance existed. In many instances these orders were not obeyed, and arrests were accordingly made. On May 26, a squad of officers were taken along the water-front on the steamboat "Franklin Edson" and arrests made wherever smoke was escaping. On the trial of one of these cases before the Court of Special Sessions, a demurrer was filed on the ground that the provisions of section 134 of the Sanitary Code (now section 96), were unreasonable, in that this section prohibited the discharge of any smoke, however small in volume, a provision with which it would be manifestly impossible to comply. This demurrer was sustained. Demurrers were then filed in nearly all the smoke cases then pending, some thirty or forty in number. Fortunately the court modified its view and refused to sustain the demurrers, holding that the Department of Health had never in any proceedings before the court taken the extreme ground that section 134 prohibited the discharge of any smoke, however small in volume, but had always interpreted this section reasonably and with a view to the abatement of nuisances. This attitude the court has maintained and convictions were obtained in nearly all the smoke cases prosecuted.

The smoke produced by wood-working establishments in burning their refuse continues to present a troublesome problem. There appears to be no method available for disposing of this refuse except by burning, and under existing conditions this cannot be done without producing large volumes of smoke. Some cases of violation of section 134 (96) by these establishments have been prosecuted; the court, however, is inclined to take the view that, as applied to these establishments, this section is unreasonable, so that convictions are not usually obtained.

Another troublesome smoke problem is that of smoke produced in the burning of sugar baskets. From about May to October Java sugar is received in New York in cane baskets. There seems to be no method of disposition of these baskets available, except burning, an operation which results in the production of immense volumes of black smoke unless the greatest care is exercised. A case of violation of section 134 (96) in which the burning of these baskets was the cause of the smoke, was prosecuted, and resulted in the discharge of the defendant.

During the year three civil actions for violation of the law prohibiting the use of soft coal were brought. One of these is still pending. In the others judgments were recovered; an appeal has been taken in one of these cases. This law seems to furnish an efficient means of dealing with the smoke question, and it is intended to proceed under it more frequently in the future, should occasion require it.

Dumps.

During the current year a systematic inspection of the City refuse dumps was maintained. The material dumped was found to be generally free from garbage. Small admixtures of decomposable matter seem, however, to be unavoidable, and this, together with the nuisance caused by the light refuse, paper, etc., being scattered by the winds, leads to numerous complaints against these dumps. Dumping seems a very unsuitable method of disposing of this light combustible refuse. The installation of a suitable number of incinerators, in which this material could be disposed of by combustion, would be a most desirable improvement.

Slaughter-houses.

A careful sanitary inspection of the slaughter-houses, including those for poultry, has been carried on during the year. The general condition of these establishments continues to be satisfactory. Orders for minor improvements have been issued against some of the slaughter-houses, which orders, with few exceptions, were promptly complied with.

In the past the provision of the Sanitary Code prohibiting the driving of cattle, except between the hours of 8 p. m., and one hour after sunrise, were frequently violated. Officers of the Health Squad were frequently detailed to arrest offenders against this section. The co-operation of the Police Department was also secured, so that now the illegal driving of cattle through the streets is almost unknown. Any violation is sure to result in the arrest of the offender.

Dairy Stable Inspection.

The work of cow stable inspection, commenced last year, was unfortunately interrupted because of the necessity of transferring the Inspector assigned to this work to other duty. After several months' delay, two Inspectors were made available for this work, which was thereupon resumed. All of the dairy stables in the borough have now been inspected; where the conditions were such that the stable could not be put in sanitary condition, the keeping of cows was ordered discontinued. Where improvements were required, these were ordered. With the exception of about five stables, in which the proceedings have not yet reached a final stage, all the unsanitary cow stables in the borough have been abolished or put in sanitary condition. When this work was commenced in 1902, there were in this borough 167 stables, in which were kept 2,325

cows. At the present time there are 105 stables in which 1,372 cows are kept, showing that 62 unsanitary stables have been abolished. In prosecuting this work it was laid down as a matter of policy that no additional cow stables should be permitted. Some of the cow keepers whose stables were in unsanitary condition were permitted to erect new stables, in accordance with plans filed with the Department of Health. Four such stables have been erected, all in sparsely settled districts, and all, with one exception, provided with connections to the street sewer. The Inspectors are now engaged in the work of raising the standard of cleanliness among the cow stable keepers. In many cases this is a difficult task, but it is hoped by persistent effort to materially improve existing conditions.

In connection with the work of cow stable inspection the water supply of all dairies using water other than City supply has been analyzed. Twenty-three wells were found to be contaminated, and were closed by the Department.

Milk Inspection.

The inspection of milk has been carried on much as in the past. During the eleven months ending November 30, 274 arrests were made for selling adulterated milk, and fines to the amount of \$2,465 were imposed. The courts have co-operated heartily with the Department, convictions being almost invariably obtained in milk cases. One persistent offender was sent to jail for thirty days, without the option of paying a fine.

On August 24 the Milk Inspectors were transferred from the Division of Inspections and placed under the control of the Chief Chemist. Shortly after, the Chemist formerly on duty in Brooklyn was transferred to the main laboratory, where all milk work is now done.

During the summer months attention was given to the enforcement of the section of the Sanitary Code prohibiting the sale of milk the temperature of which is above 50 degrees Fahrenheit. As this is a comparatively new section, it is not as yet fully obeyed. Circulars calling attention to its provisions were distributed to the dealers, and resulted in much increased attention to the proper icing of milk. It is hoped that in another year conditions will permit of the same rigid enforcement of this provision as of the other provisions of the Code relating to milk.

Meat Inspection.

There has been no change in the methods of meat inspection from those followed in the past. An Inspector is stationed at each slaughter-house, where careful examinations are made of the animals on the hoof, followed by post mortem examinations of the slaughtered animals. The markets and retail stores are systematically inspected.

The section of the Code prohibiting the exposure of meat and fish has been rigidly enforced. Many arrests have been made, so that violations of this section are rare.

Food Inspection.

One Inspector is employed in the inspection of fruits and vegetables. The Wallabout Market, being the great distributing centre for these products, most of the time of the Inspector is devoted to this market.

Employment Certificates.

The work of issuing employment certificates has, during the current year, been much improved. Records of all certificates issued are now kept in a form readily consulted.

As in the past, the office facilities during the rush for vacation certificates, proved totally inadequate. Through the courtesy of Mr. Bryan G. Smith, the use of the hall of the Long Island Historical Society as a waiting room for applicants was secured. This resulted in much diminishing the hardships formerly endured by applicants, who were compelled to wait on the street many hours with all attendant discomforts. The sincere thanks of the Department are due to Mr. Bryan G. Smith for his humane act in placing this hall at our disposal.

On October 1 a new law governing the issuance of employment certificates went into effect. The chief points of difference from the old law are in the proof of the age of the applicant, substituting documentary proof for the affidavit of the parent, and in largely increasing the classes of employment for which certificates are required. Many cases arise in which the requirement of documentary proof of the age of the child seems to work great hardship and unjust discrimination. When such proof cannot be furnished, it is usually through no fault of the child or its parents. The law, however, results in an unfair discrimination between children whose birth happens to be recorded or who happen to have a passport and those who are not able to furnish the documents required. Some children are as well developed mentally and physically at thirteen years of age as others at sixteen. I do not wish to argue for any diminution of the age at which children should be permitted to go to work, but it does seem that the test of fitness should be based on physical and mental qualifications, the latter as attested by attendance and attainments at school, rather than on the accidental possession of the proof of age now required by the law.

Court Proceedings.

The work of the division has been much facilitated by the co-operation of the courts, and further by the system of procedure adopted in criminal cases. When a prisoner is now arraigned before a magistrate, the officer is instructed under section 1265 of the Charter to request on behalf of the Department of Health that the case be remitted to Special Sessions. This is invariably done, thus doing away entirely with

hearings before the magistrates, diminishing the time required for the completion of the case by one-half, with a corresponding saving of time of inspectors, counsel and officers. When it is considered that during the current year, 646 arrests have been made, the magnitude of this saving may be appreciated.

Some opposition to the operation of this plan was manifested when it was introduced, and an application was made to a Justice of the Supreme Court to compel a magistrate to give a hearing to a prisoner arrested for violations of the Sanitary Code, whose case had been remitted to Special Sessions in accordance with this procedure. The matter was decided adversely to the applicant, so that the present system may be deemed to rest upon sound legal basis.

All of which is respectfully submitted,

JOSEPH H. RAYMOND, M. D.,
Assistant Sanitary Superintendent.

SANITARY BUREAU.

BOROUGH OF QUEENS.

To the Sanitary Superintendent:

I have the honor to submit the following report of work performed in the Borough of Queens for the three quarters ending September 26, 1903:

Summary—	Division of Inspection.	
Number of inspections.....		17,890
Number of reinspections.....		5,976
		<hr/>
Total		23,866
		<hr/> <hr/>
Number of complaints forwarded for orders.....		2,915
Number of citizens' complaints received.....		1,030
Number of citizens' complaints returned for orders.....		793
Number of citizens' complaints returned negative.....		146
Premises Inspected—		
Number of tenement houses.....		718
Number of private dwellings.....		3,594
Number of mercantile establishments.....		399
Number of manufactories and workshops.....		127
Number of stables.....		1,867
Number of sunken and vacant lots.....		706
Number of miscellaneous.....		6,452
		<hr/>
Total		13,863
		<hr/> <hr/>
Number of visits to stop work, close stores, etc.....		388
Number of specimens of milk examined.....		301
Number of pounds of goods condemned and destroyed.....		2,410
Number of permits issued.....		1,310
Number of arrests made.....		52
Number of persons held on bail.....		36
Number of persons discharged.....		16

Mercantile—

Number of children interviewed applying for certificates.....	1,480
Number of employment certificates granted.....	999
Number of employment certificates refused.....	7
Number of duplicate certificates issued.....	9
Number of inspections of milk.....	301
Number of inspections of fruit and food.....	3,726

Division of Contagious Diseases.

Summary—

Number of visits to cases of contagious diseases.....	2,656
Number of cases visited for special diagnosis.....	140
Number of cases treated with diphtheria antitoxin.....	55
Number of persons immunized with diphtheria antitoxin.....	57
Number of school notices sent.....	781
Number of complaints forwarded for orders.....	6
Number of visits to tenement houses.....	527
Number of visits to hotels.....	11
Number of visits to schools and institutions.....	2,490
Number of visits to private houses.....	1,884
Number of visits, miscellaneous.....	172
	<hr/>
Total number of visits.....	5,084
	<hr/> <hr/>
Number of primary vaccinations.....	90
Number of revaccinations.....	39
Number of vaccinations in schools.....	843
	<hr/>
Total number of vaccinations.....	972
	<hr/> <hr/>
Number of certificates of vaccination issued.....	585
Number of animals examined.....	2,249
Number of glandered horses condemned.....	29
Number of persons removed to contagious disease hospitals.....	15
Number of houses visited for disinfection.....	1,249
Number of infected rooms disinfected.....	1,838
Number of times ambulances, etc., disinfected.....	100
Number of pieces infected goods disinfected.....	1,457
Number of pieces infected goods destroyed.....	85
	<hr/> <hr/>

Total number of inspections..... 6,333

Number of Communicable Diseases Reported.

Diphtheria	403
Scarlet fever	340
Measles	423
Tuberculosis	296
Typhoid fever	82
Croup	8
Chicken-pox	96
Pertussis	55
Smallpox	1
Erysipelas	1
Total	<u>1,705</u>

Sanitary Police.

Number of inspections.....	1,839
Number of complaints referred to Inspectors.....	18
Number of complaints for orders.....	524
Number of reinspections.....	1,880
Number of negative reports forwarded.....	1,304
Number of visits to stop work, close stores, etc.....	388

Character of Premises Inspected—

Tenement houses	7
Private dwellings	408
Mercantile establishments	12
Manufactories and workshops.....	23
Stables	30
Sunken and vacant lots.....	40
Miscellaneous	1,319
Total	<u>1,839</u>

Number of arrests made.....	48
Number of persons held on bail.....	32
Number of persons discharged.....	16
Citizens' complaints received.....	<u>106</u>

Veterinarians.

Number of inspections.....	1,096
Number of animals examined.....	2,249
Number of glandered horses destroyed.....	29
Number of stables inspected.....	1,096
Number of complaints forwarded for orders.....	86
Reinspections on orders.....	479
Citizens' complaints received.....	2

SANITARY INSPECTORS.	Number of Inspections.	Number of Reinspections.	Number of Citizens' Complaints Received.	Number of Complaints Forwarded for Orders.	CHARACTER		
					Tenement Houses.	Private Dwellings	Mercantile Establishments.
A. W. Jagger, M.D.....	262	165	62	79	29	61	....
F. J. Maynard, M. D.....	1,436	5	4	10	3	8	9
T. A. Lehmann, M. D.....	555	585	107	404	73	313	1
Leo Tobias, M.D.....	323	82	67	112	43	221	....
M. S. Caldwell, M. D.....	651	33	21	41	2	120	....
T. B. Buffum, M.D.....	987	374	29	129	1	550	159
W. E. Sullivan, M.D.....	211	296	71	81	4	70	109
J. P. Sheridan, M.D.....	614	61	97	138	50	530	....
W. H. Stewart, M.D.....	1,970	143	8	302	399	485	....
E. J. Lorenze, M.D.....	784	418	130	275	38	....	....
John Colton, M. D.....	906	833	183	415	52	215	....
S. Hendrickson, M. D.....	191	7	3	50	1	9	1
C. A. McConville, M. D.....	54	....	....	19	13	41	....
A. W. Thompson, M.D.....	411	....	....	26	....	....	....
E. Byrnes, M.D.....	3,991	53	10	5	....	....	....
John J. Sullivan, M.D.....	36	....	....	....	....	....	....
C. B. Story, M. D.....	963	561	130	209	3	562	48
Total.....	14,955	3,617	922	2,305	711	3,186	387

OF PREMISES INSPECTED.					MERCANTILE ESTABLISHMENTS.								
Manufactories and Work-shops.	Stables.	Sunken and Vacant Lots.	Miscellaneous.	Total.	Number of Specimens of Milk Examined.	Number of Specimens of Milk Collected.	Pounds of Fruit Condemned.	Pounds of Vegetables Condemned.	Number of Children Interviewed Applying for Certificates.	Number of Employment Certificates Granted.	Number of Employment Certificates Refused.	Number of Duplicate Certificates Issued.	Arrests Held on Bail.
..	3	89	80	262	....	....	....	....	....	....	....	....	..
..	..	....	1,416	1,436	....	....	....	....	1,426	967	6	9	..
6	24	44	94	555	....	....	....	....	....	....	..	..	..
8	19	19	13	23	....	....	....	....	....	....	..	..	..
..	25	24	490	661	....	....	....	....	....	....	..	..	..
7	13	25	232	687	....	....	....	....	....	....	..	..	..
10	12	84	462	811	..	....	....	....	....	....	..	..	..
1	1	10	22	614	....	....	....	....	....	....	..	..	..
12	286	89	698	1,970	....	....	....	....	....	....	..	..	..
..	308	18	420	784	....	....	....	....	....	....	..	..	..
39	16	62	522	905	....	....	....	....	....	....	..	..	..
..	13	37	130	191	....	....	....	....	54	32	1	..	..
..	..	....	....	54	....	....	....	....	....	....	..	..	..
..	..	19	392	411	....	....	....	....	....	....	..	..	..
..	..	....	....	....	265	17	1,850	560	....	....	..	..	..
..	..	....	....	....	36	36	....	....	....	....	..	..	..
21	21	146	162	973	....	....	....	....	....	....	..	..	..
104	741	666	5,133	10,928	301	53	1,850	560	1,426	999	7	9	4

MEDICAL INSPECTORS.	Number of Visits to Cases.	Number of Visits to Cases for Special Diagnosis.	Number of Cases Treated with Diphtheria Antitoxin.	Number of Persons Immunized with Diphtheria Antitoxin.	Number of School Notices Sent.
A. W. Jagger, M. D.....	95	....	....	....	80
M. S. Caldwell, M. D.....	72	....	....	....	42
T. A. Lehmann, M. D.....	1,080	....	....	3	289
C. B. Story, M. D.....	278	....	....	....	89
J. P. Sheridan, M. D.....	704	140	53	49	47
W. E. Sullivan, M. D.....	35	....	....	....	35
C. A. McConville, M. D.....	161	....	....	....	127
T. B. Buffum, M. D.....	15	....	....	....	24
F. J. Maynard, M. D.....	4	....	....	4	....
Leo Tobias, M. D.....	147	....	1	3	48
A. W. Thompson, M. D.....	1	....	....	....	....
W. H. Stewart, M. D.....	10	....	....	....	....
E. J. Lorenze, M. D.....	54	....	1	....	....
S. Hendrickson, M. D.....	....	....	....	....	....
J. C. Reshower, M. D.....	....	....	....	....	....
J. D. Van Derlyn, M. D.....	....	....	....	....	....
M. Mintz, M. D.....	....	....	....	....	....
Total.....	2,656	140	55	57	781

Number of complaints Forwarded for Orders.	NUMBER OF VISITS.						Number of Primary Vaccinations.	Number of Revaccinations.	Number of Vaccinations in Schools.	Total Number Vaccinations.	Number of Vaccination Certificates Issued.
	Tenement Houses.	Hotels.	Private Dwellings.	Schools and Institutions.	Miscellaneous.	Total.					
....	27	....	49	41	19	136	....	....	....	....	....
....	....	1	69	295	2	367	....	....	64	64	24
5	339	...	695	321	30	1,385	4	....	165	169	35
....	6	4	261	72	7	350	....	....	....	....	....
....	81	4	549	150	27	811	....	....	14	14	16
1	4	....	30	594	....	628	....	....	75	75	....
....	29	....	80	393	52	554	....	....	94	94	74
....	....	....	15	414	....	429	....	....	83	83	40
....	1	....	3	....	....	4	53	16	20	89	89
....	28	....	113	135	5	281	12	....	2	14	17
....	....	....	....	1	....	1	....	....	300	300	290
....	1	2	5	7	2	17	....	....	....	....	....
....	11	....	15	8	28	62	....	....	....	....	....
....	....	....	....	....	....	....	21	....	....	21	....
....	....	....	....	21	....	21	....	....	29	29	....
....	....	....	....	27	....	27	....	....	17	17	....
....	....	....	....	11	....	11	....	....	....	....	....
6	527	11	1,884	2,490	172	5,084	90	16	863	969	585

Medical School Inspection.

Schools.	Total Daily Average Attendance.	Number of Schools Visited.	Number of Visits to Schools.	Number of Pupils Examined.	Number of Pupils Excluded.
Public schools.....	26,392	105	2,225	253,137	44
Parochial schools.....	2,500	12	120	8,753	5
Total.....	28,892	117	2,449	301,900	49

Table Showing Diseases for Which Children were Excluded.

Schools.	Measles.	Whooping Cough.	Mumps.	Contagious Eye Diseases.	Pediculosis.	Chicken Pox.	Contagious Skin Diseases.	Miscellaneous.	Total Number Excluded.
Public schools.....	3	11	4	98	212	13	60	43	444
Parochial schools.....	..	..	..	4	..	..	1	..	5
Total.....	3	11	4	102	212	13	61	43	449

Disinfecting Corps.	Number of Persons Removed to Hospital.	Number of Houses Visited.	Number of Rooms Disinfected.	Number of Times Ambulances and Other Vehicles Disinfected.	Number of Pieces of Infected Goods Disinfected.	Number of Pieces of Infected Goods Destroyed.
John Burns.....	.....	363	466	.....	.....	.....
J. Sharkey.....	.....	511	830	.....	.....	.....
J. Kenney.....	.....	119	151	.....	.....	.....
A. Woods.....	15	7	.....	98	1,437	85
J. Dooley.....	.....	247	391	.....	.....	.....
P. Rudden.....	.....	.....	.....	2	20	.....
Total.....	15	1,247	1,838	100	1,457	85

Summary of Work Performed.

Number of inspections and reinspections made.....	30,199
Number of inspections of mercantile establishments.....	399
Number of Inspectors' complaints made.....	1,996
Number of citizens' complaints received.....	1,030
Number of complaints forwarded for orders.....	2,921
Number of vessel permits issued.....	31
Number of miscellaneous permits issued.....	1,279
Number of pounds of foods seized and condemned (fruit, fish, meat, etc.)....	2,410
Number of heads of cattle examined.....	2,249
Number of glandered horses destroyed.....	29
Number of visits to cases of contagious diseases.....	2,656
Number of primary vaccinations performed.....	90
Number of revaccinations performed.....	39
Number of vaccinations performed in schools.....	843
Number of children examined.....	301,900
Number of children excluded from schools.....	449
Number of persons treated with diphtheria antitoxin.....	55
Number of persons immunized with diphtheria antitoxin.....	57
Number of persons removed to hospital.....	15
Number of pieces of infected goods disinfected.....	1,459
Number of pieces of infected goods destroyed.....	85

Respectfully submitted,

SAMUEL HENDRICKSON, M. D.,

Assistant Sanitary Superintendent.

Report of Work Performed in the Sanitary Bureau, in the Borough of Queens, During the First Three Quarters, 1923.

Summary.	First Quarter.	Second Quarter.	Third Quarter.	Totals.
Number inspections and reinspections.....	9,991	11,277	8,931	30,199
Number complaints returned.....	824	1,159	956	2,939
Number citizens' complaints received.....	245	332	453	1,030
Number arrests made.....	20	16	16	52
Number held on bail.....	4	16	16	36
Number discharged.....	16	....	....	16
Number glandered horses destroyed.....	3	6	20	29
DIVISION OF INSPECTION.				
<i>Mercantile Establishments.</i>				
Number inspections made.....	247	120	32	399
Milk Inspections—				
Number specimens of milk examined.....	132	107	62	301
Number specimens of milk collected for analysis...	....	8	45	53
Number milk inspections made.....	132	107	62	301
Fruit and Food Inspections—				
Number pounds fruit condemned and seized.....	....	240	1,610	1,850
Number pounds food condemned and seized.....	....	50	510	560
Number inspections made.....	1,526	1,138	1,062	3,726
DIVISION OF CONTAGIOUS DISEASES.				
Total vaccinations.....	431	403	138	972
Number persons removed to hospital.....	1	8	6	15
Number houses visited for disinfection.....	298	450	501	1,249
Number infected rooms disinfected.....	450	634	754	1,838
Number pieces infected goods disinfected.....	638	550	269	1,457
Number pieces infected goods destroyed.....	23	38	21	85
Medical School Inspection—				
Number schools visited.....	129	117	105	117
Number visits to schools.....	1,174	1,047	228	2,449
Number children examined.....	134,852	114,038	53,010	301,900
Number children excluded.....	204	138	107	449

Department of Health,
No. 374 Fulton Street, Jamaica, Borough of Queens, }
New York, December 2, 1903.

To the Sanitary Superintendent :

Sir—I have the honor to submit the following general report of work performed by the Sanitary Bureau in the Borough of Queens, for the year 1903 :

Sanitary Inspections.

This includes investigation of citizens' complaints, visits to contagious diseases, inspections of premises, inspections of schools, inspections of foods and offensive trades, inspections of mercantile establishments and issuance of employment certificates.

The total number of inspections and reinspections show an increase of 75 per cent. above the total of 1902, notwithstanding the fact that in the number of citizens' complaints received, there was only a very slight increase, about 5 per cent.

Sanitary inspections and reinspections show an increase of 150 per cent.; visits to contagious diseases, 100 per cent.; visits for disinfection, 75 per cent.; visits to schools, 15 per cent.; inspections and reinspections by the Veterinarian, about 50 per cent.; inspections and reinspections by the Milk Inspector show a large decrease, owing to the fact that during a large portion of the year the milk inspection has been in charge of the Division of Inspection of Milk in Manhattan; inspections and reinspections by Fruit and Food Inspector show an increase of 60 per cent.; inspections and reinspections by Sanitary Officers an increase of 70 per cent.; the number of Inspectors' complaints received have increased 125 per cent.

During the summer a thorough and daily inspection was made of Rockaway Beach and Far Rockaway by a Sanitary Inspector, two sanitary officers and myself. The sanitary conditions are very much improved. The removal of garbage was more promptly done, and complaints received from this section were very few in number. The summer population of these places is an ever increasing one, which in the height of the season is estimated, including day visitors, at over 100,000.

The number of inspections and reinspections made was 35,369, as follows :

Sanitary inspections and reinspections.	16,909
Visits to contagious diseases.	3,230
Visits to contagious diseases for disinfection.	1,422
Inspections of schools.	3,095
Inspections and reinspections by Veterinarian.	1,947
Inspections and reinspections by Milk Inspector.	323
Inspections by Fruit and Food Inspector.	3,985
Inspections and reinspections by Sanitary Officers.	4,458
Total.	35,369

Citizens' complaints received	1,197
Inspectors' complaints received	2,134
Number of orders issued	2,315
Number of vessel permits issued.....	47
Number of miscellaneous permits issued.....	1,503
Number of employment certificates issued.....	1,110

Number of orders of vacation issued against premises for non-compliance with orders, 16, as follows:

- No. 14. Fourth street, near Vernon avenue, Long Island City, defective plumbing.
- No. 16. Pine street and Collins place, Flushing, defective drainage and unsanitary conditions.
- No. 25. No. 229 DeBevoise avenue, Long Island City, defective plumbing.
- No. 26. No. 37 Wilbur avenue, Long Island City (front), existence of nuisance.
- No. 27. No. 37 Wilbur avenue, Long Island City (rear), existence of nuisance.
- No. 29. Seventeenth street, near Seventh avenue, College Point, defective drainage.
- No. 33. Main avenue, Douglaston, existence of nuisance.
- No. 34. Sixth street, near Broad, Maspeth, defective drainage and existence of nuisance.
- No. 40. Central and Norton avenues, Far Rockaway, existence of nuisance and want of repair.
- No. 42. Eighteenth street, near Seventh avenue, Whitestone, defective drainage and unsanitary conditions.
- No. 43. Amerman avenue, Arverne, defective drainage and want of repair.
- No. 48. Merrick road and Springfield avenue, existence of nuisance.
- No. 58. Atlantic, near Hoffman avenue, Chester Park, existence of nuisance.
- No. 151. Town Hall, Jamaica, defective plumbing and want of repair.
- No. 41. Nos. 70 and 72 Union street, Flushing, defective plumbing and existence of nuisance.
- No. 49. No. 209 Elm street, Long Island City, defective plumbing and existence of nuisance.

Orders complied with before vacation.....	8
Work in progress	5
Houses vacated after notice.....	3
Number of orders referred to Tenement House Department.....	164

Number of orders referred to all other departments.....	221
Number of orders outstanding	527
Amount of food condemned and destroyed, pounds.....	2,410

Contagious Diseases.

The number of contagious diseases reported show a decrease of about 10 per cent. below 1902, but because of more thorough disinfection the work of this division has increased to a marked degree.

The reported cases of diphtheria is about 25 per cent. greater than 1902, with deaths 96 as against 81 in 1902, a mortality rate less than 18 per cent.

Cultures are taken in probably 75 per cent. of all cases, either by the attending physician or by this Department on request.

Antitoxin is used much more freely and attending physicians are urged to use it by our Inspectors whenever opportunity offers. The amount given out for free distribution from this office was:

72 vials No. 4 (units, each).....	2,000
50 vials No. 4a (units, each).....	1,000
1 vial No. 5 (units, each).....	2,000
68 vials No. 5a (units, each).....	3,000
1 vial No. 6 (units, each).....	2,000
2 vials No. 6a (units, each).....	3,000

Total units used for 1903, 406,000.

This is an increase over 1902 of 257,000 units.

There was an increase in the reported cases of tuberculosis of over 40 per cent., with a decrease in deaths from 211 to 164. In every case reported, the attending physician is visited by an Inspector, unless the request is made to visit the patient, which rarely happens, for the purpose of getting information and giving instructions for the proper observance of sanitary measures. The only exception is in cases reported from tenement houses which are visited directly by the Inspector. In all cases where proper care cannot be given at home, the removal of the patient to the hospital is urgently recommended.

In every case of typhoid fever, the premises are visited by an Inspector, a thorough sanitary inspection made, and every endeavor made to trace the source of infection.

There has not been a single case of small-pox in the borough this year.

There have been 2,051 cases of contagious diseases reported for year 1903, as follows:

Diphtheria	548
Scarlet fever	372
Measles	480
Tuberculosis	361
Typhoid fever	115
Croup	8
Chickenpox	104
Whooping cough	63
	<hr/>
Total	2,051
	<hr/> <hr/>

Number of cases removed to contagious disease hospital, 15.

This is an increase over 1902 of—

Diphtheria	105
Scarlet fever	8
Tuberculosis	107
Whooping Cough	43
	<hr/> <hr/>

And a decrease of—

Measles	226
Typhoid fever	87
Parotiditis	1
Croup	16
Chickenpox	57
Smallpox	57
	<hr/> <hr/>

Vaccinations have been performed in all schools where required, at this office, and at homes whenever requested.

Number of primary vaccinations.....	103
Number of revaccinations.....	16
Number of vaccinations in schools.....	1,423
	<hr/>
Total	1,542
	<hr/> <hr/>

Number of cases of glanders reported and destroyed, 41.

Cow Stables.

Inspections of cow stables have been regularly and persistently made by Drs. Stewart, Lorenze, the Veterinarian and the Assistant Sanitary Superintendent.

There are approximately 400 cow stables in the borough, and in the neighborhood of 12,000 cows. There is a marked improvement in all sanitary conditions, and by keeping these places under constant observation, the improvement should continue.

Number of inspections and reinspections.....	3,540
Number of inspections and reinspections by Sanitary Inspectors.....	1,685
Number of inspections and reinspections by Veterinarian.....	1,855
Number of sanitary orders issued on cow stables.....	90
Number of sanitary orders complied with.....	63
Number of nuisance orders issued.....	53
Number of nuisance orders complied with.....	39
Number of cows sent to the public pound.....	640

Ponds.

The inspection of mosquito-breeding ponds in the borough has been thorough and effective. Nearly 50 per cent. of orders issued against these premises have been complied with. In other cases where work is in progress, the orders are held for reinspection; all others have been placed in the hands of the Corporation Counsel. Ten barrels of oil were distributed during the summer on the most prolific breeding ponds.

Number of pond orders issued, 137.

Order No.	Premises.	Date of Issue.	Disposition.
442	Eleventh avenue and Thirtv-fifth street, Whitestone	Mar. 19	Held for reinspection.
443	Between Whitestone and Flushing.....	" 19	Complied with.
444	Twelfth street, between East and Van Alst avenues, Long Island City.....	" 19	Corporation Counsel.
445	One Hundred and fifty feet east of Laurel Hill avenue.....	" 19	"
447	Van Dam and Gale streets, Long Island City.....	" 19	Complied with
448	Thirteenth street, between East and Van Alst avenues.....	" 19	Corporation Counsel.
449	Nott, Hunter and Jackson avenues, Long Island City.....	" 19	"
490	Briell avenue, near Jamaica avenue, Long Island City.....	" 23	Complied with.
491	Flushing avenue and Newtown turnpike, Corona.....	" 23	Corporation Counsel.
492	Flushing avenue and Newtown turnpike, Corona.....	" 23	"
519	Perry and Columbia avenues, Maspeth.....	" 25	"
520	Metropolitan avenue and Linden Hill Cemetery, Metropolitan.....	" 25	Held for reinspection.
521	Flushing avenue, Metropolitan.....	" 25	"
522	Flushing avenue, near Mount Olivet avenue, Maspeth.....	" 25	"
523	Clinton avenue and Long Island Railroad, Maspeth.....	" 25	"

Order No.	Premises.	Date of Issue.	Disposition.
524	Clinton and Fisk avenues, Maspeth.....	Mar. 25	Held for reinspection.
525	Clinton and Fisk avenues, Maspeth.....	" 25	"
526	Flushing avenue, near Mount Olivet avenue, Maspeth.....	" 25	"
527	Mount Olivet avenue, near Flushing avenue, Maspeth.....	" 25	"
528	Vincent street, near Fresh Pond road.	" 25	"
529	Vermont avenue, near Cypress avenue, Evergreen.....	" 25	"
530	Metropolitan avenue, near Hempstead turnpike, Middle Village.....	" 25	"
531	Metropolitan avenue, near Bowne avenue, Middle Village.....	" 25	"
532	Fisk avenue and Main street, Maspeth.....	" 25	Complied with.
533	Juniper avenue and Fulton avenue, Maspeth.....	" 25	Held for reinspection.
545	Perry and Columbia avenues and Long Island Railroad, Maspeth...	" 26	"
546	Perry and Columbia avenues and Long Island Railroad, Maspeth...	" 26	"
549	Seventh street, near Tenth avenue, Whitestone.....	" 26	Complied with.
550	Between Whitestone and Flushing.....	" 27	Held for reinspection.
551	Between Rockaway road and South street, Jamaica.	" 27	"
552	Park avenue, near Highland avenue, Jamaica.....	" 27	"
554	Blackstump road, near Hillside avenue, Jamaica.....	" 27	"
606	Northwest of Grand street, Corona.....	Apr. 2	Complied with.
607	Northwest of Grand street, Corona.....	" 2	"
608	Smith and Evergreen avenues, Corona.....	" 2	"
609	Smith avenue, Corona	" 2	Held for reinspection.
610	Hoffman Boulevard, Whitepot.	" 2	"
611	Trainsmeadow road, Elmhurst.....	" 2	"
612	Central and Lafayette avenues, Glendale.....	" 2	"
621	East side of Blackstump road.....	" 2	Complied with.
713	Near Hillside avenue, Jamaica.....	" 17	Held for reinspection.
714	North of Fresh Meadow road, Jamaica....	" 17	"
716	Evergreen Cemetery.....	" 20	"
717	Thirteenth avenue and Nineteenth street, Whitestone.....	" 20	"
718	Between Van Alst and Ely avenues, Long Island City..	" 20	Complied with.
719	Ely avenue and Lincoln street, Long Island City.....	" 20	"
720	Bradley and Borden avenues, Long Island City.....	" 20	"
721	Nott avenue, between Jackson and Thompson avenues, Long Island City.....	" 20	"
722	Boulevard, Edgemere.....	" 20	"
723	Bell avenue, north of Titus avenue, Bayside.....	" 20	"
724	Between Thirteenth and Fourteenth avenues, Long Island City.....	" 20	Held for reinspection.
725	Boulevard, near Life-saving Station, Arverne.....	" 20	Complied with.

Order No.	Premises.	Date of Issue.	Disposition.
726	Vandine avenue, near Flushing avenue, Jamaica	Apr. 20	Held for reinspection.
826	Jamaica Heights, north of Fulton street, Jamaica.....	" 30	"
859	Seventeenth street, near High street, College Point.....	May 6	Complied with.
862	North of Fulton street, Jamaica	" 6	Held for reinspection.
870	Webster avenue, near Jackson avenue, Long Island City.....	" 6	"
871	Eighth and Jackson avenues, Long Island City.....	" 6	Complied with.
872	Park avenue, Corona.....	" 6	Held for reinspection.
873	Corner of Woolsey and Grand avenues, Long Island City	" 6	Complied with.
874	Adjoining No. 345 Hamilton street, Long Island City.....	" 6	"
875	Bell avenue, near Bayside avenue, Bayside.....	" 6	Held for reinspection.
876	Jackson avenue, between Arch and Ninth streets, Long Island City.....	" 6	Complied with.
878	Between Crescent and Hunter avenues, Long Island City.....	" 6	"
879	Cooper street, north of Grand avenue, Corona.....	" 6	"
880	Taylor and Woolsey streets, Long Island City.....	" 6	"
881	Eighth street, between East and Jackson avenues, Long Island City.....	" 6	"
882	Metropolitan avenue, Middle Village.....	" 6	Held for reinspection.
883	Blackstump road, near Hill-side avenue, Jamaica.....	" 6	"
884	Twentieth street and Cypress avenue, Flushing.....	" 6	Complied with.
885	Farm of R. Bell.....	" 6	Held for reinspection.
886	Prospect street, Elmhurst.....	" 6	"
887	Noble and Hamilton streets, Long Island City.....	" 6	Complied with.
888	Bell avenue, Bayside.....	" 6	"
889	Lots on South street, Jamaica.....	" 6	"
890	Lots on South street, Jamaica.....	" 6	"
891	Near Pleasant avenue, Rockaway Beach	" 6	"
892	Flushing avenue, north of trolley track	" 6	Held for reinspection.
893	Near Long Island Railroad, Springfield.....	" 6	"
894	Near Long Island Railroad, Springfield.....	" 6	"
895	North of Highland avenue, Jamaica.....	May 6	Held for reinspection.
896	North of Highland avenue, Jamaica.....	" 6	"
897	North of Highland avenue, Jamaica.....	" 6	"
898	Highland avenue, near trolley, Jamaica.....	" 6	Complied with.
899	Property of State Normal School, Jamaica.....	" 6	"
907	Walnut street, Richmond Hill.....	" 7	Held for reinspection.
929	Blackstump road and Grand street.....	" 12	"
930	Between Grand and Bergen avenues, Jamaica.....	" 12	"
931	Corner of Bell avenue and Broadway, Bayside.....	" 12	Complied with.

Order No.	Premises.	Date of Issue.	Disposition.
932	Pradish avenue, near Bell avenue, Bayside.....	May 12	Complied with.
933	South side of Broadway, Bayside.....	" 12	"
934	Bayside avenue, Bayside.....	" 12	"
935	Bell and Crocheron avenues, Bayside.....	" 12	Held for reinspection.
937	Near Garrison's Hotel, Bayside.....	" 12	Complied with.
938	Corner of Bell and Crocheron avenues, Bayside.....	" 12	"
939	Foot of Crocheron avenue, Bayside.....	" 12	"
940	Property of C. M. Gould, Bayside.....	" 12	Held for reinspection.
941	Neptune avenue, Edgemere.....	" 12	Complied with.
945	Nos. 136 and 138 Eighth street, Long Island City.....	" 12	"
951	Goodrich street and Hoyt avenue, Long Island City.....	" 13	"
957	East of Flushing avenue, Jamaica.....	" 12	"
973	Broadway, near Queens avenue, Flushing.....	" 14	"
974	Whitestone and Bayside avenues, Flushing.....	" 14	"
1025	Whitestone avenue, near Bayside avenue, Flushing.....	" 18	"
1027	Flushing road, Jamaica.....	" 18	"
1025	West of Leavitt's house, Bayside.....	" 18	"
1131	Jamaica plank road, near Grant avenue.....	" 21	"
1145	Thirteenth street, near Monument street, College Point.....	" 26	"
1146	Near North Boulevard, College Point.....	" 26	"
1178	Broadway and Hopkins avenue, Long Island City.....	June 2	Held for reinspection.
1184	Whitestone road and Bayside avenue, Bayside.....	" 2	Complied with.
1334	Webster avenue, between Seventh, Eighth and Jackson avenues } Long Island City.....	" 2	Held for reinspection.
1335	Webster avenue, between Seventh, Eighth and Jackson avenues, } Long Island City.....		
1336	Farmers' avenue and South street, Hollis.....	" 2	"
1391	Linwood street, Richmond Hill.....	" 2	Complied with.
1392	Linwood street, near Atlantic avenue, Richmond Hill.....	" 2	"
1393	Linwood street, Richmond Hill.....	" 2	Held for reinspection.
1421	Main avenue, Douglaston.....	" 29	"
1504	Flushing road, between Flushing and Jamaica.....	July 8	"
1567	Fulton avenue, corner of Morris avenue, Richmond Hill.....	" 15	"
1598	Corona avenue and Orchard avenue, Corona.....	" 20	Work in progress.
1767	Fifth street, between Howell and Anderson avenues, Woodside.....	Aug. 7	Held for reinspection.
1810	Jackson avenue, east of car barn.....	" 13	"
1893	Read's lane, Far Rockaway.....	" 20	"
1918	Borden avenue, east of Van Alst avenue, Long Island City.....	" 24	"
1996	Seventeenth and Eighteenth avenues, Long Island City.....	Sept. 8	"

Order No.	Premises.	Date of Issue.	Disposition.
2042	Nott and Jackson avenues, Long Island City.....	Sept. 14	Held for reinspection.
2114	Cooper avenue, between Wyckoff and Cypress avenues, Evergreen.	" 29	Work in progress.
2158	Review avenue, near Borden avenue, Long Island City.....	Oct 8	Held for reinspection.
2160	Dry Harbor road, north of Juniper Swamp road.....	" 12	"
2176	East of Flushing road, Jamaica.....	" 13	"
2178	Washington avenue, near Wyckoff avenue, Evergreen.....	" 15	Work in progress.
2179	Washington avenue, between Cooper and Wyckoff avenues, Evergreen.....	" 15	"
2203	Pomeroy street, near Webster avenue, Long Island City.....	" 21	Held for reinspection.
2215	Gale and Van Dam streets, Long Island City.....	" 23	"
2216	Gale and Van Dam streets, Long Island City.....	" 23	"
2227	Jackson avenue, between First and Fourth streets, Woodside.....	" 26	"

School Inspections.

School inspections are very satisfactory and in charge of six Inspectors. There are 80 schools in the borough, with an average attendance of 30,000 pupils, besides the parochial schools, which are also visited. Every pupil is inspected at least once in each week, and sanitary inspections of the buildings made once a month or oftener.

Number of visits to schools.....	3,095
Number of children examined	482,642
Number of children excluded.....	637

Disinfection Station.

The quantity of goods and the number of premises from which goods have been removed has increased very considerably, necessitating the almost constant use of four horses, two goods wagons and at least three trips each week to the Kingston Avenue Hospital by both wagons.

The purchase of the Haacke farm and the establishment of a disinfecting station there will lessen the work of this division to a very large extent.

Number of disinfections performed.....	1,422
Number of removals of goods for disinfection.....	1,457

Arrests.

Number of arrests.....	54
Number of criminal actions.....	60
Number of criminal actions pending.....	1
Number of convictions.....	44
Number of acquittals.....	15
Number of civil actions commenced.....	4
Number of civil actions discontinued.....	2
Number of civil actions pending.....	2

Amount of fines imposed and collected, \$557.

Respectfully submitted,

SAMUEL HENDRICKSON, M. D.,

Assistant Sanitary Superintendent.

Department of Health,
Richmond Terrace, New Brighton, Borough of Richmond, }
New York, December 2, 1903.

CHARLES F. ROBERTS, M. D., Sanitary Superintendent :

Dear Sir—In compliance with your letter of November 7, I have the honor to submit the following report of the work of this Department in the Borough of Richmond for the year 1903:

Division of Contagious Diseases.

The contagious diseases reported to this Department for the year 1903 remain about the same as last year. There were 194 cases of diphtheria reported, which is an increase over previous years; 89 cases of scarlet fever, 261 cases of measles and 56 cases of typhoid fever.

Typhoid fever this year has been decidedly on the decrease. Upon examination of all the cases of typhoid fever reported to this Department we found but two cases that had their origin in this borough. The others were contracted away, the disease developing after their return to the island.

Tuberculosis has been steadily on the increase. This may be due to the fact that the physicians are complying with the regulations of the Department in reporting cases.

We had one case of small-pox reported from the United States Marine Hospital, which was removed to North Brother Island by this Department.

Disinfection.

The Department of Health, in the early part of this year, acquired from the Department of Public Charities a section of land situated at the County Farm, for the erection of a disinfecting plant. This building was completed in the early part of July and was put in operation at once.

Goods and infected clothing are removed from houses where contagious diseases have occurred, both private and public, to the sterilizing plant to be disinfected, and are returned the same day.

The Department has carried out the rules and regulations in regard to disinfection and fumigation, using formaldehyde in all cases. We have disinfected every case of contagious disease that has occurred in this borough.

The disinfecting plant is modern in every respect, and thoroughly equipped to carry out the work of this Department. Its erection and object has been thoroughly appreciated by the medical profession throughout the county.

We had experienced some difficulty in removing goods from the outlying districts as promptly as could be desired for the reason that the disinfecting plant is not centrally situated. We have recently acquired additional horses and wagons, which has overcome this trouble.

Vaccination.

The Medical School Inspectors have carried on a systematic vaccination in the public schools, and I am informed, and the records of the Department show, that there is not a single child attending the public schools in the Borough of Richmond who has not been vaccinated within the time required by the Department.

Culture Stations.

The establishment of five culture stations in the Borough of Richmond has been of the very greatest service to the public and aid to the physicians, enabling them to make an early diagnosis in cases of contagious disease, diphtheria, typhoid fever and tuberculosis, and I believe they have taken advantage of the opportunity in all cases to have cultures examined. The stations are now operating to my perfect satisfaction and to the profession.

Antitoxin.

The free distribution of antitoxin still continues. Very great demands are being made upon the Department for it, and it is being depended upon very generally for immunization and treatment.

Medical School Inspection.

Every school in this borough is inspected once a day by the Medical School Inspectors of this Department. There have been very few exclusions from schools, and

I believe that the supervision over the schools has been the means of lessening contagious disease to a very great extent. Medical School Inspectors have also had supervision over the sanitary condition of the schools.

There have been two cases of trachoma reported by the Medical School Inspectors which were treated by their own physicians.

Mosquito Work.

Mr. Henry Clay Weeks, the expert, by direction of the President, visited this borough during the summer, and made a survey of a large area of swamp land lying on the south shore of Staten Island, with the object of reclaiming it and lessening the breeding ground for mosquitoes. Mr. Weeks made his report to you and the necessary survey was made and the maps drawn and papers filled out and served upon the President of the Borough, and I have the honor to inform you that the survey has been made of the land lying from South Beach to New Dorp, and the work of draining this marsh land will be begun in the early spring.

Two of our Medical Inspectors, Drs. Wisely and Love, were assigned to Mr. Weeks to make inspections of all sunken lots, stagnant pools, lakes and water courses, to ascertain the presence of the larvæ of the anopheles mosquito. These localities have been plotted, and where it has been possible, orders have been served upon the owners of the land where this swamp land exists to fill in the property and abate the nuisance.

During the summer months Dr. Tobias was put in charge of a gang of laborers who constantly oiled a very large mosquito area with crude oil, but I cannot see that the results of this method were satisfactory. Great care had to be observed in this operation, as many of these ponds and brooks led to the general water supply, which did not permit the use of the oil as freely as we desired.

Notices were sent out with every order and communication in regard to mosquito developing conditions, and the Sanitary Inspectors were notified to instruct tenants and owners of property in regard to cisterns, rain-water barrels, etc., which I think has been of great benefit in lessening the development of mosquitoes.

We have had but very few cases of malarial fever reported to this Department, they having been received at the United States Marine Hospital, and had developed elsewhere.

Sanitary Inspections.

The subdivision of the borough into districts and appointing a Sanitary Inspector to each district and making him responsible for his district, has enabled them to cover the entire borough and has materially lessened the citizens' complaints, and the result of this system has been very satisfactory.

During the year Sanitary Inspector Smjth died and his position has not been filled. Sanitary Inspector Santry has been transferred to the Borough of Manhattan. The

loss of these two Inspectors has materially lessened the working force of this Department.

There have been but few orders issued to comply with sanitary regulations which have not been complied with. The orders of the Department requiring all houses on the line of public sewers to discontinue the use of cesspools and privy vaults and connect their houses with the public sewer has been carried out, and at present a very large percentage of the orders issued have been complied with. Some are now pending in the Corporation Counsel's office for the reason that it is impossible for them to connect on account of the grade of the sewers and the inefficiency of the water supply to properly flush the fixtures. The activity in the Corporation Counsel's office in bringing cases to suit has been the means of having so many orders complied with.

Milk Inspection.

The inspection of the dairies under the charge of Dr. P. K. Nichols, Veterinarian of this Department, has been very thorough, and I believe that, with few exceptions, the dairies are in first-class condition. There have been quite a number of small dealers who have been obliged to abandon their business on account of these orders, and I think it has been of very great benefit. In other cases, the dairies have been brought up to the requirements of the Department, in the establishment of cooling apparatus and proper milk houses. There were seven cases for milk adulteration, etc., in court and the offenders punished.

Dr. Nichols should be complimented for the faithful and painstaking manner in which he has performed his duties in regard to the inspection of dairies.

During the summer months special care was taken in the supervision of the milk supply of infants, and the rules of the Department enforced among dealers in preserving the temperature of the milk disposed of.

The two Milk Inspectors assigned to this borough have to cover a very large district. Notwithstanding this, I am of the opinion that the milk of every producer and dealer has been inspected at least once a week.

With this report I forward to you the statistical report for the three quarters ending September 30, 1903.

The clerical work of the office, under the charge of Mr. Charles E. Hoyer, Assistant Chief Clerk, has been carried on to my perfect satisfaction, and the clerks and other employees of this Department have been conscientious and competent in the discharge of their respective duties.

Very respectfully submitted,

JOHN T. SPRAGUE, M. D.

Assistant Sanitary Superintendent.

SANITARY BUREAU.

BOROUGH OF RICHMOND.

To the Sanitary Superintendent:

I have the honor to submit the following report of work performed in the Borough of Richmond for the quarters ending March 28, June 27 and September 26, 1903:

Division of Inspection.

Summary—

Number of inspections.....	10,352
Number of reinspections.....	5,798
Total	<u>16,150</u>
Number of complaints forwarded for orders.....	1,555
Number of citizens' complaints received.....	481
Number of citizens' complaints returned for orders.....	391
Number of citizens' complaints returned negative.....	90

Premises Inspected—

Number of tenement houses.....	38
Number of private dwellings.....	2,772
Number of mercantile establishments.....	554
Number of manufactories and workshops.....	143
Number of stables.....	817
Number of sunken and vacant lots.....	349
Number of miscellaneous.....	<u>759</u>
Total	<u>4,920</u>
Number of visits to stop work, close stores, etc.....	7
Number of specimens of milk examined.....	2,858
Number of pounds of foods condemned and destroyed.....	1,162
Number of permits issued.....	1,301
Number of arrests made.....	8
Number of persons held on bail	5
Number of persons discharged.....	2

Mercantile—

Number of citizens' complaints received.....	2
Number of complaints returned for orders.....	1
Number of children interviewed applying for certificates.....	269
Number of employment certificates granted.....	231
Number of employment certificates refused.....	38
Number of duplicate certificates issued.....	2
Inspected milk	3,190
Inspected other foods.....	<u>1,786</u>

Division of Contagious Diseases.

Summary—

Number of visits to cases of contagious diseases.....	1,685
Number of cases visited for special diagnosis.....	7
Number of cases treated with diphtheria antitoxin.....	7
Number of persons immunized with diphtheria antitoxin.....	32
Number of school notices sent.....	501
Number of complaints forwarded for orders.....	1
Number of visits to tenement houses.....	164
Number of visits to hotels.....	22
Number of visits to schools and institutions.....	2,634
Number of visits to private houses.....	1,026
Number of visits miscellaneous.....	136
Total number of visits.....	<u>3,982</u>
Number of primary vaccinations.....	78
Number of revaccinations.....	1
Number of vaccinations in schools.....	234
Total number of vaccinations.....	<u>313</u>
Number of certificates of vaccination issued.....	157
Number of animals examined.....	7,671
Number of post-mortems on animals.....	27
Number of glandered horses condemned.....	10
Number of persons removed to contagious disease hospitals.....	7
Number of houses visited for disinfection.....	357
Number of infected rooms disinfected.....	638
Number of times ambulances, etc., disinfected.....	15
Number of pieces infected goods disinfected.....	501
Number of pieces infected goods destroyed.....	12
Total inspections	<u>4,339</u>

Number of Communicable Diseases Reported.

YEAR.	Diphtheria.	Scarlet Fe er.	Measles.	Tuberculosis.	Typhoid fever.	Laryng. Diph.	Chicken Pox.	Whooping Cough.	Mumps.	Favus.	Trachoma.	Erysipelas.	Smallpox.	Total.
First Quarter.....	63	26	62	56	19	3	42	22	18	1	2	3	..	317
Second quarter.....	73	35	116	49	14	1	49	41	25	..	..	3	1	408
Third quarter.....	59	28	85	40	23	..	19	11	2	..	..	..	..	265
Total.....	195	89	261	145	56	4	110	74	46	1	2	6	1	990

SANITARY INSPECTORS.	Number of Inspections.	Number of Reinspections.	Number of Citizens' Complaints Received.	Number of Complaints Forwarded for Orders.	CHARACTER OF PREMISES INSPECTED.						
					Tenement Houses.	Private Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Stables.	Sunken and Vacant Lots.	Miscellaneous.
Santry.....	323	755	71	183	5	236	..	1	1	2	78
McMullen.....	510	1,273	71	193	6	459	..	..	3	4	88
Morrison.....	304	570	34	131	5	99	27	125	12	3	33
Smith.....	156	372	5	72	..	126	9	3	3	..	15
Stoddard.....	1,708	269	37	65	3	34	487	2	..	96	1,086
Dr. Tobias.....	253	53	5	98	2	22	..	..	4	211	14
Dr. Love.....	2	3	2	2	..	2	..	..	..	..	..
Dr. Mars.....	25	..	..	..	..	..	25	..	..	..	..
Dr. Mechtold.....	1	..	1	1	..	..	..	..	..	..	1
Kerr.....	218	..	..	..	..	..	..	..	..	..	218
Kerr.....	809	..	..	..	..	..	..	..	..	..	809
Seguine.....	1,134	..	..	..	..	..	..	..	..	..	1,134
Wolf.....	1,247	..	..	..	..	..	..	..	..	..	1,247
Office.....	..	..	..	..	..	..	..	..	..	..	..
Total.....	6,690	3,295	224	750	21	928	548	131	23	316	4,723

Total.	Number of Specimens of Milk Examined.	Number of Specimens of Milk Collected.	Pounds of Fruit Condemned.	Pounds of Vegetables Condemned.	Pounds of Confectionery Condemned.	Pounds of Meat Condemned.	Pounds of Fish Condemned.	Pounds of Poultry and Game Condemned.	Samples of Drugs Taken.	MERCANTILE ESTABLISHMENTS.				Arrests.	Discharged.
										Number of Children Interviewed Applying for Certificates.	Number of Employment Certificates granted.	Number of Employment Certificates refused.	Number of Duplicate Certificates Issued.		
323	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
510	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
304	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
156	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1,708	..	..	..	..	..	128	..	..	..	..	..	..	..	..	..
253	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	51	..	13	..	..	..	..	..	..	..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
218	..	..	370	565	10	..	25	..	32	..	..	..	..	..	..
809	791	743	..	..	..	..	..	..	..	..	..	..	..	..	..
1,134	818	201	..	..	..	..	..	..	..	..	..	..	..	..	..
1,247	1,249	331	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	269	231	38	2	..	..
6,690	2,858	1,275	370	565	10	179	25	13	32	269	231	38	2	1	1

Sanitary Police—

Number of inspections.....	2,479
Number of complaints referred to Inspectors.....	6
Number of complaints for orders.....	774
Number of nuisances abated by personal effort.....	8
Number of reinspections.....	2,408
Number of negative reports forwarded.....	98
Number of visits to stop work, close stores, etc.....	7

Character of Premises Inspected—

Tenement houses.....	17
Private dwellings	1,844
Mercantile establishments	6
Manufactories and workshops.....	12
Stables	58
Sunken and vacant lots.....	33
Miscellaneous	509
Total	2,479

Mercantile Establishments—

Number of citizens' complaints received.....	2
Number of complaints returned for orders.....	1
Number of arrests made.....	7
Number of persons held on bail.....	5
Number of persons discharged.....	1

SHORE INSPECTORS.	Number of Inspections.	Number of Horses.	Number of Dogs.	Number of Cats.	Number of Goats.	Number of Sheep.	Number of Hogs.	Number of Fowl.	Number of Fish.	Pieces of Meat.	Pieces of Bedding.	Pieces of Clothing.	Number of Mattresses.	Total.
Rush.....	211	1	133	75	11	9	7	50	37	83	12	52	163	633
Hoolihan.....	229	..	258	123	11	24	19	107	74	56	36	39	54	801
Total.....	440	1	391	198	22	33	26	157	111	139	48	91	217	1,434

Veterinarians—

Number of inspections.....	743
Number of animals examined.....	7,671
Number of post-mortems on animals.....	27
Number of glandered horses destroyed.....	10
Number of stables inspected.....	736
Number of complaints forwarded for orders.....	31
Reinspections	95
Horses tested with Mallein.....	1

MEDICAL INSPECTORS.	Number of Visits to Cases.	Number of Visits to Cases for Special Diagnosis.	Number of Cases Treated with Diphtheria Antitoxin.	Number of Persons Immunized with Diphtheria Antitoxin.	Number of School Notices Sent.	Number of Complaints Forwarded for Orders.
Dr. Mechtold.....	127	5	.....	.....	47	.....
Dr. De Revere.....	362	.....	.....	.....	75	1
Dr. Callahan.....	385	1	5	6	58	.....
Dr. F. Wood.....	111	1	1	.....	60	.....
Dr. Wisely.....	250	.....	1	26	97	.....
Dr. Wooley.....	5	.....	.....	.....	2	.....
Dr. Hochlerner.....	8	.....	.....	.....	2	.....
Dr. Love.....	436	.....	.....	.....	51	.....
Dr. Tobias.....	1	.....	.....	.....	.....	.....
Dr. Sprague.....	.....	.....	.....	.....	109	.....
Total.....	1,685	7	7	32	501	1

NUMBER OF VISITS.						Number of Primary Vaccinations.	Number of Revaccinations.	Number of Vaccinations in Schools.	Total Number Vaccinations,	Number of Vaccination Certificates Issued.
Tenement Houses.	Hotels.	Private Dwellings.	Schools and Institutions.	Miscellaneous.	Total.					
14	....	80	383	26	503	16	....	18	34	7
79	5	216	379	14	693	3	....	49	52	41
24	1	239	528	5	797	5	....	37	42	15
18	2	69	269	4	362	7	1	13	21	5
27	9	194	377	16	623	8	....	48	56	8
....	....	3	34	.....	37	....	....	....	....	....
2	....	6	365	62	435	3	....	28	31	2
....	5	218	299	9	531	....	....	41	41	3
....	....	1	.....	.....	1	....	....	....	....	....
....	....	.....	.....	.....	.....	36	....	....	36	76
164	22	1,026	2,634	136	3,982	78	1	234	313	157

Medical School Inspection.

Public Schools—

Total daily average attendance.....	8,700
Number of schools visited.....	33
Number of visits to schools.....	2,565
Number of pupils examined.....	45,649
Number of pupils excluded.....	387

Table Showing Diseases for Which Children Were Excluded.

Public Schools—

Measles.....	2
Diphtheria.....	2
Whooping cough.....	8
Mumps.....	12
Contagious eye diseases.....	41
Pediculosis.....	182
Chickenpox.....	8
Contagious skin diseases.....	116
Miscellaneous.....	16
Total number excluded.....	387

DISINFECTING CORPS.	Number of Persons Re-moved to Hospitals.	Number of Houses Visited.	Number of Rooms Disin-fected.	Number of Times Ambu-lances and Other Ve-hicles Disinfected.	Number of Pieces of In-fected Goods Disinfected.	Number of Pieces of In-fected Goods Destroyed.
Lyman.....	.....	256	460	.....	.....	.....
Doran.....	.....	18	31	.....	.....	.....
Kenney.....	.....	41	72	.....	.....	.....
Dooley.....	.....	42	75	.....	.....	.....
Thompson.....	.....	.....	.....	.....	501	12
Gorman.....	7	.....	.....	15	.....	.....
Total.....	7	357	638	15	501	12

Summary of Work Performed.

Number of inspections and reinspections made.....	20,489
Number of inspections of mercantile establishments.....	42
Number of Inspectors' complaints made.....	1,164
Number of citizens' complaints received.....	481
Number of complaints forwarded for orders.....	1,556
Number of vessel permits issued.....	103
Number of miscellaneous permits issued.....	1,198
Total number of permits issued.....	1,301
Number of pounds of foods seized and condemned (fruit, fish, meat, etc.)....	1,162
Number of heads of cattle examined.....	7,671
Number of glandered horses destroyed.....	10
Number of visits to cases of contagious diseases.....	1,685
Number of primary vaccinations performed.....	78
Number of revaccinations performed.....	1
Number of vaccinations performed in schools.....	234
Total number of vaccinations performed.....	313
Number of children examined.....	45,649
Number of children excluded from schools.....	387
Number of persons treated with diphtheria antitoxin.....	7
Number of persons immunized with diphtheria antitoxin.....	32
Number of persons removed to hospital.....	7
Number of pieces of infected goods disinfected.....	501
Number of pieces of infected goods destroyed.....	12
Number of chemical analyses made.....	793

Respectfully submitted,

JOHN T. SPRAGUE, M. D., Assistant Sanitary Superintendent.

To the Board of Health, Department of Health, City of New York:

Gentlemen—I have the honor to transmit the report of the Bureau of Records for the year 1903.

GENERAL STATISTICS.

Births.

There were 94,755 births reported during the year, as compared with 85,644 reported during 1902, an increase of 9,111 in the entire City, this increase being distributed among the boroughs as follows: Manhattan, 3,787; The Bronx, 833; Brooklyn, 3,785; Queens, 604, and Richmond, 102. This increase in the number reported was due to the active interest displayed by the Assistant Registrars of all the boroughs in

urging the physicians and midwives to report all births occurring in their practice, in some instances going so far as prosecuting the delinquents in the courts. These 94,755 births represent a birth rate of 25.38 per 1,000 of a population estimated at 3,732,903, this rate being at least 5 per 1,000 short of the true birth rate.

The recent enactment of legislation compelling applicants for employment certificates, entitling them to go to work between the ages of fourteen and sixteen years, to furnish either a transcript of the record of birth on file in the Bureau of Records or of a religious record, and the action of the educational authorities making the production of a record of birth a requisite to enter the lowest classes in the Primary Departments of overcrowded schools bid fair to awaken in the minds of the parents the necessity of having the births of their children properly recorded, and will unquestionably lead to a more faithful compliance with the law upon the part of the medical attendant.

The following table shows the number of births reported and the birth rates in the different boroughs since the formation of the Greater City in 1898:

Births Reported and Birth Rates by Boroughs, 1898 to 1903.

Borough.	1898.		1899.		1900.	
	Number of Births.	Rate.	Number of Births.	Rate.	Number of Births.	Rate.
Manhattan.....	49,835	27.54	48,397	26.44	50,494	27.27
The Bronx.....	3,524	21.07	3,671	19.95	4,122	20.40
Brooklyn.....	21,395	19.54	21,203	18.73	22,572	19.30
Queens.....	2,826	20.62	2,943	20.27	3,084	20.06
Richmond.....	1,348	21.14	1,418	21.57	1,449	21.57
City of New York.....	78,928	24.12	77,632	23.13	81,721	23.72

Borough.	1901.		1902.		1903.	
	Number of Births.	Rate.	Number of Births.	Rate.	Number of Births.	Rate.
Manhattan.....	49,990	26.68	52,291	27.59	56,078	29.26
The Bronx.....	4,023	18.11	5,220	21.38	6,053	21.30
Brooklyn.....	22,182	18.35	23,507	18.81	27,292	21.13
Queens.....	3,127	19.20	3,198	18.51	3,802	20.83
Richmond.....	1,413	20.50	1,428	20.18	1,530	21.07
City of New York.....	80,735	22.83	85,644	23.58	94,755	25.38

Marriages.

The number of marriages reported during the year was 38,174, as against 36,207 during 1902, an increase of 1,967, the increase by boroughs being as follows: Manhattan, 1,145; The Bronx, 127; Brooklyn, 602; Queens, 87; Richmond, 6.

The following table shows the number of marriages reported and the marriage rate per 1,000 in the different boroughs since the formation of the Greater City in 1898:

Marriages Reported and Marriage Rates by Boroughs, 1898 to 1903.

BOROUGH.	1898.		1899.		1900.	
	Number of Marriages.	Rate.	Number of Marriages.	Rate.	Number of Marriages.	Rate.
Manhattan.....	20,118	11.12	20,836	11.36	21,979	11.87
The Bronx.....	651	3.89	904	4.92	948	4.69
Brooklyn.....	7,129	6.51	7,612	8.43	8,214	6.94
Queens.....	636	4.64	710	4.89	718	5.00
Richmond.....	351	5.50	412	6.30	428	6.37
City of New York.....	28,885	8.83	30,474	9.07	32,247	9.36

BOROUGH.	1901.		1902.		1903.	
	Number of Marriages.	Rate.	Number of Marriages.	Rate.	Number of Marriages.	Rate.
Manhattan.....	22,895	12.22	24,766	13.07	25,911	13.52
The Bronx.....	1,067	4.80	1,227	5.03	1,354	4.76
Brooklyn.....	8,303	6.87	9,014	7.21	9,616	7.44
Queens.....	777	4.72	768	4.45	825	4.68
Richmond.....	405	5.88	432	6.11	438	6.03
City of New York.....	33,447	9.46	36,207	9.97	38,174	10.23

The marriage rates of the different boroughs, as shown above, are considerably below what they are actually, with the exception of the Borough of Manhattan, in which the reported marriage rate approximates the true rate.

Deaths.

The actual number of deaths that occurred during the year was 67,864, representing a death rate of 18.18 per 1,000, against 18.75 per 1,000 in 1902. Since consolidation the death rates per 1,000 were as follows:

Borough.	1898.	1899.	1900.	1901.	1902.	1903.
Manhattan.....	20.28	19.77	20.99	20.55	19.40	19.30
The Bronx.....	22.42	20.23	21.52	21.60	20.21	17.75
Brooklyn.....	19.77	19.13	20.09	19.25	17.88	17.18
Queens.....	18.69	17.29	17.95	17.20	16.13	14.65
Richmond.....	20.48	19.45	20.52	19.51	18.12	16.93
City of New York.....	20.26	19.47	20.57	20.00	18.75	18.18

The following table represents the number of deaths in each borough, of residents of the other boroughs and a corrected interborough death rate per 1,000 for the year 1903:

Corrected Deaths and Death Rates by Boroughs for the Year 1903.

	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	Total.
Manhattan.....	.....	254	250	32	16	552
The Bronx.....	1,211	.....	24	6	4	1,245
Brooklyn.....	138	3	.....	66	3	210
Queens.....	51	1	80	.....	.....	132
Richmond.....	48	.....	10	1	.....	59
Total.....	1,448	258	364	105	23	2,198
Death rate (corrected).....	19.77	14.07	17.30	14.50	16.31	18.18

The death rate of 19.11 for the former City of New York is the lowest on record, the next lowest was 19.49 in the year 1902, and it will be found necessary to go back to the year 1814 in order to find a rate (19.66) to approximate either of these two; considering that back in the beginning of the nineteenth century quite a number of deaths were not reported to the authorities, it must be conceded that intelligent sanitary supervision guided by the onward march of medical science has been chiefly instrumental in bringing about this wholesale saving of human life. The following table gives the death rates of the former City of New York since the organization of the Board of Health in 1866 up to date:

General Death Rate Per 1,000, Old City of New York, 1866 to 1903.

Year.	Death Rate.	Year.	Death Rate.	Year	Death Rate.	Year.	Death Rate.
1866.....	34.92	1876.....	27.11	1886.....	25.99	1896.....	21.84
1867.....	28.65	1877.....	23.66	1887.....	26.32	1897.....	20.03
1868.....	29.25	1878.....	23.68	1888.....	26.39	1898.....	20.46
1869.....	28.09	1879.....	24.13	1889.....	25.32	1899.....	19.81
1870.....	28.81	1880.....	26.41	1890.....	24.87	1900.....	21.04
1871.....	28.22	1881.....	31.04	1891.....	26.31	1901.....	20.66
1872.....	33.70	1882.....	29.61	1892.....	25.95	1902.....	19.49
1873.....	29.63	1883.....	25.80	1893.....	25.30	1903.....	19.11
1874.....	27.37	1884.....	23.82	1894.....	22.76		
1875.....	29.40	1885.....	25.55	1895.....	23.18		

The number of deaths in the entire City from the principal causes is compared in the following table with that of the preceding year and the increases or decreases noted:

Cause of Death.	1902.	1903.	Increase in 1903.	Decrease in 1903.
Typhoid fever.....	764	653	....	111
Malarial fever.....	125	90	....	35
Smallpox.....	310	5	....	305
Measles.....	710	508	....	202
Scarlet fever.....	940	734	....	206
Whooping cough.....	605	324	....	282
Diphtheria and croup.....	2,015	2,190	175	....
Influenza.....	157	418	261	....
Dysentery.....	254	157	....	97
Pulmonary tuberculosis.....	7,569	8,020	451	....
Other tubercular diseases.....	1,314	1,284	....	30
Cancer, sarcoma.....	2,450	2,608	158	....
Diabetes.....	471	488	17	....
Alcoholism.....	345	630	285	....
Diseases of nervous system.....	5,478	5,234	....	244
Diseases of circulatory system.....	5,931	5,770	....	161
Bronchitis, acute and chronic.....	2,283	1,836	....	447
Pneumonia, lobar and broncho.....	9,377	9,714	337	....
Diarrhœal diseases, under two years.....	4,938	4,443	....	495
Diarrhœal diseases, two years and over.....	823	680	....	149
Other diseases of digestive organs.....	2,812	2,803	....	9
Bright's disease and acute nephritis.....	5,461	5,636	175	....
Puerperal diseases.....	642	637	....	5
Congenital debility and malformation.....	3,278	3,695	417	....
Old age.....	959	811	....	148
Homicide.....	127	137	10	....
Suicides.....	772	805	33	....
Accidents.....	2,853	3,126	273	....
Ill-defined causes.....	1,499	1,120	....	379
All other causes.....	2,843	3,308	465	....
Total.....	68,112	67,864	3,057	3,305
Balance.....	248		248	

Typhoid Fever.

There were 653 deaths reported from this cause as having occurred during the year, a decrease of 111 as compared with 1902. The death rate per 10,000 from this disease in the former City of New York from 1873 to 1903 is given in the following table:

Deaths and Death Rates from Typhoid Fever, Old City of New York, per 10,000, 1873 to 1903.

YEAR.	DEATHS.	DEATH RATES	AVERAGE DECENNIAL DEATH RATE.
1873	313	3.19	3.28
1874	305	2.96	
1875	376	3.60	
1876	325	3.02	
1877	343	3.10	
1878	321	2.81	
1879	268	2.28	
1880	372	3.08	
1881	594	4.77	
1882	516	4.03	
1883	625	4.74	2.87
1884	476	3.51	
1885	405	2.90	
1886	433	3.01	
1887	421	2.85	
1888	364	2.39	
1889	397	2.53	
1890	352	2.18	
1891	384	2.31	
1892	400	2.34	
1893	381	2.17	1.78
1894	326	1.80	
1895	322	1.72	
1896	297	1.56	
1897	299	1.54	
1898	376	1.90	
1899	294	1.46	
1900	372	1.81	
1901	412	1.97	
1902	399	1.86	
1903	350	1.60	

The foregoing table shows a decrease of 50 per cent. in the death rate, comparing that of 1903 with the decennial average rate of 1873 to 1882. There were 2,462 cases of typhoid fever reported during the year in the boroughs of Manhattan and The Bronx, as compared with 2,629 cases reported in 1902; if we compare either of these figures with the average for the preceding ten years, which was 1,241 cases, the conclusion may be drawn that this apparent increase, compared with the decreasing death rate, was due to one of two causes, either there has been a great increase in the prevalence of the disease coincident with the discovery of a therapeutic agent of undoubted

value, or that the practising physicians of the City have taken advantage of the facilities of the Department offered for the more accurate diagnosis of this disease and consequently have reported cases occurring in their practise much more regularly than in the past. This latter is undoubtedly the true explanation of the apparent increase. In the absence of any known specific in the treatment of this disease, it is only fair to presume that the preventive measures instituted and carried on by this department have been of signal service in keeping this disease under control.

Malarial Fevers.

There were 90 deaths from malarial fevers during the year, as compared with 125 for 1902, a decrease of 35 deaths. The introduction of the Widal test for the diagnosis of typhoid fever in 1898 and the investigation of deaths reported from malarial fevers since 1902 have served to decrease the number of deaths from this disease, 250 deaths having been reported therefrom in 1898 as compared with 95 in 1903.

Small-pox.

There were 5 deaths reported from this disease as against 310 in 1902, a decrease of 305 deaths.

In the year 1902, 810,000 vaccinations and in 1903, 215,000 were performed; this unprecedented number reduced the number of cases reported in the latter year to 43. These figures serve to again impress upon us the necessity for constant and compulsory vaccination and revaccination, and, until we emulate the example set by the German Government in this regard, we must expect that the periodic visitation of this disease will again occur within five or six years.

Measles and Scarlet Fever.

In 1902 there were reported 710 deaths from measles, as compared with 508 in 1903, a decrease of 202 deaths. Nine hundred and forty deaths were reported in 1902 from scarlet fever, as compared with 734 in 1903, a decrease of 206 deaths.

The following table, which is a continuation of the one published in the Annual Report for 1902, shows that in both these diseases the tendency toward a decreased death rate still prevails; the decrease in the rate from scarlet fever being a phenomenal one when the present rate is compared with that existing twenty-five to thirty-five years ago; the decennial rate of the period 1873 to 1882 was 9.22 per 10,000 of entire population; 1883 to 1892, 5.37 per 10,000; 1893 to 1902, 2.51 per 10,000, and in 1903, 2.13 per 10,000; that is to say that if the rate as it existed during the first decennium mentioned prevailed during the year 1903, there would have been 2,016 deaths chronicled in the boroughs of Manhattan and The Bronx (old City of New York), in lieu of the 465 deaths which actually occurred.

The death rate per 10,000 from measles for the decennium 1873 to 1882 in the old City of New York was 3.23; 1883 to 1892 was 4.63, and in 1893 to 1902 was 2.51; in 1903 the rate was 1.47.

A glance at the scarlet fever rate in the table will show that the greatest decrease has been since this disease was quarantined in 1888; the measles rate does not show the relative decrease as shown in the scarlet fever rate, in great measure due to the fact that official intervention amounted to very little in the former disease, but since 1896, when measles was quarantined, the decrease in the rate has been much more marked; since 1896 it has been noticed that in every other year measles appears with greater frequency and intensity.

Measles will always be with us until parents have their eyes opened to the extremely dangerous consequences following upon exposure to existing cases and to neglect in treatment thereof when contracted. As is well known, its infectivity during the catarrhal stage, that is, before the appearance of the rash, is the great drawback in controlling efficiently epidemics of this disease.

Number of deaths and death rates per 10,000 of the population from measles and scarlet fever in the former City of New York from 1873 to 1902, inclusive:

YEAR.	MEASLES.		SCARLET FEVER.	
	Deaths.	Death Rate.	Deaths.	Death Rate
1873.....	306	3.1	1,045	10.6
1874.....	319	3.1	879	8.5
1875.....	167	1.6	514	4.9
1876.....	362	3.4	891	8.3
1877.....	155	1.4	983	8.9
1878.....	272	2.4	1,099	9.7
1879.....	244	2.1	1,477	12.6
1880.....	479	4.0	618	5.1
1881.....	429	3.4	1,964	15.8
1882.....	913	7.1	2,066	16.1
1883.....	716	5.4	744	5.6
1884.....	762	5.6	608	4.5
1885.....	736	5.3	559	4.0
1886.....	668	4.6	371	2.6
1887.....	767	5.2	589	4.0
1888.....	591	3.9	1,361	8.9
1889.....	470	3.0	1,242	7.9
1890.....	730	4.5	408	2.5
1891.....	663	4.0	1,220	7.4
1892.....	864	5.1	977	5.7
1893.....	393	2.2	551	3.1
1894.....	584	3.2	541	3.0
1895.....	793	4.2	468	2.5
1896.....	714	3.7	402	2.1
1897.....	391	2.0	500	2.6
1898.....	416	2.3	523	2.6
1899.....	379	1.9	332	1.6
1900.....	470	2.3	315	1.5
1901.....	272	1.3	625	3.0
1902.....	462	2.2	635	3.0
1903.....	327	1.5	465	2.1

Whooping Cough.

Three hundred and twenty-four deaths were reported from this disease in 1903, a decrease of 282 deaths from the number (606) reported in 1902.

The following table gives the number of deaths and death rates (annual and decennial) per 10,000 of the entire population in the old City of New York. The rates show a gradual decrease from previous years, a decrease the credit for which must be looked for elsewhere than in the supervision by the Health authorities, as isolation and disinfection have not been deemed advisable or applicable to this disease; the physicians of the city as a rule, recommend the bringing of the sick one out into the sunshine as a necessary adjunct to medication, and by this means the contagion is undoubtedly spread through direct contact as well as by the expectoration which subsequently dries and is conveyed through the atmosphere as dust.

Number of Deaths and Death Rate (Annual and Decennial) Per 100,000 of Population from Whooping Cough—Old City of New York, 1873 to 1903.

YEAR.	NUMBER OF DEATHS.	DEATH RATES ANNUAL.	DEATH RATES DECENNIAL.
1873.....	268	2.73	} 3.22
1874.....	489	4.74	
1875.....	407	3.90	
1876.....	406	3.77	
1877.....	440	3.97	
1878.....	382	3.35	
1879.....	537	4.57	
1880.....	277	2.29	
1881.....	286	2.30	
1882.....	658	5.14	
1883.....	327	2.48	
1884.....	490	3.61	
1885.....	495	3.54	
1886.....	575	4.00	
1887.....	188	1.27	
1888.....	573	3.70	
1889.....	647	4.13	
1890.....	487	3.02	
1891.....	352	2.12	
1892.....	371	2.17	
1893.....	542	3.08	
1894.....	272	1.50	
1895.....	496	2.65	
1896.....	435	2.28	
1897.....	308	1.59	
1898.....	442	2.24	
1899.....	350	1.74	
1900.....	318	1.55	
1901.....	159	0.76	
1902.....	385	1.80	
1903.....	187	0.86	

Diphtheria and Croup.

In 1903 there occurred 2,190 deaths from this disease, with a death rate 58.7 per 100,000 of the population, as compared with 2,015 deaths and a death rate of 55.5 per 100,000 in 1902, a slight increase. For statistics for previous years the reader is referred to page 387 of the Annual Report of this Department for the year of 1902.

Influenza.

Two hundred and sixty-one more deaths were attributed to influenza in 1903 than in 1902, the figures being 418 and 157 respectively. More than 80 per cent. of these deaths occurred in the first four months of the year, and we shall see in analyzing the deaths from pneumonia that the increased death rate from pneumonia, as compared with last year, was due to the prevalence of this infectious disease. Almost 90 per cent. of the deaths attributed directly to influenza were over five years of age; it is especially fatal among old people, and is probably infectious from the expectoration of a person suffering from this disease. In touching upon the deaths from pneumonia, the effect of influenza will be shown as to the increase of deaths at different age periods, as compared with the previous year.

Pulmonary Tuberculosis.

There were 8,020 deaths reported, producing death rate of 2.15 per 1,000 from this disease during 1903, as compared with 7,569 deaths and a death rate of 2.08 per 1,000 during 1902. The lowest death rate from this disease in the old City of New York was reached in 1902, when a death rate of 2.29 per 1,000 was reached, there having been a gradual decline in the rate from the year 1870, in which year the rate stood at 4.27 per 1,000; in 1903 it was 2.41 per 1,000. The reasons for the increase are not apparent, although the severity of the type of influenza in the early part of the year, as compared with that of the preceding year accounts in part for it; the efforts of the sanitary officials abated not a jot in the struggle to modify its ravages; medical and charitable organizations did not relax in their endeavors to hold it in check, and at the time of the present writing (July, 1904) the returns for the first half of the year show an increase the equal in proportion to that of 1903 over 1902.

The increasing demand for the establishment of municipal sanatoria for the segregation and treatment of tuberculosis ought to receive an impetus that shall make it all the more necessary for immediate action to be taken in this direction.

Cancer.

The number of deaths reported from cancer were 2,608, producing a death rate of 699 per million of the population, as compared with 2,450 deaths and a death rate of 674 per million in 1902. The following table gives the number of deaths and death

rates per million of population from cancer in the old City of New York, from 1873 to date. It is evident that there has been a large apparent increase in the death rate from this disease, and the question naturally arises, how much of this increase is due to more accurate diagnosis in this age of surgical advance? If we compare the rates of the year 1873 with 1903 we find an increase of 77 per cent. In the old City of New York in 1873 the percentage of deaths from external cancer was 28 and from internal cancer 72 of all deaths from cancer, while in 1902 in the Borough of Manhattan the percentage of external cancer on all cancer deaths was 16 and of internal cancer was 84.

In 1873 deaths from cancer of the breast was 13 per cent., and from cancer of stomach, liver and intestines 40 per cent. of all deaths from cancer, while in 1903 the first mentioned was 9 per cent. and the last mentioned 53 per cent. of all deaths from cancer; in 1873 the percentage of deaths from cancer of the female genital organs was 28 per cent. of all cancerous deaths, and in 1903 in Manhattan was 16.4 per cent.; the percentage of male deaths in 1873 was 33 to 67 of female deaths, and in 1903 the figures were 40 per cent. male and 60 per cent. female, the numerical ratio of the sexes varying only 1 per cent. in the census of 1870 compared with that of 1900. The average age of death of both sexes from cancer in 1873, based upon five-year periods, was 48 years; in 1903 it was 51.6 years. During the decennium 1873-1882 the average death rate from this disease was 423, during that of 1883-1892 it was 554, and during that of 1893-1902 it was 642 per million of the population. These figures tend to show that the death rate from cancerous deaths has apparently increased; that this apparent increase has taken place in the internal or inaccessible cancers, and among males rather than females. The increase is only partly accounted for by more accurate diagnosis and improved certification of causes of death; it seems that there is an actual increase, several causes having been advanced in explanation, among them the freer use of alcoholic beverages and tobacco, syphilis and increased consumption of meat, but to what extent these causes operate is not yet positively known.

Deaths and Death Rates per 1,000,000 of population, from Cancer in Old City of
New York, 1873 to 1903.

Year.	Number of Deaths.	Rate.	Year.	Number of Deaths.	Rate.
1873	425	433	1889.....	848	541
1874	416	404	1890.....	954	592
1875	424	406	1891.....	902	543
1876	459	427	1892.....	996	583
1877	495	447	1893.....	993	565
1878	570	500	1894.....	1,022	565
1879	572	487	1895.....	1,030	550
1880	659	545	1896.....	1,141	598
1881	706	567	1897.....	1,217	627
1882.....	732	572	1898.....	1,260	637
1883	678	514	1899.....	1,321	656
1884	731	539	1900.....	1,473	717
1885	754	540	1901.....	1,567	748
1886	779	542	1902.....	1,536	718
1887	832	562	1903.....	1,683	770
1888	870	571			

Nervous System.

There were 5,234 deaths from diseases of this system reported in 1903, as against 5,478 during 1902, a decrease of 244 deaths. The following table gives the number of deaths and death rate per 10,000 for a series of years in the old City of New York:

Deaths and Death Rate Per 10,000 of Population from Disease of the Nervous System,

Old City of New York 1873 to 1903.

Year.	Number of Deaths.	Rate.	Year.	Number of Deaths.	Rate.
1873.....	2,811	28.62	1889.....	3,491	22.28
1874.....	2,451	23.76	1890.....	3,210	19.90
1865.....	2,436	23.32	1891.....	3,342	20.14
1876.....	2,663	24.76	1892.....	3,655	21.40
1877.....	2,378	21.47	1893.....	3,751	21.33
1878.....	2,410	21.13	1894.....	3,165	19.15
1879.....	2,486	21.16	1895.....	3,429	18.90
1880.....	2,788	23.05	1896.....	3,359	17.62
1881.....	3,274	26.31	1897.....	3,344	17.23
1882.....	2,968	23.17	1898.....	3,175	16.06
1883.....	2,810	21.31	1899.....	3,190	15.84
1884.....	3,018	22.24	1900.....	3,091	15.05
1885.....	3,241	23.21	1901.....	3,404	15.25
1886.....	3,123	21.73	1902.....	3,449	16.12
1887.....	3,589	24.26	1903.....	3,241	14.83
1888.....	3,529	23.18			

The decennial averages per 10,000 of population were as follows: 1873 to 1882, 20.69; 1883 to 1892, 21.92; 1883 to 1902, 17.20. The rate for 1903 was 14.83 per 10,000.

Acute Bronchitis.

The number of deaths occurring in 1903 from this cause was reported as 1,560, as compared with 1,898 in 1902, a decrease of 338; this falling off was due entirely to the fact that in the year 1903 the prevalence of measles was much less than in 1902, and consequently we find that there were 329 less deaths under five years of age than in the previous year; influenza, though of a severer type in 1903 than in 1902, increased not at all the deaths from this disease at the ages of forty-five and upward, while a considerable increase in the number of deaths from pneumonia at these ages took place and was undoubtedly due to influenza as a causal agent.

Chronic Bronchitis.

The number of deaths from this disease (276) was 109 less in 1903 than in 1902. The General Medical Officer of the Department having taken the position that chronic bronchitis as a cause of death in persons over five and under sixty-five years was insufficient and too indefinite unless complicated by some acute or chronic organic disease or diseases, started an inquiry as to the presence of these latter in those deaths in which chronic bronchitis was given as the sole cause of death with the above result.

Lobar and Broncho Pneumonia.

An increase of 337 deaths was reported in 1903 over 1902, the figures being 9,714 and 9,377, respectively. The increase in the number of deaths from these causes was at the ages of twenty-five to eighty-five years and over, a marked decrease occurring at the ages under five years, this latter undoubtedly being due to the absence of as severe an epidemic of measles as in 1902, the former following as a sequence to the presence of influenza in severer form than the year previous.

The following table gives the deaths from broncho and lobar pneumonia combined, at different age periods for years 1902 and 1903; if the deaths at ages under twenty-five be compared a decrease of 634 will be found in favor of the year 1903, but if the deaths at ages over twenty-five be compared an increase of 971 will be found to have taken place.

Deaths from Lobar and Broncho Pneumonia at Different Age Periods, Years 1902 and 1903.

Ages.	Number of Deaths.		Decrease in 1903.	Increase in 1903.
	1902.	1903		
Under five years	4,999	4,355	644	.....
Five to nine years	250	236	14	.....
Ten to fourteen years.....	80	86	.....	6
Fifteen to nineteen years.....	139	157	.....	18
Twenty to twenty-four years	243	243	.....	.....
Twenty-five to twenty-nine years.....	315	341	.....	26
Thirty to thirty-four years	342	401	.....	59
Thirty-five to thirty-nine years.....	357	460	.....	103
Forty to forty-four years	333	411	.....	78
Forty-five to forty-nine years.....	314	397	.....	83
Fifty to fifty-four years.....	333	459	.....	126
Fifty-five to fifty-nine years	339	413	.....	74
Sixty to sixty-four years.....	333	486	.....	153
Sixty-five to sixty-nine years.....	320	420	.....	100
Seventy to seventy-four years.....	283	331	.....	48
Seventy-five to seventy-nine years	203	250	.....	47
Eighty to eighty-five years	113	164	.....	51
Eighty-five years and over.....	81	104	.....	23
.....	.....	.....	658	995
Balance.....	.....		.....	337

The following table gives the total number of deaths from all causes, pneumonia and pulmonary tuberculosis, the percentage of the latter two upon the former, the annual and decennial death rates per 1,000 of population in the old City of New York from 1870 to 1903. The increase in the rates from pneumonia and the decrease from pulmonary tuberculosis is clearly brought out; much has been done to stamp out tuberculosis, with excellent results, and why should not steps be taken to lessen the mortality from this greater scourge? Lobar pneumonia is now considered by reliable authorities an infectious disease, and its increase of late years calls for official care and watchfulness, and possibly intervention.

Deaths and Death Rates from Pneumonia and Pulmonary Tuberculosis, Old City of New York (Present Boroughs of Manhattan and The Bronx), 1870 to 1903.

YEAR.	PNEUMONIA.				Average Decennial Death Rate.	PULMONARY TUBERCULOSIS.			Average Decennial Death Rate.
	Total Deaths.	Deaths.	Percentage of Total.	Death Rate per 1,000 Population.		Deaths.	Percentage of Total.	Death Rate per 1,000 Population.	
1870	27,175	1,836	6.76	1.95	2.20	4,030	14.8	4.27	4.02
1871	26,976	1,834	6.80	1.92		4,186	15.5	4.38	
1872	32,647	2,150	6.58	2.22		4,274	13.1	4.41	
1873	29,084	2,328	8.00	2.37		4,124	14.2	4.21	
1874	28,727	2,398	8.35	2.33		4,034	14.0	3.91	
1875	30,709	2,802	9.12	2.68		4,172	13.6	3.99	
1876	29,152	2,542	8.72	2.36		4,194	14.4	3.90	
1877	25,203	2,148	8.20	1.94		4,044	15.4	3.65	
1878	27,003	2,288	8.47	2.01		4,465	16.5	3.92	
1879	28,342	2,554	9.01	2.17		4,343	15.3	3.70	
1880	31,937	2,822	8.84	2.33	4,706	14.7	3.89		
1881	38,624	3,261	8.44	2.62	5,312	13.8	4.27		
1882	37,924	3,472	9.16	2.71	5,247	13.8	4.10		
1883	34,011	3,409	10.02	2.59	5,290	15.6	4.01		
1884	35,934	3,159	9.02	2.33	5,235	14.9	3.86		
1885	35,622	3,650	10.23	2.61	5,196	14.6	3.72		
1886	37,351	3,656	9.79	2.54	5,477	14.7	3.81		
1887	38,933	3,707	9.52	2.51	5,260	13.5	3.56		
1888	40,175	4,288	10.67	2.82	5,260	13.1	3.46		
1889	34,679	4,075	10.27	2.60	5,179	13.1	3.36		
1890	40,103	4,989	12.44	3.09	5,492	13.7	3.41		
1891	42,659	5,818	13.32	3.51	5,160	11.8	3.11		
1892	44,329	5,841	13.17	3.42	5,033	11.3	2.95		
1893	44,186	6,487	14.58	3.69	5,124	11.5	2.91		
1894	41,175	4,725	11.47	2.61	4,658	11.3	2.57		
1895	44,420	5,751	12.95	3.07	5,205	11.7	2.78		
1896	41,622	5,383	12.93	2.82	4,994	12.0	2.62		
1897	33,877	4,621	11.88	2.38	4,843	12.5	2.50		
1898	40,438	5,301	13.11	2.68	4,957	12.3	2.51		
1899	39,911	5,418	13.57	2.69	5,238	13.1	2.60		
1900	43,227	6,717	15.60	3.29	5,278	12.2	2.57		
1901	43,397	5,792	13.37	2.76	5,233	12.1	2.50		
1902	41,704	5,841	14.01	2.73	4,893	11.7	2.29		
1903	41,776	6,303	15.10	2.89	5,262	12.6	2.41		

Number of Deaths from Organic Diseases of the Heart and Chronic Bright's Disease with the Combined Death Rate Per 10,000 of the Population, Old City of New York, 1858 to 1903.

Circulatory and Genito-Urinary System.

The death from diseases of the circulatory system numbered 5,770 in 1903 and 5,931 in 1902, a decrease of 244; the death from Bright's disease and acute nephritis combined were 5,636 in 1903, as compared with 5,461 in 1902, an increase of 175 deaths; if deaths from these diseases be added for the year 1903 they will amount to 11,406 deaths, more than one-sixth of the total number of deaths for the year.

As organic disease of the heart and chronic Bright's disease are often given as combined causes upon the certificates of death, the following table has been prepared to show the considerable increase in the number of deaths from these causes. This increase, as shown in the table, was a fairly constant one until the epidemic of influenza appeared in December, 1889, when the increase went up with a bound, and as this epidemic has been with us to a greater or lesser degree since that date, it is undoubtedly one of the chief causes in increasing the rate from these diseases two-fold since 1873; it has been maintained with some degree of truth that over-eating and drinking have also contributed to this increase.

Year.	Deaths From Organic Heart Disease.	Deaths From Chronic Bright's Disease.	Total Deaths, Both Diseases.	Combined Death Rate Per 10,000 Population.
1868.....	615	584	1,149	13.50
1869.....	666	557	1,243	13.87
1870.....	699	737	1,485	15.75
1871.....	813	947	1,760	18.41
1872.....	894	949	1,843	19.03
1873.....	860	876	1,736	17.68
1874.....	883	828	1,711	16.60
1875.....	985	909	1,894	18.13
1876.....	992	952	1,950	18.13
1877.....	880	973	1,803	16.28
1878.....	1,068	919	1,987	17.42
1879.....	1,164	1,027	2,191	18.65
1880.....	1,153	1,029	2,182	18.05
1881.....	1,289	1,187	2,476	19.90
1882.....	1,477	1,241	2,718	21.22
1883.....	1,623	1,195	2,888	21.91
1884.....	1,662	1,163	2,825	20.82
1885.....	1,800	1,188	2,988	21.40
1886.....	1,894	1,210	3,104	21.60

YEAR.	Deaths From Organic Heart Disease.	Deaths From Chronic Bright's Disease.	Total Deaths Both Di-eases.	Combined Death Rate Per 10,000 Population.
1887.....	2,018	1,128	3,146	21.27
1888.....	1,880	1,147	3,027	19.88
1889.....	1,970	1,763	3,733	23.82
1890.....	1,978	2,024	4,002	24.81
1891.....	2,285	2,116	4,405	26.54
1892.....	2,330	1,991	4,321	25.30
1893.....	2,379	2,071	4,450	25.31
1894.....	2,170	1,879	4,049	22.38
1895.....	2,297	2,019	4,316	23.04
1896.....	2,396	2,195	4,591	24.09
1897.....	2,346	2,059	4,405	22.70
1898.....	2,379	2,426	4,805	24.31
1899.....	2,203	2,739	4,942	24.53
1900.....	2,276	2,924	5,200	25.32
1901.....	3,150	2,951	6,101	29.11
1902.....	3,200	2,814	6,014	28.11
1903.....	3,129	2,818	5,947	27.20

Diarrhoeal Diseases.

A decrease of 644 deaths took place from diarrhoeal diseases at all ages in 1903 as compared with the previous year. The summer of 1903 was cool and pleasant and this fact had considerable to do with the decreased mortality; other factors aided this Providential dispensation so that the year marked the lowest rate from this cause since the consolidation in 1898.

The following table of the death rate per 1,000 of the entire population from all diarrhoeal diseases in the old City of New York from 1881 to 1903, speaks for itself:

Death Rates Per 1,000 Population from All Diarrhoeal Diseases, Old City of New York, 1881 to 1903.

YEAR.	RATE.	YEAR.	RATE.
1881.....	3.61	1893.....	2.48
1882.....	3.32	1894.....	2.28
1883.....	2.75	1895.....	2.38
1884.....	3.01	1896.....	2.16
1885.....	2.76	1897.....	1.99
1886.....	2.78	1898.....	2.10
1887.....	2.92	1899.....	1.62
1888.....	2.74	1900.....	1.80
1889.....	2.70	1901.....	1.71
1890.....	2.55	1902.....	1.52
1891.....	2.70	1903.....	1.38
1892.....	2.74		

Congenital Debility and Malformations.

The increase of 417 deaths from these causes is due to the transferring of large number of deaths from ill-defined causes to the above class.

DEATHS FROM VIOLENCE.

Homicide.

There were 137 deaths reported from homicide, an increase of 10 over the number of the previous year.

Suicide.

There were 805 deaths reported under this heading in 1903, an increase of 32 over that of the previous year; the number of males was 579 and females 226; carbolic acid was the means employed by 211 males and 134 females, representing 43 per cent. of all suicides; 148 males and 3 females chose the pistol or gun as a means of exit; hanging was the means adopted by 58 males and 9 females, and 36 males and 9 females used cutting instruments to do away with themselves. Over 26 per cent. of the suicides were born in Germany and 36 per cent. in the United States. An unusual means used by one of the female suicide was the swallowing of hairpins.

Accidental Deaths.

The number of deaths reported during the year under this heading was 3,126, as compared with 2,853 reported in 1902, an increase of 273. An increase was noted among the following casualties: Street vehicles, 44; burns and scalds, 71; poisons, 68; sunstroke, 106; drowning, 23.

The number of deaths reported from falls, fractures, etc., was almost the same as during the previous year. A decrease of 41 occurred in the deaths from accidents on railroads.

Searches and Transcripts.

There were 36,074 searches made during the year of the records of births, marriages and deaths, an increase of 8,734 over those of the year 1902; this increase was due in great measure to passage of an amendment to the Child Labor Law, requiring the production of a transcript of the record of birth from the official records or of a religious record from the church authorities, and the action of the school authorities in requiring the children applying for admission into the primary departments of certain crowded school districts to furnish a statement from the Registrar's office of the date of birth.

Twenty-eight thousand six hundred and seventy-three transcripts of births, marriages and deaths were issued, an increase of 5,648 over the previous year.

Respectfully submitted,

WM. H. GUILFOY, M. D.,

Registrar of Records.

Department of Health,
Southwest Corner Fifty-fifth street and Sixth avenue, }
New York, October 21, 1904.

WM. H. GUILFOY, M. D., Registrar of Records:

Dear Sir—Pursuant to your request, I beg to hand you herewith a digest of the work of the Borough of Manhattan:

In the year 1903 there were 37,013 deaths, 56,075 births and 25,911 marriages reported during the year, showing an increase in the deaths of 244, and an increase in the births and marriages of 3,787 and 1,145 respectively, as compared with the year 1902.

The actual number of deaths for the year 1903 amounts to 37,013, giving a death rate of 19.32 per 1,000, as against the number of deaths for the year 1902 of 36,760, with a death rate of 19.40, a decrease of .08.

The total number of deaths of residents of other boroughs who died in the Borough of Manhattan is as follows:

The Bronx	254
Brooklyn	250
Queens	32
Richmond	16
	552
	552

These figures may be equalized by the number of deaths of persons belonging to the Borough of Manhattan who die in other boroughs.

In the year 1903 there was a decrease of 48 deaths from typhoid fever; a decrease of 25 deaths from malarial fevers; a decrease of 17 deaths from small-pox, none having occurred during the year 1903; a decrease of 29 deaths from measles; a decrease of 155 deaths from scarlet fever, and a decrease of 152 deaths from whooping cough. There was an increase of 34 deaths from diphtheria and croup, and an increase of 137 deaths from influenza.

In the deaths from diseases of the respiratory system there was an increase in phthisis of 232 deaths, an increase in pneumonia of 300 deaths, an increase in broncho-pneumonia of 225 deaths, and a decrease in acute bronchitis of 49 deaths. A decrease of 123 deaths from chronic bronchitis was caused chiefly by the fact that chronic bronchitis alone was not accepted as a cause of death.

The decrease in the zymotic and diarrheal diseases accounts to a great extent for the decrease in the deaths of children under one year of 413, one year and under two years of 316, and the total under five years of 893. The increase in the number of deaths over 65 years of 271 may to a certain extent be explained by the increase in influenza, pneumonia and broncho-pneumonia.

The deaths in institutions show an increase of 1,165.

Herewith I also beg to hand you a comparison of the death rates:

	RATE PER 100,000.	
	1903.	1902.
Typhoid fever.....	16.5	19.2
Malarial fevers.....	1.44	2.7
Measles.....	14.4	16.1
Scarlet fever.....	15.2	23.5
Whooping cough.....	8.6	16.8
Diphtheria and croup.....	56.2	55.0
Influenza.....	12.1	5.0
Phthisis.....	207.1	197.2
Cancer.....	79.5	73.7
Organic heart diseases.....	142.5	143.4
Acute bronchitis.....	42.0	50.4
Chronic bronchitis.....	4.4	11.0
Pneumonia.....	186.4	172.7
Broncho-pneumonia.....	117.7	107.2
Diarrhœas under two.....	127.3	133.9
Bright's and nephritis.....	150.1	153.8

There is an increase in the Coroner's cases of 146; an increase in the number of searches of 5,956, or nearly 24 per cent.; an increase in the number of transcripts of 3,400, or nearly 19 per cent., during the year 1903.

Respectfully,

C. J. BURKE, M. D.,

Assistant Registrar of Records.

Department of Health,
Borough of The Bronx,
August 26, 1904. }

WILLIAM H. GUILFOY, M. D., Registrar of Records, Department of Health,
City of New York:

Dear Sir—I have the honor to present the following comparative report of the Bureau of Records of the Borough of The Bronx for the year ending December 31, 1903:

General Statistics.

There were 4,763 deaths, 6,053 births, and 1,354 marriages reported during the year, showing a decrease of 172 deaths and an increase of 833 births and 127 marriages.

Of these 4,763 deaths, 1,245, or 26.1 per cent., were residents of other boroughs.

The number of deaths from the principal causes is compared in the following table, with that of the preceding year and the increase or decrease noted:

CAUSE OF DEATH.	1902	1903	Increase, 1903.	Decrease, 1903.
Typhoid fever.....	34	33	.....	1
Malarial fevers.....	15	12	.....	3
Smallpox.....	201	3	.....	198
Measles.....	157	45	.....	112
Scarlet fever.....	189	174	.....	15
Whooping cough.....	67	21	.....	46
Diphtheria and croup.....	99	155	56	.....
Influenza.....	6	20	14	.....
Dysentery.....	31	18	.....	13
Pulmonary tuberculosis.....	1,154	1,292	138	.....
Other tubercular diseases.....	82	89	7	.....
Cancer and sarcoma.....	138	157	19	.....
Diabetes.....	34	34	.....	.....
Alcoholism.....	13	34	21	.....
Diseases of the nervous system.....	348	328	.....	20
Diseases of circulatory system.....	273	277	4	.....
Bronchitis, acute and chronic.....	80	81	1	.....
Pneumonia, lobar and broncho.....	535	477	.....	58
Diarrhoeal diseases, under 2 years.....	277	209	.....	68
Diarrhoeal diseases, 2 years and over.....	54	30	.....	24
Other diseases of digestive organs.....	131	125	.....	6
Bright's and acute nephritis.....	282	321	39	.....
Puerperal diseases.....	45	39	.....	6
Congenital debility and malformation.....	166	195	29	.....
Old age.....	66	73	7	.....
Homicide.....	6	11	5	.....
Suicide.....	48	59	11	.....
Accidents.....	168	207	39	.....
Ill-defined causes.....	83	62	.....	21
All other causes.....	153	182	29	.....
Total.....	5,935	4,763	419	591
Balance.....	172		172	

Typhoid Fever.

There were 33 deaths from this disease, 1 less than in the previous year.

Malarial Fevers.

There were 12 deaths from this cause, 3 less than in the previous year.

Smallpox.

This disease shows a great falling off from the record of 1902, there being but 3 deaths recorded, against 201 for the previous year.

Measles and Scarlet Fever.

Measles and scarlet fever both show a decrease; the former causing but 45 deaths, against 157 in 1902, and scarlet fever, 174 against 189. Measles was almost four times as prevalent in the borough in 1902, and scarlet fever slightly so.

The following table shows the actual number of deaths from measles and broncho-pneumonia, by months, for the years 1902 and 1903:

Months.	Measles.		Broncho-Pneumonia.	
	1902.	1903.	1902.	1903.
January	19	6	28	10
February	34	5	30	20
March	28	4	36	10
April	19	9	20	12
May	13	1	10	8
June	16	2	4	8
July	16	2	7	6
August	6	..	3	7
September .....	..	..	6	6
October	2	1	7	8
November	1	10	16	10
December	3	5	9	18
Total	157	45	178	123

Whooping Cough.

Whooping cough caused but 21 deaths, against 67 for the previous year.

Diphtheria and Croup.

Diphtheria and croup increased about 36 per cent., there being 155 deaths in 1903, and 99 in 1902.

Influenza.

The mortality from influenza rose from a total of 6 in 1902, to 20 in 1903.

The following table shows the number of deaths from measles, influenza and pneumonia, by months, for 1902 and 1903:

Months.	Measles.		Influenza.		Pneumonia.	
	1902.	1903.	1902.	1903.	1902.	1903.
January	19	6	....	1	54	34
February.....	34	5	3	5	53	44
March.....	28	4	1	9	41	42
April.....	19	9	1	1	36	33
May.....	13	1	....	....	39	36
June.....	16	2	....	....	17	24
July.....	16	2	....	....	17	13
August.....	6	....	....	....	12	14
September.....	....	....	....	....	17	13
October.....	2	1	....	....	15	16
November... ..	1	10	1	2	32	29
December.....	3	5	....	2	24	56
Total.....	157	45	6	20	357	354

Pulmonary Tuberculosis.

During the year there were 1,292 deaths recorded from this disease, as against 1,154 in the previous year, an increase of 138.

The large mortality from this disease is accounted for to a great extent by the fact that many consumptives come to The Bronx for treatment in institutions, of which there are two devoted exclusively to tuberculosis, and several others which receive such cases in addition to others. During the year 1903, there were 777 deaths from this disease of non-residents of the borough.

Diseases of the Circulatory System.

Diseases of the circulatory system caused 277 deaths during the year, against 273 in the previous year. Organic heart disease caused 221 of this total, against 231 in 1902.

Diarrhoeal Diseases.

There were 239 deaths from diarrhoeal diseases, against 331 in 1902. Of these, the deaths under two years of age were 209 and 277, respectively.

The following table shows the comparative mortality in the summer months:

Months.	Deaths From Diarrhoea Under Two Years.	
	1902.	1903.
June.....	21	25
July.....	108	70
August.....	63	42
September.....	40	22

Congenital Debility and Malformations.

There was an increase of 29 deaths from these causes in 1903 over the previous year, the totals being respectively, 195 and 166.

Deaths from Violence.

There were 207 deaths recorded from accident, 59 from suicide and 10 from homicide, a total of 277, against 168 from accident, 48 from suicide and 6 from homicide, aggregating 222 for the previous year.

Accidental Deaths.

Of the 207 deaths recorded, the chief causes were: Falls, 48; railroad injuries, 36; submersion, 35; burns and scald, 17; fractures and contusions, 17; street vehicles, 14; sunstroke, 10.

Suicide.

Of the 59 individuals who destroyed themselves during the year, 49 were males and 10 females; carbolic acid was the means used in 18 male cases and 8 female; 11 males chose gun shot, and 8 males and 2 females preferred illuminating gas.

Homicide.

There were 11 homicides during the year, against 6 in the previous year, an increase of 5.

Searches and Transcripts.

The searches of the records of births, deaths and marriages numbered 1,336, and 1,614 transcripts of these records were made during the year.

Deaths of Persons 100 Years of Age and Over.

April 30. Eliza Bates, 103 years, United States (colored); old age.

Non-Resident Deaths.

In addition to the 777 deaths of non-residents from pulmonary tuberculosis, 451 deaths were reported of non-residents from the following causes: Diphtheria, 54; measles, 30; scarlet fever, 126; small-pox, 3; all other causes, 238; total, 1,228.

Respectfully submitted,

ARTHUR J. O'LEARY, M. D.,

Assistant Registrar, Borough of The Bronx

Department of Health,
Nos. 38 and 40 Clinton Street, Borough of Brooklyn,
New York, September 2, 1904. }

WILLIAM H. GUILFOY, M. D., Registrar of Records, Department of Health, Borough of Manhattan:

Dear Sir—In submitting the report of the Bureau of Records of this borough for the year 1903, I would respectfully call your attention to the following more important items:

Not only was the death rate for the year decreased (17.18 per 1,000), as compared with the year 1902 (17.88 per 1,000), but a gain was made on the apparent birth rate, 21.13 per 1,000 for 1903, against 18.81 per 1,000 for the year 1902.

This death rate was the lowest ever recorded in this borough or in the old City of Brooklyn. Added to the fact that the general mortality was low, there is reason for congratulation when we consider that the reduction in the death rate was largely due to a reduction in nearly all the preventable diseases, the greatest gain having been made in the diarrhoeal diseases of children under two years of age—1,470 for this year, 1903, as compared to 1,732 in 1902, a year when the mortality was much lower than the average of previous years.

The attention of the medical profession should, I believe, be called to the one particular disease which seems to be steadily on the increase. While all the energy and care of the Department are being used to protect and prolong life, by the adoption and enforcement of sanitary measures along many and varied channels, we find that, on account of Brights disease and nephritis, we are losing some of the ground gained in other directions.

These diseases of the kidneys have been increasing at a slow but steady pace for several years past, and at the present rate of increase, it will be but a few years when the death rate from this source will rival, if it does not surpass, that caused by tubercular diseases.

Respectfully,

S. J. BYRNE, M. D., Assistant Registrar of Records.

Department of Health,
No. 374 Fulton Street, Jamaica, Borough of Queens, }
New York, August 25, 1904.

WILLIAM H. GUILFOY, M. D., Registrar of Records, Department of Health, New York City:

Sir—I have the honor to submit the report of the Bureau of Records, Borough of Queens, for the year 1903.

There were 2,676 deaths, 3,802 births and 855 marriages recorded during the year.

In comparison with the previous year there was a decrease of 116 deaths. Among the zymotic diseases I find a decrease of 10 in typhoid fever, but an increase of 11 in measles and 13 in diphtheria. In deaths from phthisis it is a peculiar fact that they were the same, there being 229 deaths in each year. There was a decrease of 34 in circulatory diseases and 32 in diseases of the respiratory tract; also a decrease of 50 in diarrhoeal diseases. There was an increase of 13 in disease of the kidneys.

The above constitute the changes which occurred in diseases which are considered controllable or which may be influenced by climatic conditions. The deaths from zymotic diseases were evenly distributed throughout the different wards in proportion to the population, showing they were not due to any epidemic influence.

In the matter of births, there were 3,802 certificates filed during the year, an increase of 616 over the year 1902. I have been persistent in my efforts to obtain a full return of the births occurring in this borough. In July I sent to every physician and midwife a supply of our new blanks, with a request that the rules of the Department be complied with regarding the prompt return of all births in their practice. I have had several midwives before me for neglect in this matter, and one physician was compelled to appear in court. I have also followed up our method of looking up cases where a death has occurred under one year and no return of birth made, all of which I believe has accomplished the desired effect, and I now think the returns are as complete as we can expect, unless a system of canvassing be adopted.

There were 462 permits issued for the removal of bodies, an increase of 60 over the previous year. There were 448 Coroner's cases, a decrease of 118. There were 176 cases of violence, 32 of which were suicides, as compared with 193 of violence and 36 suicides in 1902, showing the decrease to have been among those dying without medical attendance.

There were 383 searches made, 367 transcript issued and 41,890 interments in the borough, the permits for which were received at this office and returned to the borough from which they were issued.

Respectfully,

F. WICKHAM, M. D.,
Assistant Registrar of Records, Borough of Queens.

Department of Health,
 Nos. 54 and 56 Water Street, Stapleton, Borough of Richmond, }
 New York, August 24, 1904.

WILLIAM H. GUILFOY, M. D., Registrar of Records, Department of Health:

Dear Sir—I have the honor of reporting the smallest number of deaths recorded in this borough since consolidation for the year 1903. The deaths for the various years are as follows: 1898, 1,306; 1899, 1,273; 1900, 1,378; 1901, 1,345; 1902, 1,282; 1903, 1,220.

The death rate for the year 1903 was only 16.80.

The four deaths from malaria reported were seamen from tropical countries, who had been removed to the Seamen's Retreat, and the much-maligned borough, which has been credited with so much malaria, should be charged with no deaths from malaria. There were reported to this Department 32 cases of malaria during the year, the majority of these being non-residents reported from United States Marine Hospital.

The deaths from the various other causes have been in about the same ratio as in other years, with the exception of pneumonia, which is much smaller. This was doubtless due to its infectivity being recognized and proper precautions being taken. The diminution in the number of deaths from diarrhoeal diseases and in those of children under five years of age should be directly traceable to the activity of the Department of Health in enlightening the people as to the proper care of children in warm weather.

Very respectfully,

J. WALTER WOOD, M. D., Assistant Registrar of Records.

Report of Bureau of Records for

	BOROUGH OF	
	Manhattan.	*The Bronx.
Number of Deaths.....	37,013	4,753
Death rate.....	19.32	16.76

BOROUGH.	ESTIMATED POPULATION.	CERTIFICATES RECEIVED AND TABULATED.			
		Marriages.	Births.	Deaths.	Still Births.
Manhattan.....	1,917,676	25,911	56,078	37,017	3,579
The Bronx.....	268,341	1,354	6,053	4,763	342
Brooklyn.....	1,291,597	9,616	27,792	22,186	1,878
Queens.....	182,681	855	3,802	2,676	249
Richmond.....	72,608	438	1,530	1,212	70
City of New York.....	3,732,903	38,174	94,755	67,854	6,078

	BOROUGH OF	
	Manhattan	The Bronx.
Actual number of deaths in institutions.....	11,936	1,836
Actual number of deaths in tenements.....	22,542	1,574
Actual number of deaths in dwellings.....	1,561	1,196
Actual number of deaths in hotels and boarding houses.....	295	28
Actual number of deaths in streets, rivers, etc.....	679	129

* The death rate in the Borough of the Bronx is materially increased by the deaths in institutions,

Year Ending December 31, 1903.

BOROUGH OF			CITY OF NEW YORK.
Brooklyn.	Queens.	Richmond.	
22,192	2,676	1,220	67,864
17.18	14.66	16.80	18.18

RATE PER 1,000.				TRANSIT PERMITS ISSUED.	CORONERS' CASES.	SEARCHES MADE.	TRANSCRIPTS ISSUED.
Marriages.	Births.	Deaths.	Still Births.				
13.52	29.26	19.32	1.87	1,349	5,238	24,916	18,138
4.76	21.30	16.76	1.20	40	593	1,314	1,643
7.44	21.13	17.18	1.42	438	3,620	9,228	8,209
4.68	20.83	14.66	1.36	....	448	367	430
6.03	21.07	16.69	.96	2	227	219	253
10.23	25.38	18.18	1.63	1,829	10,126	36,074	28,673

BOROUGH OF			CITY OF NEW YORK.
Brooklyn.	Queens.	Richmond.	
4,358	374	373	18,837
10,838	632	130	35,716
6,529	1,600	633	11,519
108	43	15	490
359	67	68	1,302

most of the inmates having been transferred from the Borough of Manhattan.

Particulars Regarding Births, Deaths, Marriages and
CITY OF

	TOTAL.	WHITE.		COLORED.		NATIVE PARENTS.		FOREIGN PARENTS		PARENTAGE OF MIXED NATIVITIES.		PARENTAGE UNKNOWN OR NOT STATED.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
*Marriages	38,174	36,998	37,020	1,176	1,154	....	....	....	....	....	....	....	....
*Births	94,755	47,492	45,627	827	809	13,868	13,784	27,515	26,368	6,562	6,420	373	355
Deaths	67,848	35,740	30,309	871	928	7,164	6,571	21,841	19,186	3,215	2,945	4,391	2,535
*Still-births....	16,078	3,392	2,433	99	91	1,056	743	1,815	1,303	382	277	238	201

* The Returns of Births, Marriages and Still-births are incomplete.

BOROUGH OF

Marriages.....	25,911	25,095	25,111	816	803	...	....	....	....	....	....	....	....
Births.....	56,078	27,992	27,012	555	519	5,998	5,708	18,999	18,319	3,182	3,140	368	364
Deaths.....	37,017	19,626	16,452	458	481	3,157	2,864	12,244	10,763	1,803	1,616	2,875	1,690
Still-births....	‡3,579	1,995	1,408	63	63	469	321	1,216	889	208	138	163	123

‡ Sex undetermined, 50.

BOROUGH OF

Marriages	1,354	1,323	1,324	31	30	...	....	....	....	....	....	....	....
Births.....	6,053	3,023	2,949	43	38	1,224	1,176	1,120	1,062	721	750	....	....
Deaths.....	4,749	2,523	2,032	98	96	501	453	1,639	1,282	305	295	176	98
Still-births...	342	195	142	3	2	85	48	72	56	30	28	11	12

BOROUGH OF

Marriages.....	9,616	9,328	9,331	288	285	....	....	....	....	....	....	....	....
Births.....	27,292	13,770	13,132	187	203	5,107	5,223	6,443	6,089	2,106	2,023	1	....
Deaths.....	22,186	11,453	10,194	249	290	2,916	2,731	6,814	6,203	524	884	1,048	666
Still-births....	§1,838	1,025	752	26	22	417	315	461	322	119	79	54	58

§ Sex undetermined, 13.

BOROUGH OF

Marriages,....	855	831	833	24	22	....	....	....	....	....	....	....	....
Births.....	3,802	1,920	1,816	33	33	889	847	661	630	403	372	....	....
Deaths.....	2,676	1,402	1,184	50	40	416	368	835	709	124	116	77	31
Still-births ...	249	136	103	6	4	69	48	47	27	20	23	7	8

BOROUGH OF

Marriages.....	438	421	421	17	17	....	....	....	....	....	....	....	....
Births.....	1,530	787	718	9	16	350	330	292	268	150	135	4	1
Deaths.....	1,220	736	447	16	21	174	155	309	229	54	34	215	50
Still-births ...	70	40	29	1	....	16	11	19	9	5	9	1	....

Still-births Reported During the Year Ending December 31, 1903.
NEW YORK.

SINGLE.		MARRIED.		WIDOWED.		NOT STATED.		MONTH OF UTERO-GENETATION.												
M.	F.	M.	F.	M.	F.	M.	F.	1	2	3	4	5	6	7	8	9	10	Not Stated.		
33,798	34,385	....	....	4,376	3,789	....	....	1	2	3	4	5	6	7	8	9	10	..
20,359	15,251	11,953	8,851	3,691	7,031	608	104	..	..	..	..	..	..	..	..	..	..	..
....	....	....	....	....	....	....	....	..	18	112	302	476	662	879	801	2,335	179	14

‡ Sex undetermined, 63.

MANHATTAN.

23,042	23,410	....	....	2,869	2,501	....	....	..	..	..	..	..	..	..	..	..	..	..
11,421	8,548	6,337	4,662	1,886	3,640	390	83	..	..	..	..	..	..	..	..	..	..	..
....	....	....	....	....	....	....	....	..	13	86	235	297	368	502	473	1,466	131	8

THE BROOK.

1,202	1,225	....	....	152	129	....	....	..	..	..	..	..	..	..	..	..	..	..
1,411	965	923	662	264	499	23	2	..	..	..	..	..	..	..	..	..	..	..
....	....	....	....	....	....	....	....	..	1	3	11	30	43	46	41	1.6	37	4

BROOKLYN.

8,466	8,610	....	....	1,150	1,006	....	....	..	..	..	..	..	..	..	..	..	..	..
6,345	4,935	3,911	3,022	1,309	2,510	137	17	..	..	..	..	..	..	..	..	..	..	..
....	....	....	....	....	....	....	....	..	1	20	49	131	2.9	277	242	886	11	2

QUEENS.

696	734	....	....	159	121	....	....	..	..	..	..	..	..	..	..	..	..	..
793	585	501	359	134	278	24	2	..	..	..	..	..	..	..	..	..	..	..
....	....	....	....	....	....	....	....	..	3	2	5	17	23	43	32	124	..	..

RICMOND.

392	406	....	....	46	32	....	....	..	..	..	..	..	..	..	..	..	..	..
389	218	231	146	98	104	34	....	..	..	..	..	..	..	..	..	..	..	..
....	....	....	....	....	....	....	....	..	1	2	1	9	11	13	33	..	..	..

Total of Both Sexes and Deaths of Males by Age, and Cause of

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>1.—General Diseases.</i>											
1. Typhoid fever.....	653	389	2	4	3	3	3	15	14	21	47
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..	..
3. Relapsing fever.....	..	..	..	..	..	..	..	..	..	..	..
4. Malarial fever.....	90	43	1	3	3	2	1	10	3	1	..
5. Small-pox.....	5	3	..	..	..	..	..	..	..	..	..
6. Measles	508	270	88	111	31	19	8	257	8	..	1
7. Scarlet fever	734	380	14	64	60	48	38	224	114	23	6
8. Whooping cough.....	324	134	74	34	11	11	2	132	2	..	..
9. Diphtheria and croup...	2,190	1,122	98	251	215	170	108	842	225	19	13
10. Influenza.....	418	185	19	8	5	4	1	37	2	3	6
11. Miliary fever.....	..	..	..	..	..	..	..	..	..	..	..
12. Asiatic cholera.....	..	..	..	..	..	..	..	..	..	..	..
13. Cholera nostras.....	9	4	..	..	1	..	..	1	..	..	..
14. Dysentery.....	157	75	11	8	2	1	1	23	6	..	2
15. Plague.....	..	..	..	..	..	..	..	..	..	..	..
16. Yellow fever .....	..	..	..	..	..	..	..	..	..	..	..
17. Leprosy.....	1	1	..	..	..	..	..	..	..	..	..
18. Erysipelas	200	118	28	3	..	..	..	31	..	1	2
19. Other epidemic diseases.	18	11	7	1	..	..	..	8	..	..	..
20. Pyæmia, septicæmia....	94	61	18	1	1	..	..	20	..	1	3
21. Glanders.....	3	3	..	..	..	..	..	..	..	..	..
22. Malignant pustule	5	5	..	..	..	..	..	..	..	..	..
23. Hydrophobia.....	3	1	..	..	..	..	..	..	1	..	..
24. Actinomycosis.....	..	..	..	..	..	..	..	..	..	..	..
24a. Trichinosis .....	..	..	..	..	..	..	..	..	..	..	..
25. Pellagra.....	1	1	..	..	..	..	..	..	..	..	..
26. Tuberculosis of larynx .	57	40	2	..	..	..	..	2	..	..	..
27. Tuberculosis of lungs...	8,020	4,869	24	13	12	7	2	58	19	25	227
28. Tubercular meningitis..	812	451	145	89	47	30	11	322	50	13	14
29. Abdominal tuberculosis.	192	105	21	9	2	3	4	39	9	4	5
30. Potts' disease.....	60	31	..	..	2	..	1	3	9	4	5
31. Cold abscess.....	8	5	1	..	..	..	..	1	1	1	1
32. White swelling.....	28	19	..	..	..	1	..	1	3	1	6
33. Tuberculosis of other } organs.....	49	27	2	2	2	..	..	6	..	1	2
34. General tuberculosis....	78	51	3	1	2	..	..	7	6	1	3

Death, City of New York, for Year ending December 31, 1903.

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
59	61	46	42	33	15	13	10	4	6	1	2	..	..	5
..
..
2	1	3	5	1	1	..	3	4	4	3	2	..	..	..
1	..	1	..	..	..	1	..	..	..	..	..	..	..	..
1	1	2	..	..	..	..	..	..	..	..	..	..	..	2
5	3	3	1	1	..	..	..	..	..	..	..	..	..	6
..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
4	4	3	4	2	2	1	1	1	1	..	..	..	1	7
8	8	7	7	5	11	18	14	17	14	11	10	6	1	4
..
..
..	..	..	..	..	1	1	..	..	..	1	..	..	..	..
1	1	2	2	1	1	6	4	6	2	8	6	3	1	1
..
..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1	4	9	6	17	10	10	5	9	4	4	3	2	..	2
..	1	2	..	..	..	..	..	..	..	..	..	..	..	3
2	4	1	3	3	10	3	6	1	3	1	..	..	..	3
..	1	..	..	1	..	1	..	..	..	..	..	..	..	..
1	..	..	1	2	..	1	..	..	..	..	..	..	..	..
..
..
..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	4	7	5	8	4	3	..	2	1	2	..	..	..	..
463	730	792	775	582	444	288	199	143	62	41	16	2	3	157
13	13	5	6	6	1	4	3	..	..	..	1	..	..	10
15	6	6	1	7	8	2	1	..	2	..	..	..	..	5
..	3	2	..	2	1	1	1	..	..	..	..	..	..	3
..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
1	1	..	2	1	1	..	..	1	1	..	..	..	..	..
1	3	2	..	4	5	2	1	..	..	..	..	..	..	..
5	4	5	5	4	4	2	4	2	..	..	..	..	..	5

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
35. Scrofula.....	5	4	2	1	..	..	..	3	..	..	..
36. Syphilis.....	182	99	52	2	..	..	..	54	..	1	1
37. Gonorrhœa (adults)...	7	2	..	..	..	..	..	..	..	..	..
38. Gonorrhœa (children)...	4	3	3	..	..	..	..	3	..	..	..
39. Cancers, etc., of the mouth.....	127	101	..	..	1	..	..	1	1	1	1
40. Cancer of stomach, liver.....	1,03	538	1	..	..	..	..	1	1	1	1
41. Cancer of intestines, rectum.....	352	146	..	1	..	..	..	1	..	..	2
42. Cancer of female genital organs.....	424	..	..	..	..	..	..	..	..	..	..
43. Cancer of the breast...	253	..	..	..	..	..	..	..	..	..	..
44. Cancer of the skin.....	78	51	..	..	..	..	..	..	..	..	..
45. Cancer of other organs and unspecified....	341	178	2	..	1	1	1	5	3	1	3
46. Other tumors (except of female genital organs).....	62	34	..	1	1	..	2	4	1	1	3
47. Acute articular rheumatism.....	30	139	..	..	..	1	2	3	20	21	11
48. Chronic rheumatism and gout.....	90	38	..	..	..	..	..	..	..	..	1
49. Scurvy.....	9	5	3	..	1	..	..	4	1	..	..
50. Diabetes.....	488	232	..	..	1	..	..	1	..	..	1
51. Exophthalmic goitre....	23	3	..	..	..	..	..	..	..	..	..
52. Addison's disease.....	17	11	..	..	..	..	..	..	..	..	..
53. Leukæmia.....	47	30	..	2	..	..	..	2	..	2	1
54. Anæmia, chlorosis.....	91	36	3	3	..	..	..	6	2	1	2
55. Other general diseases..	4	3	..	..	..	..	..	..	..	..	..
56. Alcoholism, acute and chronic.....	630	501	..	..	..	..	..	..	..	..	..
57. Lead poisoning.....	16	16	..	..	..	..	..	..	..	..	..
58. Other chronic poisonings of occupation.....	2	2	..	..	..	..	..	..	..	..	..
59. Other chronic poisonings.....	6	4	..	..	..	..	..	..	..	..	..
<i>11.—Diseases of Nervous System and Organs of Sense.</i>											
60. Encephalitis.....	10	6	..	..	..	..	..	..	1	..	..
61. Simple meningitis.....	901	496	158	86	39	25	18	336	43	19	20
(of which, cerebro-spinal meningitis.....)	271	151	37	22	15	9	6	89	19	9	8
62. Locomotor ataxia.....	77	57	..	..	..	..	..	..	..	..	..
63. Other diseases of spinal cord.....	152	84	..	1	..	1	1	3	4	1	..
64. Apoplexy, congestion of brain.....	2,497	1,256	6	2	1	..	..	9	2	..	1
65. Softening of brain.....	76	37	..	..	..	..	..	..	..	..	..
65. Paralysis unspecified...	198	88	2	..	..	..	..	2	..	..	2
67. General paresis.....	154	113	..	1	..	1	..	2	..	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Co. or et.
..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
2	5	4	12	6	5	4	2	..	1	2	..	..	..	5
..	..	..	1	1	..	..	..	..	..	..	..	..	..	..
..
..	..	1	4	8	15	12	13	19	8	10	4	2	1	1
3	9	15	24	30	58	75	77	83	71	51	17	8	1	7
3	4	4	7	12	20	10	27	15	13	10	7	5	..	2
..
..
1	1	1	2	3	5	6	0	5	..	..	..	..	..	..
2	7	6	0	12	23	13	19	23	24	14	0	5	..	2
..	..	1	3	2	5	7	..	2	2	3	..	..	..	..
11	6	10	13	3	8	10	5	6	3	2	4	1	2	1
1	1	..	..	2	2	2	6	6	5	2	4	3	2	..
..
8	11	6	14	18	17	35	30	27	34	20	6	4	..	4
1	..	..	1	..	..	1	..	..	..	..	..	..	..	..
..	..	3	..	4	..	1	1	..	2	..	..	..	..	..
1	3	8	5	1	1	1	1	1	2	1	..	..	..	..
1	1	3	3	5	5	2	2	..	2	..	1	..	..	..
1	..	..	..	1	..	..	1	..	..	..	..	..	..	..
10	53	73	88	89	71	58	17	18	13	6	3	..	..	3
..	..	3	1	3	5	..	1	1	2	..	..	..	..	..
..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
..	2	1	..	1	..	..	..	..	..	..	..	..	..	..
..	..	..	1	..	..	1	..	..	..	1	2	..	..	..
10	7	11	8	7	6	8	4	4	1	3	3	..	..	10
10	4	5	..	2	1	1	1	..	..	2	..	..	..	1
..	2	1	2	8	7	4	13	6	8	5	1	..	..	..
5	5	7	7	6	5	4	9	11	9	4	2	1	1	..
12	6	26	42	84	104	120	176	195	177	135	106	50	21	16
..	..	2	..	1	1	2	4	8	4	5	8	1	1	..
1	..	1	3	6	6	7	6	15	14	9	9	6	1	..
2	2	12	18	19	19	9	9	3	7	3	5	2	1	2

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
68. Other forms of insanity.	103	38	..	..	..	..	..	..	1	..	5
69. Epilepsy	141	84	1	2	..	1	1	5	1	4	9
70. Convulsions (not puer- peral)..... }	11	5	..	..	..	..	..	..	4	1	..
71. Convulsions of infants..	681	383	314	49	13	4	3	383	..	..	..
72. Tetanus, trismus.....	81	59	27	1	..	1	..	29	7	5	3
73. Chorea.....	9	3	1	..	..	..	..	1	1	..	..
74. Other nervous diseases.	143	75	7	5	..	1	1	14	2	6	3
75. Diseases of the eyes....	6	3	..	..	..	..	..	..	1	..	..
76. Diseases of the ears....	147	79	12	6	6	4	2	30	4	7	7
<i>LII.—Diseases of Circulatory System.</i>											
77. Pericarditis	44	26	1	..	..	1	2	4	1	..	3
78. Acute endocarditis.....	273	130	3	..	3	..	2	8	6	8	6
79. Organic heart diseases..	4,771	2,382	15	6	1	4	7	33	36	46	65
80. Angina pectoris.....	170	88	..	..	..	..	..	..	..	..	..
81. Diseases of arteries, } aneurism, etc..... }	310	200	..	..	..	..	..	..	..	1	..
82. Embolism, thrombosis..	121	53	1	..	..	..	..	1	1	..	1
83. Diseases of veins } (hæmorrhoids, varices, phlebitis, etc.)..... }	21	12	..	..	..	..	..	..	..	..	1
84. Diseases of lymphatics } (lymphangitis, etc.)..... }	7	4	2	1	..	..	..	3	..	..	..
85. Hæmorrhage.....	52	32	18	1	1	2	1	23	3	1	1
86. Other diseases of cir- culatory system.... }	1	1	..	..	..	..	..	..	..	..	..
<i>IV.—Diseases of Respiratory System.</i>											
87. Diseases of the nasal } fossæ	4	2	1	..	..	..	..	1	..	1	..
88. Diseases of the larynx..	75	43	12	8	5	5	..	30	4	..	..
89. Diseases of the thyroid } gland	6	2	..	..	..	..	..	..	..	..	..
90. Acute bronchitis.....	1,560	764	453	113	30	11	7	614	7	2	1
91. Chronic bronchitis.....	276	112	1	3	1	..	..	5	..	..	1
92. Broncho-pneumonia	3,312	1,711	734	389	126	51	17	1,337	40	6	4
93. Pneumonia.....	6,402	3,506	496	280	113	56	29	974	69	31	77
94. Pleurisy	309	177	18	18	12	4	3	55	7	1	4
95. Congestion of lungs, } pulmonary apoplexy }	128	58	13	1	..	1	..	15	1	..	..
96. Gangrene of lung.....	27	23	2	..	..	..	..	2	..	..	1
97. Asthma.....	195	97	..	..	..	..	..	..	..	..	..
98. Pulmonary emphysema.	72	46	..	..	..	..	..	..	..	..	..
99. Other diseases of res- piratory system } (Phthisis excepted.) }	111	64	1	..	1	1	..	3	..	1	2

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
3	1	1	2	2	6	..	7	1	6	3	..	..	..	1
10	14	6	10	13	4	3	..	1	3	..	..	..	1	4
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
4	4	1	3	1	..	2	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
6	6	4	6	10	8	4	3	..	1	1	..	1	..	1
1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
7	3	1	3	6	2	3	1	1	3	..	..	1	..	3
..
1	2	1	1	..	3	2	1	1	4	1	1	..	..	..
10	7	6	5	17	12	7	10	4	6	10	5	2	1	3
74	92	121	146	179	178	227	242	278	226	194	135	78	32	49
..	1	4	4	5	5	13	11	17	14	8	4	1	1	..
..	3	8	10	19	9	25	23	24	16	23	22	11	6	9
1	5	..	1	2	5	3	4	8	3	10	3	5	..	..
..	..	..	2	2	1	1	1	1	3	..	..	..	..	..
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
1	1	..	1	..	..	..	1	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
..
..
..	2	1	..	2	..	..	2	..	1	1	..	..	..	4
..	..	..	..	..	1	..	..	1	..	..	..	..	..	..
..	1	1	4	4	7	20	10	21	20	18	20	5	9	26
1	4	4	..	7	6	5	15	20	12	15	11	10	6	1
13	13	19	8	24	22	28	35	43	28	30	25	19	7	43
127	191	217	273	252	238	246	184	181	162	109	89	54	32	97
4	14	11	20	8	8	10	12	7	5	5	1	2	3	1
1	2	1	4	2	..	1	3	3	6	2	6	7	4	1
1	..	2	3	4	2	2	..	..	4	..	1	..	1	..
1	2	3	4	5	14	7	11	11	11	9	14	3	2	5
1	..	1	2	1	6	8	5	6	7	6	1	1	1	..
5	3	10	9	6	6	8	4	3	3	1	..	..	..	1

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	..	..	..	..	..	..	..	..	I	..	..	..	..	..
I	2	I	..	2	I	2	..	..	..	..	I	..	..	..
..	..	..	..	I	I	..	2	..	..	..	..	..	..	..
7	6	6	9	9	5	8	3	9	5	..	2	2	..	..
I	4	5	8	9	9	13	13	10	12	8	3	4	I	8
..	..	..	..	..	..	..	..	..	..	..	..	..	..	39
..
6	4	9	11	17	6	14	10	21	15	23	13	9	2	4
..
9	8	11	14	11	12	19	13	19	25	11	9	3	I	4
..	..	I	2	I	..	I	3	3	I	I	I	..	..	..
..	..	..	..	..	..	I	..	..	..	..	..	..	..	..
..	..	..	..	..	I	..	..	..	..	..	..	..	..	..
I	16	39	57	60	72	63	70	48	42	27	13	I	I	6
..	I	I	4	3	..	2	7	2	4	6	..	I	..	..
3	3	6	8	10	5	8	11	6	8	2	I	I	..	..
..	..	I	2	..	..	..	..	..	..	..	..	..	..	..
3	6	4	2	I	2	7	I	2	..	I	I	I	..	2
I	I	I	..	..	4	2	I	..	..	..	..	..	..	..
35	28	29	30	21	13	14	15	4	2	2	I	I	..	4
..
14	25	27	19	30	21	19	17	12	18	11	7	3	I	5
51	89	131	193	232	227	301	292	300	265	265	147	73	36	54
I	I	3	2	3	4	3	4	4	5	7	2	I	I	..
..	..	I	I	I	..	I	I	..	I	..	I	I	I	..
I	..	2	I	I	I	4	4	4	7	9	11	5	7	2
..	2	3	I	..	I	I	..	2	2	I	..	..	..	4
..	..	..	I	2	3	2	4	6	14	16	15	4	3	..
I	..	..	..	..	..	I	..	..	..	I	3	..	..	..
..
..
..
..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
131. Ovarian cysts and tumors.....	58	..	..	..	..	..	..	..	..	..	..
132. Other diseases of female genital organs. }	115	..	..	..	..	..	..	..	..	..	..
133. Diseases of breast (not puerperal nor cancer).....	1	..	..	..	..	..	..	..	..	..	..
<i>VII.—Puerperal Diseases.</i>											
134. Accidents of pregnancy.	118	..	..	..	..	..	..	..	..	..	..
135. Puerperal hæmorrhage.	45	..	..	..	..	..	..	..	..	..	..
136. Other accidents of labor.....	95	..	..	..	..	..	..	..	..	..	..
137. Puerperal septicæmia.	247	..	..	..	..	..	..	..	..	..	..
138. Puerperal albuminuria and convulsions. }	112	..	..	..	..	..	..	..	..	..	..
139. Puerperal phlegmasia alba dolens.....	5	..	..	..	..	..	..	..	..	..	..
140. Other accidents of parturition, sudden death.....	15	..	..	..	..	..	..	..	..	..	..
141. Puerperal diseases of breast.....	..	..	..	..	..	..	..	..	..	..	..
<i>VIII.—Diseases of Skin and Cellular Tissue.</i>											
142. Gangrene.....	88	52	2	..	..	..	..	2	..	1	..
143. Carbuncle.....	10	6	1	..	..	..	..	1	..	..	..
144. Phlegmon, acute abscess.....	82	48	11	1	..	..	..	12	1	1	1
145. Other diseases of skin and adnexa.....	28	13	7	..	..	..	..	7	..	..	..
<i>IX.—Diseases of Locomotory System.</i>											
146. Diseases of bones (non-tuberculous).....	103	59	19	10	1	1	2	33	5	3	2
147. Arthritis, other diseases of joints (except tuberculosis and rheumatism).....	15	12	1	1	1	..	..	3	..	1	..
148. Amputation.....	..	..	..	..	..	..	..	..	..	..	..
149. Other diseases of organs of locomotion..	..	..	..	..	..	..	..	..	..	..	..
<i>X.—Malformations.</i>											
150. Congenital malformations.....	401	234	213	7	4	2	1	227	4	3	..
<i>XI.—Diseases of Infancy.</i>											
151. Congenital debility, icterus and sclerema }	2,970	1,660	1,660	..	..	..	..	1,660	..	..	..
152. Other diseases peculiar to infancy.....	134	69	69	..	..	..	..	69	..	..	..
153. Neglect.....	2	1	1	..	..	..	..	1	..	..	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>XII.—Diseases of Old Age.</i>											
154. Senile debility.....	811	324	..	..	..	..	..	..	..	..	..
<i>XIII.—External Causes.</i>											
155. Suicide by poison.....	384	236	..	..	..	..	..	..	..	..	9
156. Suicide by asphyxia....	124	84	..	..	..	..	..	..	..	..	3
157. Suicide by hanging or strangulation.....	67	58	..	..	..	..	..	..	..	..	..
158. Suicide by drowning....	11	6	..	..	..	..	..	..	..	..	..
159. Suicide by firearms....	151	148	..	..	..	..	..	..	..	..	3
160. Suicide by cutting instruments.....	45	36	..	..	..	..	..	..	..	..	..
161. Suicide by precipitation from height....	19	10	..	..	..	..	..	..	..	..	..
162. Suicide by crushing....	2	1	..	..	..	..	..	..	..	..	..
163. Suicide by other methods	2	..	..	..	..	..	..	..	..	..	..
164. Fractures.....	226	175	..	3	3	1	2	9	9	4	7
165. Dislocations.....	1	..	..	..	..	..	..	..	..	..	..
166. Other accidental injuries	1,337	1,076	11	14	16	18	23	82	91	45	47
167. Burn, by fire, scald....	351	142	5	22	24	20	10	81	15	2	1
168. Burning by corrosive substances.....	1	1	1	..	..	..	..	1	..	..	..
169. Sunstroke.....	142	82	24	3	1	..	..	28	3	..	..
170. Freezing.....	3	2	..	..	..	..	..	..	..	..	..
171. Electrical shock.....	26	25	..	..	..	..	..	..	1	..	4
172. Accidental drowning...	443	410	3	4	..	2	1	10	22	28	27
173. Inanition (starvation...)	3	2	..	..	..	..	..	..	..	..	..
174. Inhalation of noxious gas, not suicidal....	313	215	2	..	1	..	1	4	5	1	11
175. Other acute poisoning..	142	76	2	2	2	2	3	11	5	..	2
176. Other external violence.	270	188	31	5	2	..	..	38	4	12	7
(Of which)											
a. Homicide, by blows	25	24	..	..	..	..	..	..	..	1	..
b. Homicide, by sharp instruments.....	24	21	..	..	..	..	..	..	..	2	2
c. Homicide, by gunshot.....	71	61	1	..	1	..	..	2	1	1	3
d. Homicide, by poison.....	1	1	..	..	..	..	..	..	..	..	..
e. Homicide, by other methods.....	15	10	4	1	1	..	..	6	1	2	..
<i>XIV.—Ill-defined or Not Specified Causes.</i>											
177. Dropsy.....	..	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not puerperal.....	..	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes.....	1,123	623	543	57	12	3	..	615	1	..	1
180. Injury during birth....	324	191	191	..	..	..	..	191	..	..	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
I.—General diseases ...	19,339	10,580	624	612	404	301	185	2,126	501	148	371
<i>a.</i> Tuberculous diseases.....	9,305	5,598	198	114	67	41	18	438	97	50	263
<i>b.</i> Cancer.....	2,608	1,014	3	1	2	1	1	8	5	3	7
II.—Diseases of nervous system and organs of sense...	5,388	2,866	538	153	59	38	26	814	71	43	50
III.—Diseases of circulatory system...	5,770	2,928	40	8	5	7	12	72	47	56	77
IV.—Diseases of respiratory system	12,477	6,615	1,751	812	288	129	56	3,036	128	42	90
V.—Diseases of digestive system....	7,926	4,141	2,112	358	66	26	29	2,591	65	48	57
VI.—Diseases of genito-urinary syst. m. f.	6,171	3,228	28	11	14	16	11	80	40	24	42
VII.—Puerperal diseases..	637	..	..	..	..	..	..	..	..	..	..
VIII.—Diseases of skin and cellular tissue..	208	119	21	1	..	..	..	22	1	2	1
IX.—Diseases of locomotory system. f.	118	71	20	11	2	1	2	36	5	4	2
X.—Malformations.....	401	234	213	7	4	2	1	227	4	3	..
XI.—Diseases of Infancy.	3,430	1,896	1,896	..	..	..	..	1,896	..	..	..
XII.—Diseases of old age	811	307	..	..	..	..	..	..	..	..	..
XIII.—External causes.....	4,068	2,973	79	53	49	43	40	264	155	92	121
<i>a.</i> Suicide.....	805	579	..	..	..	..	..	..	..	..	15
<i>b.</i> Homicide.....	137	117	5	1	2	..	..	8	2	6	5
<i>c.</i> Accident.....	3,126	2,277	74	52	47	43	40	256	153	86	101
XIV.—Causes ill-defined...	1,120	623	543	57	12	3	..	615	1	..	1
Total males.....	....	36,586	7,890	2,083	903	566	362	11,804	1,018	462	812
Total females...	....	31,278	6,523	1,922	879	532	384	10,240	958	469	739
Total both sexes	....	67,864	14,413	4,005	1,782	1,098	746	22,044	1,976	931	1,551

Deaths of Females by Age, and Cause of Death,

CAUSE OF DEATH.	ALL AGES.	Under 1 Year.	1	2	3	4	TOTAL UNDER 5.	5	10	15
<i>I.—General Diseases.</i>										
1. Typhoid fever.....	264	..	1	4	3	1	9	27	21	31
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..
3. Relapsing fever.....	..	..	..	..	..	..	..	..	..	..
4. Malarial fever.....	47	3	4	2	..	..	9	3	6	1
5. Small-pox.....	2	..	..	..	..	..	1	..	..	..
6. Measles.....	238	60	96	37	15	8	216	22	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
4	7	2	1	2	..	1	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
2	2	1	2	1	..	1	..	..	..	..	..	..	..	15
7	7	10	14	17	11	29	8	27	22	22	17	9	6	6
..
..	..	1	..	..	..	..	..	..	1	2	1	..	..	..
..	3	3	2	3	..	12	8	9	11	2	2	4	1	2
..
..
..	5	4	..	2	7	7	3	4	2	3	..	..	1	2
..	1	..	..	1	..	..	..	..	..	..	..	..	..	1
1	4	1	1	1	6	2	2	4	..	..	..	1	..	..
..
..
..	2	..	..	..	..	..	..	..	..	..	..	..	..	1
..
..
..
2	2	2	5	1	1	1	..	..	..	..	..	..	..	2
462	624	510	368	241	153	111	98	63	45	27	14	6	3	141
5	4	2	3	2	1	..	1	1	..	..	..	..	..	25
9	7	7	5	4	1	1	2	1	..	2	1	..	..	5
2	1	2	4	1	..	2	1	1	1	1	..	..	..	..
..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
1	..	..	..	..	..	1	..	1	..	..	..	..	..	..
4	..	2	1	3	1	..	1	1	1	2	2	..	..	..
3	3	2	3	1	..	..	3	1	..	..	..	..	..	1
..
1	8	1	2	5	2	1	2	2	..	..	..	..	..	1
1	1	1	1	..	..	..	..	..	..	..	..	..	..	..
..
..	1	..	..	5	1	3	5	2	2	2	2	1	2	..
..	6	12	24	34	42	74	74	84	59	49	31	13	2	9
3	2	7	16	19	16	23	25	28	20	13	9	7	3	2
1	9	10	40	62	66	61	55	49	29	24	4	10	3	15

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
43. Cancer of the breast.....	253	..	..	..	..	..	..	..	..	..
44. Cancer of the skin.....	27	..	..	..	..	..	..	..	..	..
45. Cancer of other organs and un- specified.....	163	..	1	1	2	..	4	..	3	4
46. Other tumors (except of female genital organs).....	28	..	1	..	..	..	1	1	..	..
47. Acute articular rheumatism.....	191	3	..	2	3	6	14	28	18	13
48. Chronic rheumatism and gout....	52	..	..	..	..	..	..	..	..	..
49. Scurvy.....	4	2	..	..	..	..	2	..	..	..
50. Diabetes.....	256	..	..	1	..	..	1	1	3	3
51. Exophthalmic goitre.....	20	..	..	..	..	..	..	..	..	2
52. Addison's disease.....	6	..	..	..	..	..	..	..	..	..
53. Leukæmia.....	17	..	..	1	..	..	1	..	..	1
54. Anæmia, chlorosis.....	55	5	..	..	..	1	6	..	2	5
55. Other general diseases.....	1	..	..	..	..	..	..	..	..	..
56. Alcoholism, acute and chronic....	129	..	..	..	..	..	..	..	..	..
57. Lead poisoning.....	..	..	..	..	..	..	..	..	..	..
58. Other chronic poisonings of oc- cupation.....	..	..	..	..	..	..	..	..	..	..
59. Other chronic poisonings.....	59	2	..	..	..	..	..	..	..	..
<i>II.— Diseases of Nervous System and Organs of Sense.</i>										
60. Encephalitis.....	4	..	..	..	..	..	..	..	..	1
61. Simple meningitis.....	406	144	86	40	25	16	311	31	15	5
(of which cerebro-spinal men- ingitis.....)	120	34	26	14	11	8	93	12	3	2
62. Locomotor ataxia.....	20	..	..	..	..	..	..	..	..	..
63. Other diseases of spinal cord.....	68	1	1	..	..	..	2	..	2	3
64. Apoplexy, congestion of brain....	1,241	4	1	..	..	..	5	3	1	3
65. Softening of brain.....	39	..	..	1	..	..	1	..	..	..
66. Paralysis (unspecified).....	110	..	..	2	..	..	2	2	1	..
67. General paresis.....	36	..	..	..	..	..	..	..	..	..
68. Other forms of insanity.....	54	..	..	1	1	..	2	3	1	1
69. Epilepsy.....	48	3	..	1	1	3	8	4	1	4
70. Convulsions (not puerperal).....	8	..	..	..	..	..	..	2	2	1
71. Convulsions of infants.....	296	242	39	9	5	1	296	..	..	..
72. Tetanus, trismus.....	22	12	1	..	..	1	14	1	..	..
73. Chorea.....	6	..	..	..	..	..	..	..	3	..
74. Other nervous diseases.....	68	6	5	2	1	..	14	..	6	3
75. Diseases of the eyes.....	3	1	..	..	..	..	1	..	1	..
76. Diseases of the ears.....	68	10	8	5	4	4	31	3	9	6

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored
..	2	7	21	27	33	32	45	33	15	20	10	5	3	5
..	..	1	1	1	5	5	3	4	3	..	2	1	1	..
2	3	6	9	16	20	23	21	25	8	10	8	1	..	1
..	..	1	2	2	5	2	3	2	3	2	3	1	..	..
6	10	10	11	11	12	15	14	10	6	6	4	3	..	10
..	..	2	2	2	3	..	8	9	11	6	6	3	..	..
1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
4	9	7	9	13	16	31	39	37	43	23	11	3	3	3
1	2	2	3	3	2	2	..	2	..	1	..	..	..	1
1	1	..	1	..	2	..	1	..	..	..	..	..	..	..
..	1	4	3	1	1	1	2	2	..	..	..	..	..	..
5	7	5	4	4	7	3	3	1	..	3	..	..	..	..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	17	26	37	28	10	7	3	1	..	..	..	..	..	..
..
..
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	1	2	..	..	..	..
7	7	5	4	3	4	1	4	1	3	1	3	..	1	8
1	2	2	1	1	2	1	..	..	..	..	..	..	..	4
..	..	..	2	4	3	3	3	2	2	..	1	..	..	..
4	5	1	3	6	10	6	4	3	10	5	3	..	1	..
7	9	32	35	53	76	146	133	198	166	144	113	72	40	33
..	1	..	1	1	2	5	1	6	5	4	6	2	4	2
1	4	1	2	5	8	5	6	17	16	14	9	7	10	3
1	..	2	6	5	2	..	2	4	5	4	2	1	2	..
7	10	6	5	2	1	6	2	2	..	3	1	1	1	4
8	..	1	8	3	3	2	2	..	1	2	1	..	..	4
..	2	..	..	..	..	..	1	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
1	3	3	..	..	..	..	..	..	..	..	..	..	..	..
1	..	1	..	..	..	..	..	1	..	..	..	..	..	..
4	3	4	6	8	4	5	3	1	5	..	1	1	..	..
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
1	7	1	3	2	..	3	1	..	1	..	..	..	..	..

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>III.—Diseases of Circulatory System.</i>										
77. Pericarditis.....	18	2	..	..	1	..	3	3	1	..
78. Acute endocarditis.....	143	9	..	1	1	2	13	11	5	8
79. Organic heart diseases.....	2,389	17	7	2	5	3	34	51	61	55
80. Angina pectoris.....	82	..	..	..	..	..	..	1	..	..
81. Diseases of arteries, aneurism, etc.	105	..	..	..	..	..	..	..	..	1
82. Embolism, thrombosis.....	68	1	..	..	..	..	1	..	..	..
83. Diseases of veins (hæmorrhoids, varices, phlebitis, etc.).... }	9	..	..	..	..	..	..	..	..	..
84. Diseases of lymphatics (lymphangi- tisis, etc.)..... }	3	2	..	1	..	..	3	..	..	..
85. Hæmorrhage.....	20	9	..	..	..	..	9	..	2	1
86. Other diseases of circulatory system..... }	..	..	..	..	..	..	..	..	..	..
<i>IV.—Diseases of Respiratory System.</i>										
87. Diseases of the nasal fossæ.....	2	..	..	..	..	..	..	..	..	1
88. Diseases of the larynx.....	32	10	3	4	3	3	23	1	1	..
89. Diseases of thyroid gland.....	4	1	..	..	..	..	1	..	..	..
90. Acute bronchitis.....	796	363	126	52	17	9	547	11	6	5
91. Chronic bronchitis.....	154	3	1	..	..	..	4	1	..	1
92. Broncho-pneumonia.....	1,601	645	354	120	33	24	1,176	40	13	11
93. Pneumonia.....	2,296	398	250	129	59	32	868	87	36	65
94. Pleurisy.....	132	14	13	6	5	..	38	8	8	5
95. Congestion of lungs, pulmonary apoplexy..... }	50	8	1	..	..	..	9	..	..	2
96. Gangrene of lung.....	4	..	..	..	..	..	..	..	..	..
97. Asthma.....	98	..	1	..	..	..	1	..	..	..
98. Pulmonary emphysema.....	26	..	..	..	..	..	..	..	..	..
99. Other diseases of respiratory system (phthisis excepted).... }	47	3	..	..	..	..	3	..	2	..
<i>V.—Diseases of Digestive System.</i>										
100. Diseases of mouth and adnexa...	12	10	..	..	..	..	10	1	..	..
101. Diseases of pharynx.....	18	6	2	..	..	1	9	4	..	..
102. Diseases of œsophagus.....	4	..	..	..	..	1	1	..	..	..
103. Ulcer of stomach.....	61	..	..	..	..	..	..	..	..	4
104. Other diseases of stomach (can- cer excepted)..... }	206	45	5	5	3	2	60	7	..	1
105. Diarrhœa and enteritis (under two years)..... }	2,130	1,790	340	..	..	..	2,130	..	..	..
(of which) chronic diarrhœa.....	9	8	1	..	..	..	9	..	..	..
106. Diarrhœa and enteritis (two years and over)..... }	382	..	..	58	29	11	98	17	4	8
107. Intestinal parasites.....	2	..	..	..	..	..	..	1	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	I	..	I	..	I	I	3	3	2	4	7	3	4	..
..	..	..	..	..	..	I	I	..	..	..	..	I	..	..
I	2	2	6	I	3	I	..	3	I	..	2	..	..	..
I	..	..	..	..	I	..	..	2	I	..	I	..	..	..
I	2	..	2	..	I	..	..	2	..	..	..	..	..	3
..	..	..	..	..	..	I	..	..	I	..	..	..	..	..
..
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	46
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..
..	..	..	..	..	..	3	6	13	37	74	91	129	151	12
23	37	22	14	12	8	6	3	4	5	3	I	..	..	I
5	5	4	7	6	4	..	3	2	I	..	I	..	..	I
I	2	..	I	..	..	4	I	..	..	..	..	..	..	I
2	2	..	..	I	..	..	..	..	..	..	..	..	..	..
..	..	I	..	I	..	..	I	..	..	..	..	..	..	..
..	..	3	I	I	..	2	I	..	I	..	..	..	..	..
I	I	..	..	2	..	I	..	..	2	..	..	2	..	..
I	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	I	I	..	..	..	..	..	..	..	..	..
..	..	2	5	2	I	5	3	9	5	4	2	I	I	..
..	..	..	..	..	..	..	..	..	..	I	..	..	..	..
14	11	11	16	14	10	10	18	20	12	11	11	5	2	3
6	6	11	12	10	11	13	8	5	5	I	3	I	..	4
..
..	2	..	3	..	2	4	4	2	5	5	..	I	I	I
..	..	..	..	..	..	..	..	..	I	..	..	..	..	..

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
171. Electrical shock	1	..	..	..	..	..	..	..	..	..
172. Accidental drowning	33	1	..	1	..	..	2	3	..	2
173. Inanition (starvation)	1	..	..	..	..	..	..	..	..	..
174. Inhalation of noxious gas, not suicidal.	103	2	1	1	2	3	9	1	1	8
175. Other acute poisoning	66	2	1	2	2	2	9	2	1	2
176. Other external violence.....	82	22	3	1	..	1	27	1	..	2
<i>a.</i> Homicide, by blows.....	1	..	..	..	..	..	..	..	..	..
<i>b.</i> Homicide, by sharp instru- ments.....	3	..	..	..	..	..	..	..	..	..
<i>c.</i> Homicide, by gunshot.....	10	..	..	..	..	..	..	..	..	1
<i>d.</i> Homicide, by poison.....	..	..	..	..	..	..	..	..	..	..
<i>e.</i> Homicide, by other methods..	6	5	..	..	..	..	5	..	..	..
<i>XIV.—Ill-defined or not Specified Causes.</i>										
177. Dropsy .....	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not puerperal.....	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes	497	411	62	10	5	1	489	3	..	..
180. Injury during birth.....	133	132	..	..	..	1	133	..	..	..
I.—General diseases	8,759	532	554	400	271	204	1,961	530	211	370
<i>a.</i> Tuberculous diseases.....	3,706	152	111	75	34	22	394	78	94	288
<i>b.</i> Cancer.....	1,594	1	1	1	2	..	5	2	3	6
II.—Diseases of nervous system and organs of sense	2,522	423	141	61	37	25	687	50	43	29
III.—Diseases of circulatory system	2,842	40	7	4	7	5	63	66	69	65
IV.—Diseases of respiratory system	5,862	1,451	749	291	117	68	2,676	149	65	92
V.—Diseases of digestive system..	3,785	1,883	354	65	38	20	2,360	57	34	31
VI.—Diseases of genito-urinary system	2,963	18	8	10	17	10	63	31	25	70
VII.—Puerperal diseases.....	637	..	..	..	..	..	..	..	..	38
VIII.—Diseases of skin and cellular tissue.....	89	16	..	2	..	3	21	2	4	1
IX.—Diseases of locomotory system	47	22	6	4	..	1	33	..	2	2
X.—Malformations.....	167	157	2	3	..	1	163	4	..	..
XI.—Diseases of infancy	1,467	1,465	2	..	..	..	1,467	..	..	..
XII.—Diseases of old age	504	..	..	..	..	..	..	..	..	..
XIII.—External causes.....	1,095	64	36	29	40	46	215	66	16	40
<i>a.</i> Suicide.....	226	..	..	..	..	..	..	..	..	12
<i>b.</i> Homicide.....	19	5	..	..	..	..	5	..	..	1
<i>c.</i> Accident.....	850	59	36	29	40	46	210	66	16	27
XIV.—Causes ill-defined.....	539	453	62	10	5	1	531	3	..	..
Total Females	31,278	6,524	1,921	879	532	384	10,240	958	469	738

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
6	4	..	6	1	2	1	1	2	..	2	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
11	8	8	4	7	5	10	5	6	9	3	5	3	..	..
7	12	7	13	3	1	5	2	1	1	..	..	..	..	2
5	9	12	7	5	3	3	2	4	..	2	..	..	..	2
..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
..	1	..	1	..	1	..	..	..	..	..	..	..	..	..
..	1	3	1	..	2	1	1	..	..	..	..	..	..	..
..
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
..
..
..	..	1	..	..	1	..	3	..	..	..	..	..	..	29
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
571	799	676	625	533	434	461	441	407	282	228	131	71	28	269
487	641	528	389	253	158	117	106	66	44	35	20	5	3	175
6	22	44	111	164	183	223	228	225	134	120	66	38	14	33
45	52	61	78	96	114	183	162	236	216	181	145	85	59	69
92	121	135	176	172	166	228	257	299	268	250	211	129	75	71
122	157	186	195	165	174	225	254	337	311	285	224	147	98	221
73	78	108	122	125	89	133	117	126	103	90	71	40	28	70
98	168	198	253	259	254	271	238	292	247	224	159	73	40	80
116	191	140	110	37	5	..	..	..	..	..	..	..	..	15
2	3	2	7	1	5	3	4	8	4	4	10	4	4	..
1	2	..	2	..	1	1	..	2	1	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	63
..	..	..	..	..	..	3	6	13	37	74	91	129	151	11
83	99	81	89	66	48	64	52	55	47	32	24	14	4	16
33	47	30	23	24	13	13	9	6	9	3	2	2	..	3
..	3	3	1	1	2	1	1	..	..	1	..	..	..	1
50	49	48	65	41	33	50	42	49	38	28	22	12	4	11
..	..	1	..	..	1	..	3	..	..	..	..	..	..	27
1,203	1,670	1,588	1,657	1,454	1,291	1,572	1,534	1,775	1,516	1,368	1,056	632	487	921

BOROUGH OF

Deaths of Males by Age, and Cause of Death,

CAUSE OF DEATH.	Total both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>I.—General Diseases.</i>											
1. Typhoid fever.....	317	193	1	2	1	1	2	7	10	13	24
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..	..
3. Relapsing fever.....	..	..	..	..	..	..	..	..	..	..	..
4. Malarial fever.....	27	14	..	..	1	2	..	3	..	1	..
5. Small-pox.....	..	..	..	..	..	..	..	..	..	..	..
6. Measles.....	276	143	50	58	15	10	2	135	5	..	1
7. Scarlet fever.....	291	140	8	24	23	14	13	82	40	9	3
8. Whooping cough.....	166	69	37	19	5	6	2	69	..	..	..
9. Diphtheria and croup...	1,077	551	65	140	115	75	46	441	86	4	5
10. Influenza.....	232	102	8	6	4	2	1	21	1	..	2
11. Miliary fever.....	..	..	..	..	..	..	..	..	..	..	..
12. Asiatic cholera.....	..	..	..	..	..	..	..	..	..	..	..
13. Cholera nostras.....	4	1	..	..	..	..	..	..	..	..	..
14. Dysentery.....	49	22	2	1	..	..	..	3	1	..	..
15. Plague.....	..	..	..	..	..	..	..	..	..	..	..
16. Yellow fever.....	..	..	..	..	..	..	..	..	..	..	..
17. Leprosy.....	1	1	..	..	..	..	..	..	..	..	..
18. Erysipelas.....	129	74	20	2	..	..	..	22	..	..	1
19. Other epidemic diseases.	8	6	3	1	..	..	..	4	..	..	..
20. Pyæmia, septicæmia....	66	46	17	1	1	..	..	19	..	..	2
21. Glanders.....	3	3	..	..	..	..	..	..	..	..	..
22. Malignant pustule.....	4	4	..	..	..	..	..	..	..	..	..
23. Hydrophobia.....	2	1	..	..	..	..	..	..	1	..	..
24. Actinomycosis.....	..	..	..	..	..	..	..	..	..	..	..
24a. Trichinosis.....	..	..	..	..	..	..	..	..	..	..	..
25. Pellagra.....	1	1	..	..	..	..	..	..	..	..	..
26. Tuberculosis of larynx..	23	20	1	..	..	..	..	1	..	..	..
27. Tuberculosis of lungs...	3,971	2,400	17	9	8	5	1	40	12	13	109
28. Tubercular meningitis..	508	283	106	54	28	19	7	214	26	7	9
29. Abdominal tuberculosis.	98	54	4	6	2	..	1	13	3	3	4
30. Potts' disease.....	40	21	..	..	2	..	1	3	4	3	3
31. Cold abscess.....	6	3	1	..	..	..	..	1	1	..	1
32. White swelling.....	16	10	..	..	..	1	..	1	3	1	1
33. Tuberculosis of other } organs.....	25	15	1	..	1	..	..	2	..	1	2

MANHATTAN.

for the Year Ending December 31, 1903.

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
33	33	21	77	14	7	3	4	2	4	1	..	..	..	5
..
..
..	..	..	3	1	..	..	1	1	1	2	1	..	..	..
..
1	1	..	..	..	..	..	..	..	..	..	..	..	..	1
1	1	3	..	1	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
3	2	2	2	2	2	..	1	..	..	..	..	..	1	5
4	4	5	4	3	5	11	7	15	10	1	5	3	1	3
..
..
..	..	1	2	1	..	4	1	1	1	3	3	..	1	..
..
..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	4	5	4	10	5	6	4	4	3	3	2	1	..	1
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
..	2	1	3	3	8	2	4	1	1	..	..	..	..	1
..	1	..	..	1	..	1	..	..	..	..	..	..	..	..
1	..	..	1	1	..	1	..	..	..	..	..	..	..	..
..
..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	2	4	3	3	3	2	..	1	..	1	..	..	..	..
209	235	394	364	281	236	143	105	89	38	22	8	1	1	78
9	6	5	2	3	..	1	1	..	..	..	..	..	..	7
11	4	5	..	4	2	2	1	..	2	..	..	..	..	2
..	2	2	..	2	1	1	..	..	..	..	..	..	..	..
..
1	..	..	2	..	1	..	..	..	..	..	..	..	..	..
1	1	1	..	2	2	2	1	..	..	..	..	..	..	..

CAUSE OF DEATH.	Total both Sexes.	All Ages.	Under 1 Year	1	2	3	4	Total Under 5.	5	10	15
34. General tuberculosis....	34	17	1	1	1	..	..	3	3	..	2
35. Scrofula.....	4	3	1	1	..	..	..	2	..	..	..
36. Syphilis.....	120	60	34	1	..	..	..	35	..	1	..
37. Gonorrhœa (adults)....	4	..	..	..	..	..	..	..	..	..	..
38. Gonorrhœa (children)...	4	3	2	..	..	..	..	3	..	..	..
39. Cancers, etc., of the mouth.....	69	56	..	..	1	..	..	1	..	1	..
40. Cancer of stomach, liver.	588	330	1	..	..	..	..	1	1	1	1
41. Cancer of intestines, } Rectum.....	224	95	..	1	..	..	..	1	..	..	..
42. Cancer of female genital organs.....	250	..	..	..	..	..	..	..	..	..	..
43. Cancer of the breast....	144	..	..	..	..	..	..	..	..	..	..
44. Cancer of the skin.....	34	24	..	..	..	..	..	..	..	..	..
45. Cancer of other organs } and unspecified.....	217	109	2	..	..	1	1	4	2	1	3
46. Other tumors (except } of female genital organs).....	38	26	..	..	1	..	2	3	1	1	2
47. Acute articular rheumatism.....	141	51	..	..	..	1	2	3	9	8	7
48. Chronic rheumatism } and gout.....	54	19	..	..	..	..	..	..	..	..	..
49. Scurvy.....	7	5	3	..	1	..	..	4	1	..	..
50. Diabetes.....	268	128	..	..	..	..	..	..	..	..	1
51. Exophthalmic goitre..	18	3	..	..	..	..	..	..	..	..	..
52. Addison's disease.....	8	5	..	..	..	..	..	..	..	..	..
53. Leukæmia.....	28	19	..	2	..	..	..	2	..	1	1
54. Anæmia, chlorosis.....	52	23	1	1	..	..	..	2	2	1	1
55. Other general diseases..	2	1	..	..	..	..	..	..	..	..	..
56. Alcoholism, acute and } chronic.....	473	378	..	..	..	..	..	..	..	..	..
57. Lead poisoning.....	6	6	..	..	..	..	..	..	..	..	..
58. Other chronic poisonings } of occupation.....	1	1	..	..	..	..	..	..	..	..	1
59. Other chronic poisonings }	6	4	..	..	..	..	..	..	..	..	..
<i>II.—Diseases of Nervous System and Organs of Sense.</i>											
60. Encephalitis.....	1	1	..	..	..	..	..	..	..	..	..
61. Simple Meningitis.....	590	325	96	59	27	20	15	217	27	10	15
(of which cerebro- } spinal meningitis...)	173	100	19	15	12	5	5	56	14	3	7
62. Locomotor ataxia.....	28	20	..	..	..	..	..	..	..	..	..
63. Other diseases of } spinal cord.....	82	49	..	..	..	..	..	..	1	1	..
64. Apoplexy, congestion } of brain.....	1167	603	2	1	..	..	..	3	1	..	1
65. Softening of brain.....	34	16	..	..	..	..	..	..	..	..	..
66. Paralysis unspecified...	111	45	1	..	..	..	..	1	..	..	2

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	3	2	..	1	2	..	1	..	..	..	..	..	..	2
..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
1	3	..	8	4	4	2	1	..	1	..	..	..	..	..
..
..
..	..	1	2	7	7	4	9	13	4	6	..	1	..	..
1	7	7	16	24	32	52	53	48	48	25	10	3	..	4
2	4	4	5	10	15	5	17	11	10	6	3	2	..	1
..
..
..	1	1	1	3	2	2	4	2	1	5	2	..	..	1
2	4	4	6	7	13	9	11	15	14	4	7	3	..	2
..	..	1	1	1	4	7	..	1	2	2	..	..	..	..
2	3	3	6	..	4	5	..	2	..	..	..	..	..	..
..	1	..	..	2	..	1	3	3	3	..	2	3	1	..
..
3	3	3	11	10	12	18	14	13	19	18	1	2	..	..
1	..	..	1	..	..	1	..	..	..	..	..	..	..	..
..	..	2	..	2	..	..	1	..	..	..	..	..	..	..
1	3	4	4	..	1	1	..	..	1	..	..	..	..	..
..	..	2	3	4	4	1	1	..	1	..	1	..	..	..
..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
8	40	56	62	70	54	41	15	16	12	3	1	..	..	2
..	..	3	..	..	2	..	1	..	..	..	..	..	..	..
..
..	2	1	..	1	..	..	..	..	..	..	..	..	..	..
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
11	6	7	3	7	4	7	2	3	1	2	3	..	..	3
6	3	4	..	2	1	1	1	..	..	2	..	..	..	1
..	..	1	1	4	2	2	6	1	2	1	..	..	..	..
3	4	3	5	5	2	3	6	8	3	2	2	..	1	..
4	4	19	23	42	45	73	95	101	81	60	38	17	6	3
..	..	2	..	1	1	..	2	4	2	2	2	..	..	..
..	..	..	3	4	4	2	4	7	8	5	2	3	1	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total under 5.	5	10	15
67. General paresis	93	75	..	1	..	1	..	2	..	..	..
68. Other forms of insanity	64	16	..	..	..	..	..	..	1	..	2
69. Epilepsy.....	79	51	1	2	..	1	1	5	..	2	3
70. Convulsions(not puer- peral).....	7	3	..	..	..	..	..	..	2	1	..
71. Convulsions of infants.	406	227	186	27	9	3	2	227	..	..	..
72. Tetanus, trismus.....	51	36	15	1	..	..	..	16	4	4	3
73. Chorea.....	4	2	..	..	..	..	..	..	1	..	..
74. Other nervous diseases.	71	43	1	3	..	1	1	6	1	2	1
75. Diseases of the eyes....	6	3	..	..	..	..	..	..	1	..	..
76. Diseases of the ears....	119	64	10	3	6	3	2	24	3	5	5
<i>III.—Diseases of Circulatory System.</i>											
77. Pericarditis.....	19	13	1	..	..	..	..	1	..	..	2
78. Acute endocardi- ditis.....	66	31	1	..	1	..	..	2	3	2	2
79. Organic heart diseases.	2,732	1,379	6	2	..	..	3	11	23	26	37
80. Angina pectoris.....	62	44	..	..	..	..	..	..	..	..	..
81. Diseases of arteries, aneurism, etc.....	250	164	..	..	..	..	..	..	..	1	..
82. Embolism, thrombosis..	61	27	1	..	..	..	..	1	1	..	1
83. Diseases of veins (hæmorrhoids var- ices, phlebitis, etc.)	14	9	..	..	..	..	..	..	..	..	1
84. Diseases of lymphat- ics (Lymphangitis, etc.....)	2	2	1	1	..	..	..	2	..	..	..
85. Hæmorrhage.....	38	24	14	1	1	1	1	18	3	1	..
86. Other diseases of cir- culatory system... }	..	..	..	..	..	..	..	..	..	..	..
<i>IV. Diseases of Respiratory System.</i>											
87. Diseases of the nasal fossæ.....	1	..	..	..	..	..	..	..	..	..	..
88. Diseases of the larynx..	29	16	5	5	1	3	..	14	..	..	..
89. Diseases of thyroid gland.....	5	2	..	..	..	..	..	..	..	..	..
90. Acute bronchitis.....	806	385	210	71	20	8	4	313	5	1	..
91. Chronic bronchitis.....	85	33	..	..	..	..	..	..	..	..	..
92. Broncho-pneumonia....	2,257	1,185	523	275	84	38	14	934	31	4	2
93. Pneumonia.....	3,574	2,008	263	167	65	24	14	533	38	17	44
94. Pleurisy.....	201	115	14	15	7	4	2	42	5	..	3
95. Congestion of lungs, pulmonary apoplexy }	69	27	4	1	..	..	..	5	..	..	..
96. Gangrene of lung.....	18	17	2	..	..	..	..	2	..	..	1
97. Asthma.....	79	30	..	..	..	..	..	..	..	..	..
98. Pulmonary emphysema.	46	29	..	..	..	..	..	..	..	..	..
99. Other diseases of res- piratory system (phthisis excepted.)	47	25	1	..	..	..	..	1	..	1	1

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
2	I	II	14	13	13	5	5	I	3	I	3	..	I	2
2	..	..	I	I	3	..	2	..	3	I	..	..	..	I
6	8	6	5	10	I	2	..	I	I	..	..	..	I	2
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
2	4	..	2	I	..	..	..	..	..	..	..	..	..	I
..	..	..	..	..	..	..	..	..	..	..	I	..	..	..
3	3	2	6	7	4	3	3	..	..	I	..	I	..	I
I	..	..	I	..	..	..	..	..	..	..	..	..	..	..
6	2	I	3	5	2	3	I	I	3	..	..	..	..	3
..	2	..	I	..	3	I	I	..	I	..	I	..	..	..
3	6	I	..	I	..	2	I	I	3	3	I	..	..	I
38	52	75	92	116	104	141	156	167	128	89	65	38	15	28
..	..	I	I	2	2	8	7	9	6	5	3	..	..	..
..	3	7	9	18	7	21	19	18	11	19	20	6	5	6
I	3	..	..	I	4	I	I	3	2	5	I	2	..	..
..	..	..	I	I	I	I	I	I	2	..	..	..	..	..
..
..	..	..	I	..	..	..	I	..	..	..	..	..	..	..
..
..
..	..	..	..	I	..	..	..	..	I	..	..	..	..	I
..	..	..	..	I	..	..	..	I	..	..	..	..	..	..
..	I	..	2	2	3	9	5	13	9	10	7	I	4	6
..	3	..	..	2	2	2	4	6	6	3	3	2	..	..
II	10	11	8	15	15	21	23	27	21	21	12	10	3	30
66	112	116	155	153	149	148	108	116	93	65	46	25	24	55
I	9	6	13	5	6	7	7	4	3	I	I	I	I	..
I	I	..	I	..	..	..	2	I	4	I	3	5	3	I
I	..	2	2	2	..	2	..	..	4	..	I	..	..	..
I	I	..	2	I	5	2	3	4	4	5	2	..	..	..
..	..	I	..	I	5	3	4	6	5	2	I	..	I	..
..	3	4	2	2	I	5	2	I	2	..	..	..	..	I

CAUSE OF DEATH.	Total both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>XIII.—External Causes.</i>											
155. Suicide by poison.....	211	130	..	..	..	..	..	..	..	..	5
156. Suicide by Asphyxia...	73	49	..	..	..	..	..	..	..	..	1
157. Suicide by hanging or } strangulation	37	32	..	..	..	..	..	..	..	..	..
158. Suicide by drowning...	4	1	..	..	..	..	..	..	..	..	..
159. Suicide by firearms....	100	99	..	..	..	..	..	..	..	..	2
160. Suicide by cutting in- } struments.....	23	17	..	..	..	..	..	..	..	..	..
161. Suicide by precipita- } tion from height....	13	7	..	..	..	..	..	..	..	..	..
162. Suicide by crushing....	1	1	..	..	..	..	..	..	..	..	..
163. Suicide by other methods	..	..	..	..	..	..	..	..	..	..	..
164. Fractures.....	136	101	..	3	2	1	1	7	5	2	5
165. Dislocations.....	1	..	..	..	..	..	..	..	..	..	..
166. Other accidental injuries	809	649	3	11	10	13	16	53	63	23	30
167. Burn, by fire, scald....	185	71	3	12	13	13	5	46	12	..	..
168. Burning by corrosive } substances.....	1	1	1	..	..	..	..	1	..	..	..
169. Sunstroke	66	38	6	1	1	..	..	8	..	..	..
170. Freezing.....	..	..	..	..	..	..	..	..	..	..	..
171. Electrical shock.....	6	5	..	..	..	..	..	..	..	..	..
172. Accidental drowning...	221	205	1	1	..	..	..	2	14	12	7
173. Inanition (starvation)..	2	1	..	..	..	..	..	..	..	..	..
174. Inhalation of noxious } gas, not suicidal....	218	141	1	..	..	..	..	1	4	..	9
175. Other acute poisoning.	109	57	1	1	1	1	1	5	3	..	2
176. Other external violence	139	92	17	2	..	..	..	19	2	2	3
<i>a.</i> Homicide by blows.	15	15	..	..	..	..	..	..	..	..	..
<i>b.</i> Homicide, by sharp } instruments....	10	9	..	..	..	..	..	..	..	..	1
<i>c.</i> Homicide, by gun } shot.....	40	32	1	..	..	..	..	1	1	..	1
<i>d.</i> Homicide, by } poison.....	..	..	..	..	..	..	..	..	..	..	..
<i>e.</i> Homicide, by other } methods.....	4	1	1	..	..	..	..	1	..	..	..
<i>XIV.—Ill-defined or No Specified Causes.</i>											
177. Dropsy.....	..	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not } puerperal.....	..	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes.....	588	513	285	26	4	3	..	318	..	..	..
180. Injury during birth....	196	113	113	..	..	..	..	113	..	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
297	472	544	531	479	429	330	261	239	176	102	47	17	6	121
231	353	413	371	296	247	151	109	90	40	23	8	1	1	89
5	16	17	30	51	69	72	94	89	77	46	22	9	..	8
39	33	52	63	101	80	102	114	127	107	73	51	21	10	21
42	72	84	105	139	121	175	187	199	153	121	91	46	20	39
81	140	140	185	185	186	198	165	179	151	109	76	41	36	94
36	49	80	98	80	69	87	82	59	45	41	23	9	2	37
31	59	90	125	151	140	178	161	166	157	162	84	33	27	32
..
1	1	5	4	6	3	7	6	7	5	2	8	2	1	1
..	3	2	2	1	2	1	1	..	..	..	1	..	..	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
..	..	..	..	..	..	..	..	..	..	..	..	..	..	44
..	..	..	..	..	..	..	1	6	13	22	28	26	26	..
123	156	188	213	164	136	132	81	63	42	24	18	9	3	20
22	33	38	52	42	47	42	23	12	12	3	1	1	..	2
12	6	7	16	6	1	2	..	1	1	..	..	..	..	2
89	117	143	145	116	88	88	58	50	29	21	17	2	3	11
..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
651	985	1,185	1,331	1,305	1,166	1,210	1,059	1,043	849	658	426	208	131	430
650	906	843	925	855	730	883	844	962	746	630	493	325	217	458
1,301	1,891	2,028	2,256	2,161	1,896	2,093	1,903	2,005	1,595	1,288	919	553	348	888

of Death, Year Ending December 31, 1903.

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
19	23	9	13	11	1	3	3	1	1	2	..	..	..	3
..
..
..	1	..	2	..	2	..	2	1	..	2	..	..	..	..
..

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
6. Measles.....	133	34	55	22	12	4	127	6	..	..
7. Scarlet fever.....	151	7	18	31	24	16	95	36	6	4
8. Whooping cough.....	97	49	25	14	3	3	94	3	..	..
9. Diphtheria and croup.....	526	48	133	97	80	56	414	96	11	3
10. Influenza.....	130	4	2	..	..	..	6	3	4	2
11. Miliary fever.....	..	..	..	..	..	..	..	..	..	..
12. Asiatic cholera.....	..	..	..	..	..	..	..	..	..	..
13. Cholera nostras.....	3	..	..	..	..	..	..	..	..	..
14. Dysentery.....	27	1	..	..	..	..	1	..	..	..
15. Plague.....	..	..	..	..	..	..	..	..	..	..
16. Yellow fever.....	..	..	..	..	..	..	..	..	..	..
17. Leprosy.....	..	..	..	..	..	..	..	..	..	..
18. Erysipelas.....	55	25	2	1	..	..	28	..	..	1
19. Other epidemic diseases.....	2	1	1	..	..	..	2	..	..	..
20. Pyæmia septicæmia.....	20	7	..	..	..	..	7	1	..	..
21. Glanders.....	..	..	..	..	..	..	..	..	..	..
22. Malignant pustule.....	..	..	..	..	..	..	..	..	..	..
23. Hydrophobia.....	1	..	..	..	..	..	..	..	..	..
24. Actinomycosis.....	..	..	..	..	..	..	..	..	..	..
24a. Trichinosis.....	..	..	..	..	..	..	..	..	..	..
25. Pellagra.....	..	..	..	..	..	..	..	..	..	..
26. Tuberculosis of larynx.....	3	..	..	..	..	..	..	1	..	..
27. Tuberculosis of lungs.....	1,571	8	14	9	5	2	38	16	30	135
28. Tubercular meningitis.....	225	69	54	29	15	8	175	25	7	6
29. Abdominal tuberculosis.....	44	9	2	..	..	2	13	4	3	4
30. Potts' disease.....	19	1	..	..	..	..	1	2	4	1
31. Cold abscess.....	3	2	..	..	..	..	2	..	..	..
32. White Swelling.....	6	1	..	1	..	..	2	2	..	..
33. Tuberculosis of other organs.....	10	..	..	2	..	..	2	1	..	..
34. General tuberculosis.....	17	5	..	..	..	2	7	..	1	..
35. Scrofula.....	1	1	..	..	..	..	1	..	..	..
36. Syphilis.....	60	32	5	1	..	..	39	..	..	1
37. Gonorrhœa (adults).....	4	..	..	..	..	..	..	1	..	..
38. Gonorrhœa (children).....	1	..	..	..	1	..	1	..	..	..
39. Cancers, etc., of the mouth.....	13	..	..	..	..	..	..	..	..	..
40. Cancer of stomach, liver.....	268	..	..	..	..	..	..	..	..	..
41. Cancer of intestines, rectum.....	119	1	..	..	..	..	1	1	..	1

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
I	4	2	..	2	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
I	..	..	..	I	..	..	..	..	..	..	..	..	..	10
4	2	5	7	10	7	20	4	16	9	11	12	6	2	3
..
..
..	..	I	..	..	..	..	..	..	..	2	..	..	..	..
..	..	2	I	2	..	5	4	5	4	I	..	2	..	I
..
..
..
..	5	4	..	I	4	5	3	I	I	I	..	..	I	I
..
I	I	..	I	..	5	2	I	..	..	..	..	I	..	..
..
..
..
..
..	I	..	..	..	..	..	..	..	..	..	..	..	..	I
226	395	233	187	133	68	52	62	31	28	14	8	2	3	75
4	I	2	2	I	I	..	I	..	..	..	..	..	..	15
5	3	4	2	I	I	I	I	..	..	I	I	..	..	3
2	..	I	2	I	..	2	I	I	I	..	..	..	..	..
..	..	..	..	..	..	..	I	..	..	..	..	..	..	..
I	..	..	..	..	..	..	I	..	..	..	..	..	..	..
2	..	..	..	3	..	..	..	I	..	..	..	I	..	..
2	I	1	I	..	..	..	3	I	..	..	..	..	..	..
..
I	7	..	I	4	2	I	2	2	..	..	..	..	..	I
I	I	I	..	..	..	..	..	..	..	..	..	..	..	..
..
..	I	..	..	I	I	2	3	..	I	I	2	..	I	..
..	4	9	14	19	25	38	40	46	26	23	17	6	I	3
3	2	6	14	14	9	13	14	15	11	6	6	3	..	..

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
42. Cancer of female genital organs...	250	..	..	..	..	..	..	..	..	1
43. Cancer of the breast.....	144	..	..	..	..	..	..	..	..	..
44. Cancer of the skin.....	10	..	..	..	..	..	..	..	..	..
45. Cancer of other organs and un- specified.....	108	..	1	1	2	..	4	..	2	4
46. Other tumors (except of female genital organs).....	12	..	1	..	..	..	1	..	..	..
47. Acute articular rheumatism.....	90	1	..	..	..	4	5	17	12	7
48. Chronic rheumatism and gout....	35	..	..	..	..	..	..	..	..	..
49. Scurvy.....	2	1	..	..	..	..	1	..	..	..
50. Diabetes.....	140	..	..	..	..	..	..	1	..	1
51. Exophthalmic goitre.....	15	..	..	..	..	..	..	..	..	2
52. Addison's disease.....	3	..	..	..	..	..	..	..	..	..
53. Leukæmia.....	9	..	..	1	..	..	1	..	..	1
54. Anæmia. chlorosis.....	29	1	..	..	..	..	1	..	1	4
55. Other general diseases.....	1	..	..	..	..	..	..	..	..	..
56. Alcoholism, acute and chronic...	95	..	..	..	..	..	..	..	..	..
57. Lead poisoning.....	..	..	..	..	..	..	..	..	..	..
58. Other chronic poisonings of occupation.....	..	..	..	..	..	..	..	..	..	..
59. Other chronic poisonings.....	2	..	..	..	..	..	..	..	..	..
<i>II.—Diseases of Nervous System and Organs of Sense.</i>										
60. Encephalitis.....	..	..	..	..	..	..	..	..	..	..
61. Simple meningitis.....	265	96	49	26	21	12	204	22	11	5
(of which cerebro-spinal meningitis).....	73	16	16	8	8	6	54	10	3	2
62. Locomotor ataxia.....	8	..	..	..	..	..	..	..	..	..
63. Other diseases of spinal cord....	33	..	..	..	..	..	..	..	2	3
64. Apoplexy, congestion of brain...	564	1	..	..	..	..	1	1	1	..
65. Softening of brain.....	18	..	..	1	..	..	1	..	..	..
66. Paralysis unspecified.....	65	..	..	2	..	..	2	1	..	..
67. General paresis.....	13	..	..	..	..	..	..	..	..	..
68. Other forms of insanity.....	37	..	..	1	1	..	2	3	1	1
69. Epilepsy.....	19	1	..	1	1	1	4	2	1	1
70. Convulsions (not puerperal)....	5	..	..	..	..	..	..	1	1	1
71. Convulsions of infants.....	178	149	19	5	5	..	178	..	..	..
72. Tetanus, trismus.....	15	7	1	..	..	1	9	1	..	..
73. Chorea.....	2	..	..	..	..	..	..	..	1	..
74. Other nervous diseases.....	28	1	..	1	1	..	3	..	3	2
75. Diseases of the eyes.....	3	1	..	..	..	..	1	..	1	..
76. Diseases of the ears.....	55	8	8	4	3	3	26	2	5	5

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
1	6	7	24	42	34	41	30	27	14	15	3	4	1	7
..	1	6	14	19	21	22	19	16	9	8	4	3	2	1
..	..	1	..	..	3	3	..	1	1	..	..	1	..	..
2	2	3	5	5	18	16	15	19	2	6	4	1	..	..
..	..	1	1	1	2	..	3	1	1	..	..	1	..	..
3	3	5	7	6	6	5	4	2	4	4	..	..	..	6
..	..	1	..	2	2	..	7	8	6	4	3	2	..	..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1	6	5	3	8	8	20	17	22	26	12	6	2	2	..
1	2	1	1	3	2	1	..	1	..	1	..	..	..	..
1	..	..	1	..	..	..	1	..	..	..	..	..	..	..
..	..	3	2	..	..	1	..	1	..	..	..	..	..	..
2	4	2	4	1	5	2	1	1	..	1	..	..	..	..
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
..	12	20	26	20	10	5	2	..	..	..	..	..	..	..
..
..
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
..
4	5	3	2	2	..	..	3	..	1	..	2	..	1	8
1	1	1	..	1	..	..	..	..	..	..	..	..	..	4
..	..	..	1	1	1	1	2	1	1	..	..	..	..	..
1	3	..	1	4	6	3	3	2	5	..	..	..	..	..
3	7	14	15	25	38	76	63	96	76	55	45	31	17	16
..	..	..	..	1	2	2	1	4	1	1	3	1	1	2
..	3	1	2	5	4	4	4	11	7	8	4	4	5	1
1	..	1	5	1	2	..	1	1	1	..	..	..	..	..
7	6	5	2	2	1	4	1	..	..	1	..	..	1	2
4	..	1	2	1	3	..	..	..	..	..	..	..	..	..
..	1	..	..	..	..	..	1	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
1	2	2	..	..	..	..	..	..	..	..	..	..	..	..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1	1	2	1	5	1	4	1	..	3	..	..	1	..	..
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
1	6	1	3	2	..	2	1	..	1	..	..	..	..	2

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>III.—Diseases of Circulatory System.</i>										
77. Pericarditis.....	6	1	..	..	..	..	1	1	..	..
78. Acute endocarditis	35	5	..	..	..	1	6	5	2	3
79. Organic heart diseases.....	1,353	2	3	1	1	2	9	34	32	42
80. Angina pectoris.....	18	..	..	..	..	..	..	..	..	..
81. Diseases of Arteries, aneurism, etc.	86	..	..	..	..	..	..	..	..	1
82. Embolism, thrombosis.....	34	1	..	..	..	..	1	..	..	..
83. Diseases of veins (hæmorrhoids, } varices, phlebitis, etc.)..... }	5	..	..	..	..	..	..	..	..	..
84. Diseases of lymphatics (lym- } phangitis, etc.)..... }	..	..	..	..	..	..	..	..	..	..
85. Hæmorrhage.....	14	6	..	..	..	..	6	..	1	1
86. Other diseases of circulatory } system..... }	..	..	..	..	..	..	..	..	..	..
<i>IV.—Diseases of Respiratory System.</i>										
87. Diseases of the nasal fossæ.....	1	..	..	..	..	..	..	..	..	..
88. Diseases of the larynx.....	13	4	3	2	..	1	10	..	..	..
89. Diseases of thyroid gland.....	3	1	..	..	..	..	1	..	..	..
90. Acute bronchitis.....	421	195	80	18	8	6	307	4	4	2
91. Chronic bronchitis.....	52	..	..	..	..	..	..	1	..	..
92. Broncho-pneumonia.....	1,072	443	249	82	19	14	807	26	9	8
93. Pneumonia.....	1,566	205	130	75	34	18	463	46	15	25
94. Pleurisy.....	86	11	13	2	4	..	30	6	4	5
95. Congestion of lungs, pulmonary } apoplexy..... }	22	2	1	..	..	..	3	..	..	1
96. Gangrene of lung.....	1	..	..	..	..	..	..	..	..	..
97. Asthma.....	49	..	1	..	..	..	1	..	..	..
98. Pulmonary emphysema.....	17	..	..	..	..	..	..	..	..	..
99. Other diseases of respiratory } system (phthisis excepted).... }	22	1	..	..	..	..	1	..	..	..
<i>V.—Diseases of Digestive System.</i>										
100. Diseases of mouth and adnexa...	8	6	..	..	..	..	6	1	..	..
101. Diseases of pharynx.....	9	3	2	..	..	..	5	2	..	..
102. Diseases of œsophagus.....	1	..	..	..	..	1	1	..	..	..
103. Ulcer of stomach.....	37	..	..	..	..	..	..	..	..	3
104. Other diseases of stomach (can- } cer excepted)..... }	87	15	..	1	..	1	17	1	..	1
105. Diarrhœa and enteritis (under } two years)..... }	1,176	994	182	..	..	..	1,176	..	..	..
(of which chronic diarrhœa.....	..	..	..	..	..	..	..	..	..	..
106. Diarrhœa and enteritis (two } years and over)..... }	189	..	..	23	14	4	41	11	2	6
107. Intestinal parasites .....	..	..	..	..	..	..	..	..	..	..
108. Hernia, intestinal obstruction....	146	6	3	..	1	..	10	1	2	1

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	2	..	..	..	1	..	..	1	..	..	..	..	..	..
4	2	2	1	1	4	1	1	2	..	..	1	..	..	..
42	63	79	86	95	86	121	131	142	112	102	90	57	30	33
..	1	..	1	4	4	1	..	..	1	..	5	1	..	..
..	..	1	5	2	5	3	9	8	11	12	8	16	5	..
2	4	..	..	2	..	1	5	8	2	3	3	1	2	..
1	..	..	..	1	..	1	1	..	..	..	..	..	1	..
..
1	..	..	1	..	..	..	..	1	1	1	1	..	..	1
..
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	1	..	..	..	1	..	1	..	..	..
..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
3	3	3	4	4	6	4	7	14	8	14	15	10	9	16
1	..	..	1	2	2	4	2	8	5	10	13	2	1	1
10	8	16	11	8	13	18	26	30	23	27	14	7	8	33
44	71	75	92	66	76	99	85	123	102	82	48	33	21	51
10	6	2	2	6	1	2	5	4	3	..	..	..	..	1
..	..	..	..	1	..	2	2	2	1	1	2	5	2	1
..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
1	..	1	..	1	1	5	7	5	12	5	7	3	..	..
..	..	..	..	..	1	3	2	2	5	2	1	..	1	..
..	3	2	2	1	1	1	6	3	..	..	1	..	1	1
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..
4	2	5	4	3	5	4	1	2	..	3	..	1	..	..
3	5	7	2	3	4	5	5	7	5	6	7	2	7	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
..
5	6	7	5	10	4	8	17	16	13	11	14	9	4	1
..
5	7	7	8	12	13	25	12	14	7	10	5	3	4	1

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>VIII.—Diseases of Skin and Cellular Tissue.</i>										
142. Gangrene.....	25	1	..	1	..	2	4	..	1	..
143. Carbuncle.....	1	..	..	..	..	..	..	..	..	..
144. Phlegmon, acute abscess.....	22	1	..	1	..	..	2	2	1	..
145. Other diseases of skin and adnexa	7	3	..	..	..	..	3	..	..	1
<i>IX.—Diseases of Locomotory System.</i>										
146. Diseases of bones (non-tubercu- lous).....	28	13	5	1	..	1	20	..	1	2
147. Arthritis, other diseases of joints (except tuberculosis and rheumatism).....	..	..	..	..	..	..	..	..	..	..
148. Amputation.....	..	..	..	..	..	..	..	..	..	..
149. Other diseases of organs of lo- comotion.....	..	..	..	..	..	..	..	..	..	..
<i>X.—Malformations.</i>										
150. Congenital malformations.....	73	69	1	..	..	..	70	3	..	..
<i>XI.—Diseases of Infancy.</i>										
151. Congenital debility, icterus and sclerema.....	776	775	1	..	..	..	776	..	..	..
152. Other diseases peculiar to infancy	14	14	..	..	..	..	14	..	..	..
153. Neglect.....	..	..	..	..	..	..	..	..	..	..
<i>XII.—Diseases of Old Age.</i>										
154. Senile debility.....	214	..	..	..	..	..	..	..	..	..
<i>XIII.—External Causes.</i>										
155. Suicide by poison.....	81	..	..	..	..	..	..	..	..	6
156. Suicidè by asphyxia.....	24	..	..	..	..	..	..	..	..	..
157. Suicide by hanging or strangula- tion.....	5	..	..	..	..	..	..	..	..	..
158. Suicide by drowning.....	3	..	..	..	..	..	..	..	..	..
159. Suicide by firearms.....	1	..	..	..	..	..	..	..	..	..
160. Suicide by cutting instruments....	6	..	..	..	..	..	..	..	..	..
161. Suicide by precipitation from height.....	6	..	..	..	..	..	..	..	..	..
162. Suicide by crushing.....	..	..	..	..	..	..	..	..	..	..
163. Suicide by other methods.....	..	..	..	..	..	..	..	..	..	..
164. Fractures.....	35	1	2	1	1	..	5	1	..	1
165. Dislocations.....	..	..	..	..	..	..	..	..	..	..
166. Other accidental injuries.....	160	2	5	11	9	9	36	15	4	6
167. Burn, by fire, scald.....	112	1	16	5	10	15	47	10	5	3
168. Burning by corrosive substances..	..	..	..	..	..	..	..	..	..	..
169. Sunstroke.....	28	8	1	1	2	..	12	1	..	..
170. Freezing.....	..	..	..	..	..	..	..	..	..	..
171. Electrical shock.....	1	..	..	..	..	..	..	..	..	..
172. Accidental drowning.....	16	..	..	..	..	..	..	2	..	1

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	..	..	I	..	I	I	I	2	I	4	4	2	3	..
..	..	..	..	..	..	I	..	..	..	..	..	..	..	..
I	I	I	6	..	2	..	..	3	I	..	I	..	..	..
..	..	..	..	..	..	..	..	I	I	..	I	..	..	..
I	I	..	I	..	I	..	..	I	..	..	..	..	..	2
..
..
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	I
..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..
..	..	..	..	..	..	2	3	4	24	28	46	47	60	4
II	17	14	10	7	3	3	3	2	2	3	..	..	..	..
5	2	4	3	3	3	..	I	I	I	..	I	..	..	..
..	2	..	I	..	..	2	..	..	..	..	..	..	..	..
2	I	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	I	..	..	..	..	..	..	..	..	..	..
..	..	I	I	I	..	2	..	..	I	..	..	..	..	..
I	I	..	..	2	..	I	..	..	I	..	..	..	..	..
..
..
..	..	I	I	2	I	3	3	7	4	3	2	I	..	..
..
10	10	8	8	II	6	4	8	14	6	4	6	3	I	2
4	5	5	6	4	5	8	7	I	2	..	..	..	..	..
..
..	I	..	3	..	2	..	3	2	..	3	..	I	..	I
..
I	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	3	..	2	I	I	..	I	I	..	..	..	I	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..
..	..	I	3	..	..	..	..	..	..	..	..	..	..	I
..
..	I	I	I	..	..	..	..	..	..	I	..	..	..	I
..
..
..	I	..	..	I	..	..	..	I	..	..	I	..
..	I	2	5	2	2	4	4	3	2	I	I	I
..	I	..	..	..	I	I	..	..
..
..
..	I	..	..	..	..	..	I	..	..
..	I	I	I	I	I	..	..	..	..
..	I	..	..	..	..	..	..	..	..	..	..	..
..	2	I	..	..	I	..	..	..	..	..	..	..	..	..
..	I	I	I	..	2	2	..	I	..
..
I	3	..	..	I	2	4	2	3	2	I	..	..	..	I
..
..
..	..	2	..	..	..	..	..	..	I	..	..	..	..	..
..
..
..	4	2	9	3	3	3	..	I	..	..	..	..	..	..
..	I	..	..	..	I	..	..	..	..	..
..
..
..
..	I	2	..	4	..	2	..	..	..	..	..
..	I	I	..	..	..	..	..	I	..	..	..	..
I	..	I	2	6	6	4	12	11	10	14	6	5	2	2
..	I	..	..	..	2	..	..	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>XIII.—External causes.</i>											
155. Suicide by poison....	27	19	..	..	..	..	..	....	..	..	..
156. Suicide by asphyxia...	10	8	..	..	..	..	..	....	..	..	..
157. Suicide by hanging } or strangulation.... }	5	5	..	..	..	..	..	....	..	..	..
158. Suicide by drowning ..	..	..	..	..	..	..	..	....	..	..	..
159. Suicide by firearms ...	11	11	..	..	..	..	..	....	..	..	..
160. Suicide by cutting in- } struments..... }	3	3	..	..	..	..	..	....	..	..	..
161. Suicide by precipita- } tion from height.... }	2	2	..	..	..	..	..	....	..	..	..
162. Suicide by crushing...	..	..	..	..	..	..	..	....	..	..	..
163. Suicide by other } methods..... }	1	..	..	..	..	..	..	....	..	..	..
164. Fractures.....	40	30	..	..	..	..	1	1	..	1	..
165. Dislocations .....	..	..	..	..	..	..	..	....	..	..	..
166. Other accidental in- } juries..... }	77	69	..	2	1	..	1	4	4	8	5
167. Burn, by fire, scald....	17	7	1	3	1	..	..	5	..	..	..
168. Burning by corrosive } substances..... }	..	..	..	..	..	..	..	....	..	..	..
169. Sunstroke.....	10	3	..	1	..	..	..	1	1	..	..
170. Freezing.....	..	..	..	..	..	..	..	....	..	..	..
171. Electrical shock.....	3	3	..	..	..	..	..	....	..	..	1
172. Accidental drowning..	34	34	..	..	..	..	1	3	3	5	5
173. Inanition (starvation).	..	..	..	..	..	..	..	....	..	..	..
174. Inhalation of noxious } gas, not suicidal.... }	14	13	..	..	..	..	..	....	..	..	..
175. Other acute poison- } ing..... }	3	1	..	..	..	..	..	....	..	..	..
176. Other external vio- } lence..... }	19	10	5	..	..	..	..	5	..	1	1
Of which											
<i>a.</i> Homicide, by } blows..... }	1	1	..	..	..	..	..	....	..	..	..
<i>b.</i> Homicide, by } sharp instruments }	4	3	..	..	..	..	..	....	..	..	1
<i>c.</i> Homicide, by } gunshot..... }	..	..	..	..	..	..	..	....	..	..	..
<i>d.</i> Homicide by } poison..... }	..	..	..	..	..	..	..	....	..	..	..
<i>e.</i> Homicide, by } other methods ... }	5	3	2	..	..	..	..	2	..	1	..
<i>XIV.—Ill-defined or not specified causes.</i>											
177. Dropsy .....	..	..	..	..	..	..	..	....	..	..	..
178. Sudden death, not } puerperal..... }	..	..	..	..	..	..	..	....	..	..	..
179. Ill-defined cause	50	29	26	2	..	..	..	28	..	..	..
180. Injury during birth....	12	6	6	..	..	..	..	6	..	..	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
I.—General diseases....	2,175	1,265	38	47	39	35	25	134	52	15	52
<i>a.</i> Tuberculous diseases.....	1,381	896	10	3	4	3	1	21	8	5	46
<i>b.</i> Cancer.....	157	41	..	..	..	..	..	....	..	..	..
II.—Diseases of nervous system and organs of sense...	328	163	26	8	..	..	..	34	7	3	..
III.—Diseases of circulatory system...	277	126	1	..	..	..	1	2	1	4	2
IV.—Diseases of respiratory system...	613	314	69	27	14	7	3	120	9	2	5
V.—Diseases of digestive system.....	366	186	101	11	5	1	..	118	3	3	1
VI.—Diseases of genitourinary system..	341	177	3	..	..	..	1	4	3	..	5
VII.—Puerperal diseases..	39	..	..	..	..	..	..	....	..	..	..
VIII.—Diseases of skin and cellular tissue.....	10	8	2	..	..	..	..	2	..	..	..
IX.—Diseases of locomotory system}	8	3	1	1	..	..	..	2	..	..	..
X.—Malformations.....	23	14	13	1	..	..	..	14	..	..	..
XI.—Diseases of infancy.....	184	90	90	..	..	..	..	90	..	..	..
XII.—Diseases of old age.....	73	32	..	..	..	..	..	....	..	..	..
XIII.—External causes....	276	218	6	6	2	2	3	19	8	15	12
<i>a.</i> Suicide.....	59	48	..	..	..	..	..	....	..	..	..
<i>b.</i> Homicide.....	9	7	2	..	..	..	..	2	..	1	1
<i>c.</i> Accident.....	208	163	4	6	2	2	3	17	8	14	11
XIV.—Causes ill-defined...	50	29	26	2	..	..	..	28	..	..	..
Total, males.....	..	2,625	376	103	60	45	33	617	83	42	77
Total, females....	..	2,138	365	120	52	28	31	596	74	47	53
Total, both sexes.	..	4,763	741	223	112	73	64	1,213	157	89	130

Deaths of Females by Age and Cause

CAUSE OF DEATHS.	All ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>General diseases.</i>										
1. Typhoid fever.....	15	..	..	2	2	..	4	2	1	1
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..
3. Relapsing fever.....	..	..	..	..	..	..	..	..	..	..
4. Malarial fever.....	4	..	..	..	..	..	..	1	1	..
5. Small-pox.....	2	1	..	..	..	..	1	..	..	..
6. Measles.....	21	9	7	1	1	1	19	2	..	..
7. Scarlet fever.....	83	3	17	11	8	11	50	21	9	2

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	I	2	..	2	I	I	..	..	I	..	..	I
..	I	..	..	I	..	..	..
..	I	..	..	..	I	I	..	I	..	..	I	2	..	..
..	I	..	..	I	I	I	I	..	..	..
..	..	I	..	..	..	..	..	..	..	..	..	..	..	..
..	2	..	..	..	I	I	7	..	..	..	..	..
..	..	I	..	..	..	..	..	..	..	..	..	..	..	..
..
..	..	I	..	..	..	..	I	I	..	..	..	..	..	..
I	I	..	..	..	I	..	..	..	..	..	..	..	..	..
..
..	I	2	4	I	..	..	..	I	..	..	..	..	..	..
..
..
..
..
..	I	I	I	I	2	I	..	..	I	I	..	..	..	..
..	I	..	2	I	..	..	..	..	..	..	..	..
..	I	I	I	..	..	..	..	..	..	..	..	..
..	I	I	I	I	I	..	I	I	I	..	..	..
I	..	3	3	2	6	9	12	13	15	12	5	7	3	5
..	I	..	I	I	..	..	..	..	..
..	I	..	..	2	..	2	2	I	..	I
..	I	..	..	I	..	..	..	..
..	I	..	..	..	..	..	I
..	I	..	..	..	..	..	..	I	..	..	..	..
..
..
..
..
..
..
..
..
..
..
..
..
..
I	I	2	3	I	I	I	I	I	..	..	I	I	..	4

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
4	I	8	8	6	4	8	13	14	12	15	11	6	4	3
..
..	I	I	..	..	..	..	..	..	2	..
..	I	..	I	2	I	I	..	I	..
..	I	..	..	..
..
..
..
..
..
..
..	..	I	..	..	..	I	..	I	I	I	3	2	..	..
..	..	I	I	I	I	..	..	3	..	2	3	4	..	..
..	I	I	2	3	4	2	2	3	3	2	9
4	2	10	10	7	8	10	10	8	12	12	8	4	3	8
..	I	..	I	..	..	I	2	I	I	..	..	I
..	I	..	..	..	I	..	..	I	..	..	2	..	..	I
..	I	..	..	..	..	..	..	..
..	I	I	..	..	I	I	..	..	..	..
..
..
..	I	..	..
..	I
..
..
..	3	I	..	I	..	..	I	..	..	..	..	..	..	..
..	2	..	I	2	..	..	..	..	..	..	I	I	..	..
..
..
..	..	I	I	I	..	I	I	I	I	..	2	2	..	..
..
..	2	I	I	..	..	3	I	..	I	..	..
..
..	I
..	..	I	..	2	..	I	2	I	..	I	..	..	..	I

CAUSE OF DEATH.	All ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
176. Other external violence.....	9	3	..	..	..	1	4	..	..	..
(Of which) a. Homicide, by blows....	..	..	..	..	..	..	..	..	..	..
b. Homicide, by sharp instruments..... }	1	..	..	..	..	..	..	..	..	..
c. Homicide, by gunshot..	..	..	..	..	..	..	..	..	..	..
d. Homicide, by poison..	..	..	..	..	..	..	..	..	..	..
e. Homicide, by other methods..... }	2	1	..	..	..	..	1	..	..	..
<i>XIV—Ill-defined or not specified causes.</i>										
177. Dropsy.....	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not puerperal.....	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes.....	21	15	5	1	..	..	21	..	..	..
180. Injury during birth.....	6	6	..	..	..	..	6	..	..	..
I. General diseases.....	910	49	53	31	25	23	181	53	30	43
a. Tuberculous diseases....	483	8	8	4	3	..	23	4	12	40
b. Cancer.....	117	..	..	..	..	..	..	..	..	..
II. Diseases of nervous system and organs of sense..... }	165	25	4	1	..	2	32	3	2	..
III. Diseases of circulatory system..	151	1	..	..	..	..	1	3	5	2
IV. Diseases of respiratory system.	299	64	30	12	1	4	111	5	5	3
V. Diseases of digestive system....	180	95	23	5	1	1	125	1	2	1
VI. Diseases of genito-urinary system..... }	164	3	1	1	..	..	5	2	2	2
VII. Puerperal diseases.....	39	..	..	..	..	..	..	..	..	1
VIII. Diseases of skin and cellular tissue..... }	2	1	..	..	..	..	1	..	..	..
IX. Diseases of locomotory system.	5	3	1	1	..	..	5	..	..	..
X. Malformations.....	9	9	..	..	..	..	9	..	..	..
XI. Diseases of infancy.....	94	94	..	..	..	..	94	..	..	..
XII. Diseases of old age.....	41	..	..	..	..	..	..	..	..	..
XIII. External causes.....	58	7	2	..	1	1	11	7	1	..
a. Suicide.....	11	..	..	..	..	..	..	..	..	..
b. Homicide.....	2	1	..	..	..	..	1	..	..	..
c. Accident.....	45	6	2	..	1	1	10	7	1	..
XIV. Causes ill-defined.....	21	15	5	1	..	..	21	..	..	..
Total females.....	2,138	366	119	52	28	31	596	74	47	52

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	1	1	2	..	..	..	..	..	..	1	..	..	..	..
..
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
..
..
..	1	..	..	..	..	..	..	2	..	..	..	..	..	..
..
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..
64	109	89	70	55	35	31	36	38	34	18	16	6	2	41
62	96	84	55	41	21	16	11	7	5	4	2	..	..	29
..	2	..	5	11	10	12	18	20	16	11	7	4	1	9
2	1	4	7	4	11	13	14	17	18	18	8	8	3	7
5	2	10	11	7	6	11	14	16	14	16	14	7	7	7
4	3	12	12	9	13	14	14	18	18	19	20	14	5	20
..	5	5	2	9	2	4	5	4	5	3	3	4	..	3
3	9	10	12	12	13	15	11	19	18	14	9	2	6	10
4	12	6	12	2	2	..	..	..	..	..	..	..	..	2
..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	1	1	1	8	6	10	14	3
3	4	3	8	5	2	1	1	2	5	3	2	..	..	1
2	2	2	..	3	2	..	..	..	..	..	..	..	..	..
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
1	1	1	8	2	..	1	1	2	5	3	2	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
85	145	139	134	103	85	89	96	115	113	99	78	51	37	100

BOROUGH OF
Deaths of Males and Cause of Death

CAUSE OF DEATH.	Total Both Sexes.	All Ages,	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>1.—General Diseases.</i>											
1. Typhoid fever.....	267	156	1	2	2	2	1	8	1	8	19
2. Typhus fever .....	..	..	..	..	..	..	..	..	..	..	..
3. Relapsing fever .....	..	..	..	..	..	..	..	..	..	..	..
4. Malarial fever.....	36	13	..	1	..	..	..	1	1	..	..
5. Small-pox	2	2	..	..	..	..	..	..	..	..	..
6. Measles	167	90	25	37	14	6	4	86	2	..	..
7. Scarlet fever.....	244	135	4	21	23	14	12	74	46	9	2
8. Whooping cough.....	118	55	32	10	6	5	..	53	2	..	..
9. Diphtheria and croup...	830	427	21	91	79	67	48	306	98	13	3
10. Influenza.....	144	61	10	2	..	2	..	14	..	3	3
11. Miliary fever.....	..	..	..	..	..	..	..	..	..	..	..
12. Asiatic cholera.....	..	..	..	..	..	..	..	..	..	..	..
13. Cholera nostras .....	..	..	..	..	..	..	..	..	..	..	..
14. Dysentery	85	40	7	6	..	1	1	15	5	..	2
15. Plague.....	..	..	..	..	..	..	..	..	..	..	..
16. Yellow fever.....	..	..	..	..	..	..	..	..	..	..	..
17. Leprosy.....	..	..	..	..	..	..	..	..	..	..	..
18. Erysipelas.....	49	32	4	1	..	..	..	5	..	..	1
19. Other epidemic dis- } eases	9	5	4	..	..	..	..	4	..	..	..
20. Pyæmia septicæmia...	7	4	1	..	..	..	..	1	..	..	..
21. Glanders.....	..	..	..	..	..	..	..	..	..	..	..
22. Malignant pustule.....	1	1	..	..	..	..	..	..	..	..	..
23. Hydrophobia.....	..	..	..	..	..	..	..	..	..	..	..
24. Actinomycosis.....	..	..	..	..	..	..	..	..	..	..	..
24a. Trichinosis .....	..	..	..	..	..	..	..	..	..	..	..
25. Pellagra.....	..	..	..	..	..	..	..	..	..	..	..
26. Tuberculosis of larynx..	28	14	1	..	..	..	..	1	..	..	..
27. Tuberculosis of lungs...	2,396	1,406	7	3	3	2	..	15	6	7	67
28. Tubercular meningitis..	223	123	32	29	12	8	4	85	17	4	3
29. Abdominal tuberculosis..	74	140	12	3	..	3	3	21	5	1	1
30. Potts' disease.....	16	8	..	..	..	..	..	..	4	1	2
31. Cold abscess.....	1	1	..	..	..	..	..	..	..	..	..
32. White swelling.....	10	7	..	..	..	..	..	..	..	..	3
33. Tuberculosis of other } organs.....	19	9	..	2	1	..	..	3	..	..	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
34. General tuberculosis...	24	25	2	..	1	..	..	3	3	1	1
35. Scrofula	1	1	1	..	..	..	..	1	..	..	..
36. Syphilis	47	29	14	1	..	..	..	15	..	..	..
37. Gonorrhœa (adults)...	2	2	..	..	..	..	..	..	..	..	..
38. Gonorrhœa (children) ..	..	..	..	..	..	..	..	..	..	..	..
39. Cancers, etc., of the mouth.....	43	34	..	..	..	..	..	..	1	..	1
40. Cancer of stomach, liver.....	310	147	..	..	..	..	..	..	..	..	..
41. Cancer of intestines, rectum.....	91	35	..	..	..	..	..	..	..	..	2
42. Cancer of female genital organs.....	121	..	..	..	..	..	..	..	..	..	..
43. Cancer of the breast...	77	..	..	..	..	..	..	..	..	..	..
44. Cancer of the skin.....	40	23	..	..	..	..	..	..	..	..	..
45. Cancer of other organs and unspecified.....	96	54	..	..	1	..	..	1	..	..	..
46. Other tumors (except of female genital organs).....	19	7	..	1	..	..	..	1	..	..	1
47. Acute articular rheumatism.....	164	78	..	..	..	..	..	..	10	11	4
48. Chronic rheumatism and gout	19	10	..	..	..	..	..	..	..	..	..
49. Scurvy.....	1	..	..	..	..	..	..	..	..	..	..
50. Diabetes.....	160	75	..	..	1	..	..	1	..	..	..
51. Exophthalmic goitre...	4	..	..	..	..	..	..	..	..	..	..
52. Addison's disease	7	4	..	..	..	..	..	..	..	..	..
53. Leukæmia.....	12	7	..	..	..	..	..	..	..	1	..
54. Anæmia, chlorosis....	26	10	2	2	..	..	..	4	..	..	1
55. Other general diseases.	1	1	..	..	..	..	..	..	..	..	..
56. Alcoholism, acute and chronic	109	89	..	..	..	..	..	..	..	..	..
57. Lead poisoning.....	7	7	..	..	..	..	..	..	..	..	..
58. Other chronic poisonings of occupation. }	1	1	..	..	..	..	..	..	..	..	..
59. Other chronic poisonings.....	..	..	..	..	..	..	..	..	..	..	..
<i>II.—Diseases of Nervous System and Organs of Sense.</i>											
60. Encephalitis.....	8	4	..	..	..	..	..	..	..	..	..
61. Simple meningitis.....	197	110	43	18	10	5	3	79	8	5	4
(of which cerebro-spinal meningitis. }	57	31	9	4	3	4	1	21	2	2	..
62. Locomotor ataxia.....	35	25	..	..	..	..	..	..	..	..	..
63. Other diseases of spinal cord.....	48	25	..	..	..	..	1	1	2	..	..
64. Apoplexy, congestion of brain.....	975	480	2	..	1	..	..	3	1	..	..
65. Softening of brain	27	15	..	..	..	..	..	..	..	..	..
66. Paralysis unspecified..	58	21	1	..	..	..	..	1	..	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
5	I	1	I	3	2	I	2	I	..	..	..	..	..	2
..
I	I	3	3	2	I	I	I	..	..	I	..	..	..	3
..	..	..	I	I	..	..	..	..	..	..	..	..	..	..
..
..	..	..	I	I	8	5	3	5	3	2	3	I	..	..
2	2	6	7	10	20	18	17	27	18	12	5	3	..	2
I	..	..	2	I	3	3	7	5	5	2	2	2	..	I
..
..
..	..	..	I	..	2	4	5	3	3	2	..	2	I	..
..	3	2	3	5	10	2	4	5	8	8	I	2	..	..
..	..	..	I	I	I	..	..	I	..	I	..	..	..	..
8	2	6	6	3	3	5	5	4	3	I	4	I	2	I
I	..	..	..	..	2	..	2	2	3	..	..	..	..	..
..
2	5	3	3	6	3	13	12	9	10	I	5	2	..	2
..
..	..	I	..	I	..	..	..	..	..	2	..	..	..	..
..	..	I	I	I	..	..	I	I	..	I	..	..	..	..
I	I	..	..	..	I	I	I	..	..	..	..	..	..	..
..	..	..	..	..	..	..	I	..	..	..	..	..	..	..
2	9	15	17	15	13	12	I	I	I	2	I	..	..	..
..	..	..	I	2	2	..	..	I	I	..	..	..	..	..
..	..	..	..	..	..	I	..	..	..	..	..	..	..	..
..
..	..	..	..	..	..	..	..	..	..	I	2	..	..	..
4	I	4	I	..	..	I	I	I	..	I	..	..	..	4
4	I	I	..	..	..	..	..	..	..	..	..	..	..	..
..	I	..	I	3	3	I	3	5	4	4	..	..	..	..
I	1	4	..	..	3	I	3	3	4	I	..	I	..	..
5	2	6	16	31	50	36	59	68	70	45	54	23	11	9
..	..	..	..	..	..	2	I	2	I	3	4	I	I	..
I	..	..	..	..	I	4	I	3	..	3	4	3	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	I	I	3	3	3	3	3	I	3	I	2	2	..	..
I	I	I	..	..	2	..	5	I	2	I	..	..	..	..
4	4	..	3	3	2	..	..	..	2	..	..	..	..	2
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
2	..	..	..	..	..	I	..	..	..	..	..	..	..	..
..
2	I	..	..	2	4	I	..	..	I	..	..	..	..	..
..
I	..	..	..	I	..	..	..	..	..	..	..	I	..	..
I	..	I	..	..	..	I	..	..	2	I	..	..	..	..
5	I	5	5	15	10	5	7	3	2	3	I	I	I	..
29	28	35	42	55	48	71	66	76	69	75	47	31	13	17
..	..	3	3	3	2	4	4	6	5	2	I	I	I	..
..	..	..	..	..	I	4	2	4	4	..	2	4	I	I
..	I	..	I	I	I	2	2	3	I	2	I	2	..	..
..	..	..	..	..	..	..	..	..	I	..	..	..	..	..
..
I	I	..	..	..	..	..	..	..	..	..	..	..	..	..
..
..
..	2	I	..	I	..	..	I	..	..	I	..	..	..	2
..
..	..	I	2	2	3	10	3	6	8	8	12	3	5	16
I	I	4	..	4	4	3	7	10	4	8	7	4	6	I
I	2	8	7	6	6	4	5	13	6	6	8	6	3	10
46	63	82	87	71	70	74	59	40	55	31	30	14	5	28
3	4	4	6	3	..	2	4	I	2	I	..	I	2	I
..	..	I	I	I	..	I	..	..	..	..	2	1	..	..
..	..	..	I	2	I	..	..	..	..	..	..	..	..	..
..	I	3	2	4	8	4	6	5	7	3	9	3	2	2
..	..	..	2	..	I	3	I	..	2	3	..	..	..	..
4	..	4	6	4	4	3	2	2	I	I	..	..	..	..

CAUSE OF DEATH.	Total both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total under 5.	5	10	15
<i>XIII.—External Causes.</i>											
155. Suicide by Poison.....	129	75	..	..	..	..	..	..	..	..	4
156. Suicide by Asphyxia...	36	23	..	..	..	..	..	..	..	..	2
157. Suicide by Hanging } or Strangulation... }	19	16	..	..	..	..	..	..	..	..	..
158. Suicide by Drowning..	5	4	..	..	..	..	..	..	..	..	..
159. Suicide by Firearms...	24	23	..	..	..	..	..	..	..	..	1
160. Suicide by Cutting } Instruments..... }	15	13	..	..	..	..	..	..	..	..	..
161. Suicide by Precipita- tion from Height.. }	4	1	..	..	..	..	..	..	..	..	..
162. Suicide by Crushing...	1	..	..	..	..	..	..	..	..	..	..
163. Suicide by other } Methods..... }	1	..	..	..	..	..	..	..	..	..	..
164. Fractures.....	18	15	..	..	1	..	..	1	1	1	..
165. Dislocations.....	..	..	..	..	..	..	..	..	..	..	..
166. Other Accidental In- juries..... }	358	276	6	1	5	3	6	21	19	14	8
167. Burns, by Fire Scald...	123	52	1	7	9	6	4	27	3	1	1
168. Burning by Corrosive } Substances..... }	..	..	..	..	..	..	..	..	..	..	..
169. Sunstroke.....	59	34	17	1	..	..	..	18	2	..	..
170. Freezing.....	2	1	..	..	..	..	..	..	..	..	..
171. Electrical Shock.....	12	12	..	..	..	..	..	..	..	..	2
372. Accidental Drowning..	128	117	1	1	..	..	..	2	2	7	9
173. Inanition (Starvation)..	1	1	..	..	..	..	..	..	..	..	..
174. Inhalation of Noxious } Gas, not Suicidal... }	79	56	1	..	1	..	1	3	1	1	2
175. Other Acute Poisoning.	29	18	1	1	1	1	2	6	2	..	..
176. Other External Violence	101	76	8	2	2	..	..	12	2	8	2
Of which) a. Homicide, by } Blows..... }	8	7	..	..	..	..	..	..	..	1	..
b. Homicide, by } Sharp In- } struments. }	9	8	..	..	..	..	..	..	..	1	..
c. Homicide, by } Gunshot... }	26	24	..	..	1	..	..	1	..	1	1
d. Homicide, by } Poison..... }	1	1	..	..	..	..	..	..	..	..	..
e. Homicide, by } Other Me- } thods..... }	8	6	1	1	1	..	..	3	1	1	..
<i>XIV.—Ill-defined or Not Specified Causes.</i>											
177. Drop-y.....	..	..	..	..	..	..	..	..	..	..	..
178. Sudden Death, not } Puerperal..... }	..	..	..	..	..	..	..	..	..	..	..
179. Ill-defined Causes.....	401	227	189	23	8	..	..	220	1	..	1
180. Injury during Birth....	107	65	65	..	..	..	..	65	..	..	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
I.—General Diseases...	6,118	3,268	180	212	143	110	73	718	201	59	116
<i>a.</i> Tuberculous Diseases...	2,801	1,633	54	37	17	13	7	128	35	14	77
<i>b.</i> Cancer	778	293	..	..	1	..	..	1	1	..	3
II.—Diseases of Nervous System and Organs of Sense..	1,750	909	155	35	13	7	5	215	16	12	16
III.—Diseases of Circulatory System...	1,886	919	15	4	3	4	7	33	11	17	26
IV.—Diseases of Respiratory System...	4,021	2,081	570	216	86	40	18	930	27	14	26
V.—Diseases of Digestive System...	2,711	1,424	708	126	34	9	9	886	30	20	23
VI.—Diseases of Genito-urinary System...	2,295	1,192	6	4	3	6	4	23	16	13	23
VII.—Puerperal Diseases.	228	..	..	..	..	..	..	..	..	..	..
VIII.—Diseases of Skin and Cellular Diseases.....	58	32	6	..	..	..	..	6	1	1	1
IX.—Diseases of Locomotor System....	31	18	4	1	..	1	1	7	1	1	..
X.—Malformations.....	187	106	103	2	..	1	..	106	..	..	..
XI.—Diseases of Infancy	1,031	580	580	..	..	..	..	580	..	..	..
XII.—Diseases of Old Age	331	122	..	..	..	..	..	..	..	..	..
XIII.—External Causes...	1,144	813	35	13	19	10	13	90	32	32	31
<i>a.</i> Suicide.....	234	155	..	..	..	..	..	..	..	..	7
<i>b.</i> Homicide.....	52	46	1	1	2	..	..	4	1	4	1
<i>c.</i> Accident.....	858	612	34	12	17	10	13	86	31	28	23
XIV.—Causes ill-defined..	401	227	189	23	8	..	..	220	1	..	..
Total Males.....	..	11,691	2,551	636	369	188	130	3,814	336	169	263
" Females.....	..	10,501	2,050	588	298	187	131	3,254	351	157	258
" Both Sexes...	..	22,192	4,601	1,224	607	375	261	7,068	687	326	521

Deaths of Females by Age and Cause of

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>General Diseases.</i>										
1. Typhoid fever	111	..	1	1	..	..	2	7	9	18
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..
3. Relapsing fever .....	..	..	..	..	..	..	..	..	..	..
4. Malarial fever.....	23	3	2	2	..	..	7	1	2	..
5. Small-pox .....	..	..	..	..	..	..	..	..	..	..
6. Measles.....	77	15	31	13	2	3	64	13	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
3	I	..	I	..	..	I	..	..	..	..	..	..	..	I
..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
I	I	I	2	..	..	I	..	..	..	..	..	..	..	5
2	5	4	7	7	4	7	4	8	7	9	3	2	4	3
..
..
..
..	2	I	I	I	..	7	4	4	6	I	2	2	..	..
..
..
..
..
..
..
..
..	I	..	..	..	..	..	..	..	..	..	..	..	..	..
..
..
..
..
..
..
..
2	I	I	5	I	I	I	..	..	..	..	..	..	..	I
156	201	168	114	55	56	37	21	18	11	7	3	4	..	39
..	I	..	I	I	..	..	..	I	..	..	..	..	..	6
4	3	2	2	2	..	..	..	I	..	I	..	..	..	..
..	I	I	2	..	..	..	..	..	..	..	..	..	..	..
..
..	..	..	..	..	..	..	..	I	..	..	..	..	..	..
I	..	2	I	..	I	..	..	I	I	I	I	..	..	..
..	2	I	2	I	..	..	..	..	..	..	..	..	..	I
..
..	I	I	..	I	..	..	..	..	..	..	..	..	..	..
..
..
..
..
..
..
..
..
..
..	I	3	6	12	12	26	24	32	15	14	11	6	..	3
..	..	I	2	4	5	9	9	9	6	4	I	4	2	I
..	2	3	12	12	21	17	19	16	9	6	..	3	I	2
..	I	I	6	6	11	9	19	9	3	6	4	I	I	2

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
44. Cancer of the skin	17	..	..	..	..	..	..	..	..	..
45. Cancer of other organs and unspecified.....	42	..	..	..	..	..	..	..	1	..
46. Other tumors (except of female genital organs).....	12	..	..	..	..	..	..	1	..	..
47. Acute articular rheumatism.....	86	2	..	2	3	2	9	7	5	5
48. Chronic rheumatism and gout	9	..	..	..	..	..	..	..	..	..
49. Scurvy.....	1	1	..	..	..	..	1	..	..	..
50. Diabetes	85	..	..	..	..	..	..	..	..	2
51. Exophthalmic goitre.....	4	..	..	..	..	..	..	..	..	..
52. Addison's disease.....	3	..	..	..	..	..	..	..	..	..
53. Leukæmia.....	5	..	..	..	..	..	..	..	..	..
54. Anæmia, chlorosis.....	16	3	..	..	..	1	4	..	..	..
55. Other general diseases.....	..	..	..	..	..	..	..	..	..	..
56. Alcoholism, acute and chronic.	20	..	..	..	..	..	..	..	..	..
57. Lead poisoning.....	..	..	..	..	..	..	..	..	..	..
58. Other chronic poisonings of oc- cupation.....	..	..	..	..	..	..	..	..	..	..
59. Other chronic poisonings.....	..	..	..	..	..	..	..	..	..	..
<i>II.—Diseases of Nervous System and Organs of Sense.</i>										
60. Encephalitis.....	4	..	..	..	..	..	..	..	..	1
61. Simple meningitis	87	30	24	10	2	3	69	4	4	..
(Of which) Cerebro-spinal meningitis.....	26	11	5	2	2	2	22	2	..	..
62. Locomotor ataxia.....	10	..	..	..	..	..	..	..	..	..
63. Other diseases of spinal cord.....	23	1	1	..	..	..	2	..	..	..
64. Apoplexy, congestion of brain... .	495	1	1	..	..	..	2	2	..	3
65. Softening of brain	12	..	..	..	..	..	..	..	..	..
66. Paralysis unspecified	37	..	..	..	..	..	..	1	1	..
67. General paresis.....	10	..	..	..	..	..	..	..	..	..
68. Other forms of insanity.....	14	..	..	..	..	..	..	..	..	..
69. Epilepsy	20	2	..	..	..	1	3	..	..	2
70. Convulsions (not puerperal).....	2	..	..	..	..	..	..	1	..	..
71. Convulsions of infants.....	77	56	16	4	..	1	77	..	..	..
72. Tetanus, trismus.....	5	3	..	..	..	..	3	..	..	..
73. Chorea.....	3	..	..	..	..	..	..	..	1	..
74. Other nervous diseases	30	4	4	1	..	..	9	..	..	1
75. Diseases of the eyes.....	..	..	..	..	..	..	..	..	..	..
76. Diseases of the ear.....	12	2	..	1	1	..	4	1	4	1

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	I	I	..	I	..	I	..	..	..	..	I	..	..	I
3	6	3	4	4	7	7	8	4	7	6	4	2	I	4
25	3I	32	53	39	37	6I	53	85	90	80	59	34	22	16
I	4	2	4	3	3	2	7	6	5	13	6	I	..	2
..	..	..	..	..	2	..	2	4	3	2	I	2	I	..
2	I	2	..	2	..	3	5	2	3	2	..	I	2	I
..	..	..	..	..	..	..	I	I	..	..	..	I	..	..
..
..	I	..	..	..	..	..	I	..	..	..	..	..	..	I
..
..
..	..	I	..	..	..	..	..	..	..	I	..	..	..	..
..	..	..	..	..	..	..	I	..	..	..	..	..	..	..
2	I	..	I	3	5	5	7	10	17	24	17	8	7	18
..	I	..	..	I	2	6	5	6	8	14	14	11	3	..
6	3	4	..	2	4	10	9	12	19	9	10	12	6	13
35	50	5I	50	42	30	37	52	7I	56	48	44	23	17	43
I	..	3	5	2	4	2	I	I	..	3	I	..	I	3
..	I	..	2	I	..	I	..	2	I	I	..	3	2	..
I	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	I	4	I	5	2	6	5	6	3	5	2	2	2
..	..	..	..	..	..	..	2	I	3	I	I	..	..	..
..	2	2	2	2	2	I	..	..	..	2	..	2	I	2
..
..	..	I	..	I	..	..	..	..	..	..	..	..	..	..
..	..	..	..	2	..	..	..	..	..	..	..	..	..	..
..	4	I	2	2	..	..	..	..	2	I	2	..	..	..
3	I	2	I	4	I	7	4	6	6	7	2	5	3	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
..
5	6	3	5	I	4	7	1I	1I	13	13	12	5	6	3
..
4	4	3	4	6	9	12	6	10	7	2	3	4	..	..
..	I	I	2	I	..	..	2	..	..	2	..	I	..	I

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..	I	..	..	..	..	..	I	I	I	..	3	I	..	..
..	..	..	..	..	..	..	I	..	..	..	..	I	..	..
..	I	I	..	I	..	I	..	..	..	..	I	..	..	..
..	..	..	..	..	..	..	..	I	..	..	..	..	..	..
..	I	..	I	..	..	..	..	I	..	..	..	..	..	..
..	..	..	..	..	..	I	..	..	I	..	..	..	..	..
..
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	I
..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
..	..	..	..	..	..	..	..	..	..	..	..	..	..	I
..
..	..	..	..	..	..	I	2	6	7	30	31	61	71	4
10	17	6	3	3	4	3	..	I	2	..	I	..	..	I
..	2	..	4	2	I	..	2	I	..	..	..	..	..	I
I	..	..	..	..	..	I	I	..	..	..	..	..	..	I
..	..	..	..	I	..	..	..	..	..	..	..	..	..	..
..	..	I	..	..	..	..	..	I	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	I	..	..	2	..	..
I	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	I	..	..	..	..	..	..	..	..	..	..
..	..	I	..	..	..	I	..	..	..	..	..	..	..	..
..
3	I	3	6	I	3	5	9	5	4	7	4	2	I	..
..	I	6	4	5	6	4	I	2	I	..	I	I	..	3
..
..	I	..	..	..	..	4	I	..	3	2	..	..	I	..
..	..	..	..	..	..	..	..	..	I	..	..	..	..	..

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
171. Electrical shock.....	..	..	..	..	..	..	..	..	..	..
172. Accidental drowning.....	11	1	..	1	..	..	2	1	..	..
173. Inanition (starvation).....	..	..	..	..	..	..	..	..	..	..
174. Inhalation of noxious gas, not } suicidal	23	..	..	..	1	..	1	..	..	1
175. Other acute poisoning.....	11	1	1	..	1	1	4	1	..	..
176. Other external violence.....	25	5	1	..	..	..	6	1	..	1
<i>a.</i> Homicide, by blows.....	1	..	..	..	..	..	..	..	..	..
<i>b.</i> Homicide, by sharp instru- } ments.....	1	..	..	..	..	..	..	..	..	..
<i>c.</i> Homicide, by gunshot.....	2	..	..	..	..	..	..	..	..	..
<i>d.</i> Homicide, by poison.....	..	..	..	..	..	..	..	..	..	..
<i>e.</i> Homicide, by other methods..	2	2	..	..	..	..	2	..	..	..
<i>XIV.—Ill-defined or not Specified Causes.</i>										
177. Dropsy.....	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not puerperal....	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes.....	174	132	28	6	3	1	170	..	..	..
180. Injury during birth.....	42	42	..	..	..	..	42	..	..	..
I.—General diseases	2,850	145	175	144	93	72	629	209	78	122
<i>a.</i> Tuberculosis diseases ...	1,168	41	33	28	10	8	120	19	36	91
<i>b.</i> Cancer.....	485	..	..	..	..	..	..	1	1	..
II.—Diseases of nervous system } and organs of sense ... }	841	99	46	16	3	5	169	9	10	8
III.—Diseases of circulatory system	967	23	4	1	4	2	34	15	26	16
IV.—Diseases of respiratory system	1,940	458	205	91	48	22	824	53	21	44
V.—Diseases of digestive system..	1,287	625	121	25	16	9	796	26	10	11
VI.—Diseases of genito-urinary } system.....	1,103	5	1	3	6	4	19	12	9	33
VII.—Puerperal diseases.....	228	..	..	..	..	..	..	..	..	13
VIII.—Diseases of skin and cellular } tissue.....	26	8	..	..	..	1	9	1	..	..
IX.—Diseases of locomotor system.	13	5	..	2	..	..	7	..	1	..
X.—Malformations.....	81	76	1	3	..	..	80	1	..	..
XI.—Diseases of infancy.....	409	409	..	..	..	..	409	..	..	..
XII.—Diseases of old age.....	209	..	..	..	..	..	..	..	..	..
XIII.—External causes.....	331	23	7	7	14	15	66	25	2	11
<i>a.</i> Suicide.....	79	..	..	..	..	..	..	..	..	5
<i>b.</i> Homicide.....	6	2	..	..	..	..	2	..	..	..
<i>c.</i> Accident.....	246	21	7	7	14	15	64	25	2	6
XIV.—Causes ill-defined.....	216	174	28	6	3	1	212	..	..	..
Total females.....	10,501	2,050	588	298	187	131	3,254	351	157	258

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
..
3	I	..	2	..	..	I	..	..	..	..	I	..	..	..
..
3	..	..	I	I	2	2	3	I	3	..	3	2	..	..
2	I	I	I	..	..	I	..	..	..	..	..	..	..	I
2	4	4	I	I	..	I	2	I	..	I	..	..	..	2
..	..	..	..	..	..	..	..	..	..	I	..	..	..	I
..	I	..	..	..	..	..	..	..	..	..	..	..	..	..
..	I	..	..	..	..	..	I	..	..	..	..	..	..	..
..
..
..
..	..	I	..	..	..	..	3	..	..	..	..	..	..	8
..
197	256	219	195	142	143	151	142	130	80	75	44	27	11	77
163	209	175	127	60	58	38	21	22	12	9	4	4	..	47
..	5	11	29	47	53	69	79	73	39	36	21	15	6	8
14	14	19	28	28	37	64	56	89	84	83	74	20	26	17
31	44	40	61	49	49	74	77	102	108	103	71	41	26	25
45	58	62	64	54	52	64	83	108	110	106	92	61	39	81
23	29	30	33	33	26	49	40	44	49	35	27	16	10	24
31	59	73	90	84	84	104	88	107	90	107	72	26	15	30
43	67	65	29	10	I	..	..	..	..	..	..	..	..	4
..	2	1	..	I	..	I	2	2	I	..	4	2	..	..
..	I	..	I	..	..	I	..	I	I	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	I
..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
..	..	..	..	..	..	I	2	6	7	30	31	61	71	4
25	28	22	22	15	16	23	21	11	15	10	10	7	2	9
12	19	7	7	7	5	4	5	2	3	..	I	2	..	3
..	2	..	..	..	..	..	I	..	..	I	..	..	..	I
13	7	15	15	8	11	19	15	9	12	9	9	5	2	5
..	..	I	..	..	..	..	3	..	..	..	..	..	..	8
409	558	532	523	416	408	532	514	600	545	549	425	270	200	303

BOROUGH OF

Deaths of Males by Age, and Cause of Death,

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>I.—General Diseases.</i>											
1. Typhoid fever.....	22	12	..	..	..	..	..	..	1	..	1
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..	..
3. Relapsing fever.....	..	..	..	..	..	..	..	..	..	..	..
4. Malarial fever.....	11	5	..	..	1	..	..	1	..	..	..
5. Small-pox.....	..	..	..	..	..	..	..	..	..	..	..
6. Measles.....	17	10	4	4	..	1	1	10	..	..	..
7. Scarlet fever.....	22	11	..	2	1	3	..	6	5	..	..
8. Whooping cough.....	13	2	1	1	..	..	..	2	..	..	..
9. Diphtheria and croup...	105	54	3	7	6	12	1	29	20	..	5
10. Influenza.....	17	10	..	..	..	..	..	..	..	..	1
11. Miliary fever.....	..	..	..	..	..	..	..	..	..	..	..
12. Asiatic cholera.....	..	..	..	..	..	..	..	..	..	..	..
13. Cholera nostras.....	..	..	..	..	..	..	..	..	..	..	..
14. Dysentery.....	5	3	..	1	..	..	..	1	..	..	..
15. Plague.....	..	..	..	..	..	..	..	..	..	..	..
16. Yellow fever.....	..	..	..	..	..	..	..	..	..	..	..
17. Leprosy.....	..	..	..	..	..	..	..	..	..	..	..
18. Erysipelas.....	8	6	2	..	..	..	..	2	..	1	..
19. Other epidemic diseases.	..	..	..	..	..	..	..	..	..	..	..
20. Pyæmia, septicæmia...	10	6	..	..	..	..	..	..	..	..	..
21. Glanders.....	..	..	..	..	..	..	..	..	..	..	..
22. Malignant pustule.....	..	..	..	..	..	..	..	..	..	..	..
23. Hydrophobia.....	..	..	..	..	..	..	..	..	..	..	..
24. Actinomyces.....	..	..	..	..	..	..	..	..	..	..	..
24a. Trichinosis.....	..	..	..	..	..	..	..	..	..	..	..
25. Pellagra.....	..	..	..	..	..	..	..	..	..	..	..
26. Tuberculosis of larynx..	2	2	..	..	..	..	..	..	..	..	..
27. Tuberculosis of lungs...	229	130	..	1	..	..	..	1	..	1	6
28. Tubercular meningitis...	10	3	..	1	..	..	..	1	1	..	..
29. Abdominal tuberculosis.	1	1	1	..	..	..	..	1	..	..	..
30. Potts' disease.....	2	1	..	..	..	..	..	..	1	..	..
31. Cold abscess.....	1	1	..	..	..	..	..	..	..	1	..
32. White swelling.....	..	..	..	..	..	..	..	..	..	..	..
33. Tuberculosis of other organs.....	3	3	1	..	..	..	..	1	..	..	..

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored
..	..	I	I	..	..	I	I	1	..	..	..	..	..	..
..
..	I
..
..
..	2	I	..	..	..	..	..	..	I
..	..	I	..	..	I	I	2	I	3	5	..	..	..	..
..	I	I	I	I	..	..	2	I	..	..	..
..
..
I	I	..	..	..	..	..
..	I	I	I	I	I	..	..	..	..
..
..	I	..	..	..	..	..	..	I	..	..	..	..
..
..
2	I	..	..	I	I	I	..	..	..	..	I
..
..	I	..	..	..	..	..	..	..	..	..	..
..
..	I	..	..	..	..	..	..	..	..	..	..
I
..	I	2	2	..	..	..	..	I	..	..	I
..
..
..
..
..
..
..
I	2	..	2	..	..	..	..	..	..	..	..	3
..
..	I	..	..	..	..	I	..	..	..	..	I	..	..	..
I
2	I	5	2	4	8	I3	I2	I2	7	4	I	2
..	2	..	..	..	..	..	..
..	..	I	..	2	I	..	..	I	I	..	I	..	..	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
67. General paresis.....	14	5	..	..	..	..	..	..	..	..	..
68. Other forms of insanity.	5	3	..	..	..	..	..	..	..	..	..
69. Epilepsy	2	..	..	..	..	..	..	..	..	..	..
70. Convulsions (non-puer- } peral).....	1	..	..	..	..	..	..	..	..	..	..
71. Convulsions of infants..	55	29	19	7	2	1	..	29	..	..	..
72. Tetanus, trismus.....	10	8	4	..	..	..	..	4	2	..	..
73. Chorea.....	1	..	..	..	..	..	..	..	..	..	..
74. Other nervous diseases..	5	4	1	..	..	..	..	1	..	1	..
75. Diseases of the eyes....	..	..	..	..	..	..	..	..	..	..	..
76. Diseases of the ears....	..	..	..	..	..	..	..	..	..	..	..
<i>III.—Diseases of Circulatory System.</i>											
77. Pericarditis.....	6	2	..	..	..	1	..	1	..	..	..
78. Acute endocarditis....	18	9	..	..	..	..	..	..	1	1	1
79. Organic heart diseases..	209	96	..	..	..	..	..	..	..	2	3
80. Angina pectoris.....	6	3	..	..	..	..	..	..	..	..	..
81. Diseases of arteries, } aneurism, etc.....	6	4	..	..	..	..	..	..	..	..	..
82. Embolism, thrombosis..	3	1	..	..	..	..	..	..	..	..	..
83. Diseases of veins (hæm- } orrhoids, varices } phlebitis, etc.).....	..	..	..	..	..	..	..	..	..	..	..
84. Diseases of lymphatics } (lymphangitis, etc.)..	1	..	..	..	..	..	..	..	..	..	..
85. Hæmorrhage.....	..	..	..	..	..	..	..	..	..	..	..
86. Other diseases of circu- } latory system.....	1	1	..	..	..	..	..	..	..	..	..
<i>IV.—Diseases of Respiratory System.</i>											
87. Diseases of the nasal } fossæ.....	..	..	..	..	..	..	..	..	..	..	..
88. Diseases of the larynx..	4	1	1	..	..	..	..	1	..	..	..
89. Diseases of thyroid gland	..	..	..	..	..	..	..	..	..	..	..
90. Acute bronchitis.....	38	19	13	5	..	..	..	18	..	..	..
91. Chronic bronchitis....	11	4	..	..	1	..	..	1	..	..	..
92. Broncho-pneumonia....	92	52	20	14	4	1	..	39	4	..	..
93. Pneumonia.....	274	145	30	12	..	2	1	45	8	1	7
94. Pleurisy.....	8	5	1	..	..	..	..	1	..	..	..
95. Congestion of lungs, } pulmonary apoplexy }	10	8	2	..	..	..	..	2	..	..	..
96. Gangrene of lung.....	1	..	..	..	..	..	..	..	..	..	..
97. Asthma.....	5	4	..	..	..	..	..	..	..	..	..
98. Pulmonary emphysema.	3	2	..	..	..	..	..	..	..	..	..
99. Other diseases of respi- } ratory system } (phtisis excepted)..	11	5	..	..	1	1	..	2	..	..	..

CAUSE OF DEATH.	Total Both Sexes.	All Ages	Under 1 Yerr.	1	2	3	4	Total Under 5.	5	10	15
<i>XIII.—External Causes.</i>											
155. Suicide by poison....	13	10	..	..	..	..	..	..	..	..	..
156. Suicide by asphyxia, { ill gas.....}	3	3	..	..	..	..	..	..	..	..	..
157. Suicide by hanging or { strangulation.....}	5	4	..	..	..	..	..	..	..	..	..
158. Suicide by drowning...	2	1	..	..	..	..	..	..	..	..	..
159. Suicide by firearms...	7	6	..	..	..	..	..	..	..	..	..
160. Suicide by cutting in- { struments.....}	2	1	..	..	..	..	..	..	..	..	..
161. Suicide by precipita- { tion from height....}	..	..	..	..	..	..	..	..	..	..	..
162. Suicide by crushing....	..	..	..	..	..	..	..	..	..	..	..
163. Suicide by other meth- { ods.....}	..	..	..	..	..	..	..	..	..	..	..
164. Fractures.....	..	..	..	..	..	..	..	..	..	..	..
165. Dislocations.....	..	..	..	..	..	..	..	..	..	..	..
166. Other accidental injuries	90	80	1	..	..	2	..	3	5	..	4
167. Burn, by fire, scald....	15	4	..	..	1	..	1	2	..	..	..
168. Burning by corrosive { substances.....}	..	..	..	..	..	..	..	..	..	..	..
169. Sunstroke.....	4	4	1	..	..	..	..	1	..	..	..
170. Freezing.....	..	..	..	..	..	..	..	..	..	..	..
171. Electrical shock.....	1	1	..	..	..	..	..	..	..	..	..
172. Accidental drowning..	21	18	..	2	..	..	..	2	1	3	1
173. Inanition (starvation)..	..	..	..	..	..	..	..	..	..	..	..
174. Inhalation of noxious { gas, not suicidal....}	7	5	..	..	..	..	..	..	..	..	..
175. Other acute poisoning.	1	..	..	..	..	..	..	..	..	..	..
176. Other external violence	5	4	1	..	..	..	..	1	..	1	..
(Of which)											
a. Homicide, by blows	1	1	..	..	..	..	..	..	..	..	..
b. Homicide, by sharp { instruments....}	1	1	..	..	..	..	..	..	..	1	..
c. Homicide, by gun- { shot.....}	1	1	..	..	..	..	..	..	..	..	..
d. Homicide, by { poison.....}	..	..	..	..	..	..	..	..	..	..	..
e. Homicide, by { other methods..}	..	..	..	..	..	..	..	..	..	..	..
<i>XIV.—Ill-defined or Not Specified Causes.</i>											
177. Dropsy.....	..	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not { puerperal.....}	..	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes.....	36	23	19	4	23
180. Injury during birth....	5	4	4	4

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
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..	I	..	I	I	..	I	I	2
3	2	3	4	7	10	11	13	11	13	9	13	3	2	3
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..	I	I
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..	..	I	..	I
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..	I	I	..	2	..	4
..	I	I	I	I	I	2	..
..	I	I	I	I	..	2
4	3	4	4	6	4	7	7	9	8	7	3	8	3	5
..	I
..	I
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..	I
..	I
..	..	2	I	..	I	I
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..	I
..	I
I	I	2	..	I
..	6
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..	2	..	I	I
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..	3	2	I	I	I
..	I

CAUSE OF DEATH.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
174. Inhalation of noxious gas, not suicidal.....	2
175. Other acute poisoning.....	1	..	..	..	1	..	1	..	..	..
176. Other external violence.....	1	..	..	..	..	..	..	..	..	..
(Of which) a. Homicide, by blows....	..	..	..	..	..	..	..	..	..	..
b. Homicide, by sharp instruments .. .. . }	..	..	..	..	..	..	..	..	..	..
c. Homicide, by gunshot... ..	..	..	..	..	..	..	..	..	..	..
d. Homicide, by poison....	..	..	..	..	..	..	..	..	..	..
e. Homicide, by other methods .. .. . }	..	..	..	..	..	..	..	..	..	..
<i>XIV. Ill-defined or Not Specified Causes.</i>										
177. Dropsy.....	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not puerperal.....	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes.....	13	10	1	1	..	..	12	1	..	..
180. Injury during birth.....	1	1	..	..	..	..	1	..	..	..
I.—General diseases.....	297	21	10	12	9	9	61	27	9	13
a. Tuberculous diseases.....	107	5	..	1	1	..	7	1	1	8
b. Cancer.....	55	..	..	..	..	..	..	..	..	..
II.—Diseases of nervous system and organs of sense.....	139	32	10	3	2	..	47	4	3	..
III.—Diseases of circulatory system.	134	1	..	2	2	..	5	6	3	..
IV.—Diseases of respiratory system	212	53	33	4	3	3	96	5	5	3
V.—Diseases of digestive system... ..	158	82	13	10	2	1	108	2	1	1
VI.—Diseases of genito-urinary system.....	99	..	2	..	1	..	3	..	1	6
VII.—Puerperal diseases.....	28	..	..	..	..	..	..	..	..	2
VIII.—Diseases of skin and cellular tissue.....	2	1	..	..	..	..	1	..	..	..
IX.—Diseases of locomotory system	..	..	..	..	..	..	..	..	..	..
X.—Malformations.....	1	..	..	..	..	1	1	..	..	..
XI.—Diseases of infancy.....	76	76	..	..	..	..	76	..	..	..
XII.—Diseases of old age.....	30	..	..	..	..	..	..	..	..	..
XIII.—External causes.....	35	5	..	..	2	1	8	2	1	..
a. Suicide.....	7	..	..	..	..	..	..	..	..	..
b. Homicide.....	..	..	..	..	..	..	..	..	..	..
c. Accident.....	28	5	..	..	2	1	8	2	1	..
XIV.—Causes ill-defined.....	13	10	1	1	..	..	12	1	..	..
Total Females.....	1,224	281	69	32	21	15	418	47	23	25

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
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..	I	I	I	..	3
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..	I	2
..	I	3	2	2	4	4	I	I	I	..
..	I
..	I	2	3	..	I

CAUSE OF DEATH.	Total Both Sexes.	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
<i>XIII.—External Causes.</i>											
155. Suicide by poison.....	4	2	..	..	..	..	..	..	..	..	..
156. Suicide by asphyxia....	2	1	..	..	..	..	..	..	..	..	..
157. Suicide by hanging or } strangulation..... }	1	1	..	..	..	..	..	..	..	..	..
158. Suicide by drowning...	..	..	..	..	..	..	..	..	..	..	..
159. Suicide by firearms...	9	9	..	..	..	..	..	..	..	..	..
160. Suicide by cutting in- } struments..... }	2	2	..	..	..	..	..	..	..	..	..
161. Suicide by precipita- } tion from height.... }	..	..	..	..	..	..	..	..	..	..	..
162. Suicide by crushing...	..	..	..	..	..	..	..	..	..	..	..
163. Suicide by other } methods..... }	..	..	..	..	..	..	..	..	..	..	..
164. Fractures.....	3 ²	29	..	..	..	..	..	..	3	..	2
165. Dislocations.....	..	..	..	..	..	..	..	..	..	..	..
166. Other accidental injuries	3	2	1	..	..	..	..	1	..	..	..
167. Burn, by fire, scald...	11	6	..	..	..	1	..	1	..	1	..
168. Burning by corrosive } substances.... }	..	..	..	..	..	..	..	..	..	..	..
169. Sunstroke.....	3	3	..	..	..	..	..	..	..	..	..
170. Freezing.....	1	1	..	..	..	..	..	..	..	..	..
171. Electrical shocks.....	4	4	..	..	..	..	..	..	1	..	1
172. Accidental Drowning..	39	36	1	..	..	..	..	1	2	1	5
173. Inanition (starvation)..	..	..	..	..	..	..	..	..	..	..	..
174. Inhalation of noxious } gas, not suicidal.... }	..	..	..	..	..	..	..	..	..	..	..
175. Other acute poisoning..	..	..	..	..	..	..	..	..	..	..	..
176. Other external violence	6	6	..	1	..	..	..	1	..	..	1
(Of which)											
a. Homicide, by blows.	..	..	..	..	..	..	..	..	..	..	..
b. Homicide, by sharp } instruments..... }	..	..	..	..	..	..	..	..	..	..	..
c. Homicide, by gun- } shot..... }	4	4	..	..	..	..	..	..	..	..	1
d. Homicide, by poison	..	..	..	..	..	..	..	..	..	..	..
e. Homicide, by other } methods..... }	..	..	..	..	..	..	..	..	..	..	..
<i>XIV.—Ill-defined or Not Specified Causes.</i>											
177. Dropsy.....	..	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not } puerperal..... }	..	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes.....	45	26	24	2	26
180. Injury during birth....	4	3	3	3

20	25	30	35	40	45	50	55	60	65	70	75	80	85	Colored.
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..	2	I	I	..	I	I
..	I
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..	..	I
I	..	I	1
3	..	3	I	4	4	I	2	4	7	5	2	I	..	I
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..	I	..	I	I	2
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CAUSE OF DEATH,	All Ages.	Under 1 Year.	1	2	3	4	Total Under 5.	5	10	15
174. Inhalation of noxious gas, not suicidal..... }
175. Other acute poisoning.....	..	..	..	..	..	..	..	..	..	..
176. Other external violence.....	..	..	..	..	..	..	..	..	..	..
(Of which)										
<i>a.</i> Homicide by blows.....	..	..	..	..	..	..	..	..	..	..
<i>b.</i> Homicide, by sharp instru- ments..... }	..	..	..	..	..	..	..	..	..	..
<i>c.</i> Homicide, by gunshot.....	..	..	..	..	..	..	..	..	..	..
<i>d.</i> Homicide, by poison.....	..	..	..	..	..	..	..	..	..	..
<i>e.</i> Homicide, by other methods..	..	..	..	..	..	..	..	..	..	..
<i>XIV.—Ill-defined or not Specified Causes.</i>										
177. Dropsy.....	..	..	..	..	..	..	..	..	..	..
178. Sudden death, not puerperal. ....	..	..	..	..	..	..	..	..	..	..
179. Ill-defined causes.....	19	19	..	..	..	..	19	..	..	..
180. Injury during birth.....	1	1	..	..	..	..	1	..	..	..
I.—General diseases.....	110	8	2	3	1	2	16	8	3	5
<i>a.</i> Tuberculous diseases....	48	3	..	1	..	..	4	2	1	3
<i>b.</i> Cancer.....	25	..	..	..	..	..	..	..	..	..
II.—Diseases of nervous system } and organs of sense..... }	44	3	4	..	..	1	8	..	..	1
III.—Diseases of circulatory system	39	..	..	..	..	..	..	2	..	..
IV.—Diseases of respiratory system	66	8	4	4	..	..	16	2	2	..
V.—Diseases of digestive system..	88	46	8	1	..	..	55	..	..	..
VI.—Diseases of genito-urinary } system..... }	49	..	..	1	1	..	2	..	..	2
VII.—Puerperal diseases.....	6	..	..	..	..	..	..	..	..	..
VIII.—Diseases of skin and cellular } tissue..... }	4	1	..	..	..	..	1	..	..	..
IX.—Diseases of locomotory system	..	..	..	..	..	..	..	..	..	..
X.—Malformations.....	3	3	..	..	..	..	3	..	..	..
XI.—Diseases of infancy.....	15	15	..	..	..	..	15	..	..	..
XII.—Diseases of old age.....	10	..	..	..	..	..	..	..	..	..
XIII.—External causes.....	15	..	..	..	..	1	1	1	1	2
<i>a.</i> Suicide.....	3	..	..	..	..	..	..	..	..	1
<i>b.</i> Homicide.....	..	..	..	..	..	..	..	..	..	..
<i>c.</i> Accident.....	12	..	..	..	..	1	1	1	1	1
XIV.—Causes ill-defined.....	19	19	..	..	..	..	19	..	..	..
Total females.....	468	103	18	9	2	4	136	13	6	10

20	25	30	35	40	43	50	55	60	65	70	75	80	85	Colored.
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..	3
..
11	8	5	6	10	4	5	6	7	5	8	1	..	2	3
9	8	4	3	5	2	2	2	2	..	1	2
..	2	3	1	2	2	3	3	6	1	..	2	..
1	1	..	2	3	4	2	1	3	6	2	4	3	3	..
2	4	3	1	1	4	5	4	4	5	2	2	..
..	..	5	2	2	1	2	4	5	9	5	5	1	5	4
1	1	3	5	1	3	1	2	7	1	1	4	1	2	5
4	2	4	2	6	4	2	2	4	7	5	2	1	..	4
1	1	1	2	1	..	..	..	..	..	..	..	..	..	..
1	..	..	..	..	1	..	..	..	..	..	..	..	1	..
..
..
..
..	..	..	..	..	..	..	..	..	..	2	2	3	3	1
..	1	..	1	..	1	1	..	3	1	1	..	..	1	1
..	1	..	..	..	..	..	..	..	1	..	..	..	..	..
..
..	..	..	1	..	1	1	..	3	..	1	..	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
21	14	18	24	26	19	14	19	34	33	28	23	11	19	21

Respectfully submitted,
 J. WALTER WOOD, M. D.,
 Assistant Registrar of Records.

Table of Mortality from the Principal
METEOR

	Jan.	Feb.	Mar.	Apr.	May.
Mean Barometer	29.830	29.915	30.102	29.779	30.046
Mean Humidity.....	85	86	80	70	79
Maximum.....	.....	.....	.....	.....	.....
Minimum.....	.....	.....	.....	.....	.....
Inches of Rain (Melted Snow included).	4.18	4.70	4.23	3.44	.30
Mean Temperature (Fah.).....	30.3°	33.1°	44.7°	51.9°	62.8°
Maximum Temperature (Fah.).....	51°	62°	70°	82°	89°
Minimum Temperature (Fah.).....	10°	4°	28°	29°	37°

CAUSE OF DEATH.	BOROUGH OF									
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.
Total, all causes.....	3,422	3,278	3,441	3,267	3,279	2,770	3,150	2,922	2,708	2,708
1. Typhoid fever	21	16	18	19	22	21	18	33	38	46
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..
3. Malarial fevers.....	..	2	2	..	7	5	2	1	2	2
4. Small-pox .....	..	..	..	..	..	..	..	..	..	..
5. Measles	22	31	34	27	38	27	35	13	9	7
6. Scarlet fever.....	32	35	39	50	40	30	17	4	3	6
7. Whooping-cough.	21	15	11	15	23	11	7	17	19	9
8. Diphtheria and crecup.....	111	89	101	103	118	98	87	59	62	62
9. Influenza	9	80	66	27	11	5	1	..	..	2
10. Asiatic cholera.....	..	..	..	..	..	..	..	..	..	..
11. Cholera nostras.....	..	..	..	..	..	..	..	..	..	..
12. Other epidemic diseases.....	15	17	23	14	24	16	19	18	17	10
13. Phthisis.....	381	357	389	374	343	284	279	315	287	290
14. Tubercular meningitis.....	44	49	53	51	52	55	53	31	36	33
15. Other forms of tuberculosis.....	18	22	21	16	25	17	25	22	17	25
16. Cancer, malignant tumors	152	112	141	131	121	126	130	123	114	118
17. Meningitis, simple.....	37	41	60	65	78	49	40	49	41	43
18. Apoplexy, congestion and } softening of brain..... }	125	119	95	117	103	87	70	72	83	103
19. Organic heart disease.....	235	238	253	255	235	220	204	194	170	219
20. Acute bronchitis.....	84	87	88	90	87	45	36	36	47	50
21. Chronic bronchitis.....	14	11	8	8	6	4	5	5	3	7
22. Pneumonia (excluding Broncho- } Pneumonia)..... }	390	430	444	373	376	193	152	138	145	201
22a. Broncho-pneumonia	258	251	246	227	196	145	150	104	104	126

Causes of Death for the Year 1903.

LOGY.

June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Average for Past 35 Years.
29.853	29.874	29.921	30.042	29.924	29.942	29.918	29.938	29.925
81	73	73	67	61	66	77	75	72
.....
.....
9.78	3.92	6.73	3.67	13.31	.97	3.09	58.32	43.88
64.2°	74.6°	69.0°	67.0°	58.0°	42.1°	31.50	52.4°	52.1°
81°	95°	83°	88°	76°	70°	54°	95°	101°
52°	57°	54°	47°	36°	19°	11°	4°	6°

MANHATTAN.

BOROUGH OF THE BRONX.

Nov.	Dec.	Total.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
2,883	3,145	37,013	402	433	422	408	387	340	444	372	321	393	365	476	4,763
34	31	317	4	..	1	4	1	1	5	6	5	2	1	3	33
..
3	1	27	1	..	1	1	3	2	1	1	..	1	1	..	12
..	..	....	2	..	..	1	..	..	..	..	..	..	..	..	3
16	17	276	6	5	4	9	1	2	2	..	..	1	10	5	45
12	23	291	14	17	28	23	17	10	9	9	7	6	10	24	174
10	8	166	3	1	1	1	1	4	1	5	1	1	..	2	21
73	114	1,077	17	14	19	17	14	10	8	7	5	10	15	19	155
7	24	232	1	5	9	1	..	..	..	..	..	..	2	2	20
..
..
8	10	191	3	1	3	..	3	2	4	8	11	..	..	..	35
324	346	3,971	121	124	105	108	111	90	112	9	92	119	94	125	1,292
23	28	508	2	5	4	8	6	8	1	1	4	7	5	7	58
19	15	242	1	3	2	3	4	2	4	2	4	3	1	3	31
111	147	1,526	13	12	12	16	7	14	18	18	10	15	12	11	153
45	42	590	3	3	6	6	8	6	4	4	3	5	3	2	53
103	119	1,201	19	13	20	11	8	13	12	9	16	23	13	21	178
260	229	2,732	29	25	17	20	16	15	14	14	14	20	22	15	221
71	85	806	4	10	5	6	4	4	1	1	6	3	5	4	51
6	8	85	1	3	2	..	6	..	1	2	1	2	7	3	28
313	419	3,574	34	44	42	33	36	24	13	14	13	16	29	56	354
196	254	2,257	10	20	10	12	8	8	6	7	6	8	10	18	123

CAUSE OF DEATH.	BOROUGH OF									
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.
23. Diseases of stomach (cancer excepted).....	25	23	21	16	14	13	22	22	13	22
24. Diarrhœas (under 2 years).....	83	77	79	70	101	190	579	527	367	207
25. Hernia, intestinal obstruction....	18	25	23	18	19	20	21	24	23	28
26. Cirrhosis of liver.....	33	40	46	38	32	41	39	48	38	29
27. Bright's disease and nephritis....	317	260	272	251	260	219	208	199	186	211
28. Diseases of women (not cancer)...	19	22	10	12	23	9	20	10	15	11
29. Puerperal septicæmia.....	11	15	17	17	11	8	13	5	3	9
30. Other puerperal diseases.....	15	17	17	19	28	15	16	14	16	18
31. Congenital debility and mal- formations.....	196	170	167	194	162	184	202	191	194	196
32. Old age.....	33	37	38	35	21	17	21	24	22	24
33. Violent deaths.....	214	152	147	197	217	181	279	178	213	198
<i>a.</i> Sunstroke.....	..	..	..	..	9	..	54	3	..	..
<i>b.</i> Other accidents.....	177	117	114	154	155	125	179	135	153	157
<i>c.</i> Homicide.....	6	2	2	6	12	5	6	2	9	11
<i>d.</i> Suicide.....	31	33	31	37	40	51	40	38	51	30
34. All other causes.....	441	399	457	403	440	404	358	366	340	352
35. Ill-defined causes.....	48	39	55	25	46	31	82	80	71	44
Under one year.....	644	614	662	611	640	637	990	919	802	643
One year and under two years.....	199	214	259	223	225	172	265	200	164	146
Total under five years.....	1,014	1,006	1,101	1,050	1,083	997	1,413	1,244	1,086	893
Sixty-five years and over.....	462	471	458	467	426	324	320	292	258	347
Males.....	1,843	1,779	1,875	1,773	1,811	1,468	1,631	1,559	1,476	1,515
Females.....	1,579	1,499	1,566	1,494	1,468	1,302	1,509	1,363	1,232	1,193
Colored.....	92	103	97	95	90	89	76	85	40	32

MANHATTAN.			BOROUGH OF THE BRONX.												
Nov.	Dec.	Total.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
12	15	213	..	3	1	3	1	4	2	2	2	2	4	3	27
92	68	2,440	2	5	4	5	5	25	70	42	22	15	7	7	209
27	30	276	2	7	3	3	4	1	2	3	..	1	2	..	28
35	36	455	1	2	2	4	2	2	3	2	4	5	3	2	32
248	248	2,879	27	22	25	25	133	20	24	15	19	33	32	46	321
16	17	184	1	..	..	2	..	1	1	3	..	..	..	..	8
11	13	133	3	1	1	..	..	..	..	1	..	1	1	..	8
15	13	203	1	3	1	3	1	3	6	3	2	3	4	1	31
138	154	2,148	19	11	23	13	17	15	12	23	16	17	15	17	201
33	30	335	5	11	14	8	10	2	3	1	5	1	9	4	73
206	173	2,355	15	15	17	26	31	20	42	28	15	35	8	24	275
..	..	66	..	..	..	..	1	..	8	..	1	..	..	..	10
155	137	1,759	12	11	12	17	17	16	25	25	11	24	7	20	197
3	4	63	..	1	..	1	2	..	3	1	..	1	..	1	10
48	32	462	3	3	5	8	11	4	6	2	3	10	1	3	59
77	593	4,730	37	46	39	35	27	29	57	37	25	38	33	43	452
34	33	588	1	2	1	..	2	3	6	13	13	1	4	4	50
498	521	8,181	46	54	61	50	49	64	105	94	62	50	51	55	741
119	181	2,367	23	18	17	21	11	18	22	25	15	12	16	25	223
763	858	12,528	102	82	105	103	75	104	146	133	87	78	81	110	1,213
413	445	4,683	57	73	69	54	56	43	55	49	44	65	60	72	627
1,591	1,695	20,065	218	253	245	229	207	185	256	210	164	224	173	256	2,625
1,292	1,450	16,917	184	180	177	179	180	155	188	162	152	169	187	220	2,138
36	51	888	24	14	11	21	30	11	15	10	9	15	16	22	198

Table of Mortality from the Principal

CAUSE OF DEATH.	BOROUGH OF									
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.
Total, all causes	1,934	1,977	1,898	1,788	1,863	1,682	2,165	1,776	1,621	1,710
1. Typhoid fever.....	12	20	20	15	19	6	32	25	29	33
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..
3. Malarial fevers.....	3	1	3	2	3	1	4	3	5	4
4. Small-pox.....	..	..	..	..	..	..	..	..	..	..
5. Measles.....	5	7	9	6	28	31	23	11	5	11
6. Scarlet fever.....	16	16	12	33	25	30	26	15	13	9
7. Whooping-cough.....	12	15	18	10	7	13	8	15	7	3
8. Diphtheria and croup.....	74	65	76	71	84	81	73	41	44	72
9. Influenza.....	12	50	51	12	5	..	..	..	1	4
10. Asiatic cholera .....	..	..	..	..	..	..	..	..	..	..
11. Cholera nostras .....	..	..	..	..	..	..	..	..	..	..
12. Other epidemic diseases.....	5	10	12	15	6	9	23	21	15	8
13. Phthisis.....	230	218	206	208	206	170	183	195	156	194
14. Tubercular meningitis.....	17	16	22	22	21	25	24	14	13	16
15. Other forms of tuberculosis.....	17	11	15	21	14	15	17	17	14	18
16. Cancer, malignant tumors.....	61	80	71	59	63	62	68	72	49	74
17. Meningitis, simple.....	10	9	13	19	22	21	22	23	20	15
18. Apoplexy, congestion and soft- ening of the brain.....	105	98	73	77	114	59	81	39	65	72
19. Organic heart disease.....	163	155	139	121	135	113	100	104	93	109
20. Acute bronchitis	74	85	67	48	63	34	30	32	36	45
21. Chronic bronchitis.....	18	14	14	11	11	9	8	8	8	12
22. Pneumonia (excluding broncho- pneumonia).....	234	264	235	191	199	96	93	73	95	116
22a. Broncho pneumonia.....	82	81	89	62	67	55	49	30	43	57
23. Diseases of stomach (cancer excepted).....	17	21	14	23	15	12	17	27	22	26
24. Diarrheas under 2 years.....	26	27	31	37	34	167	448	330	200	104
25. Hernia, intestinal obstruction.....	9	8	14	13	11	15	15	20	14	5
26. Cirrhosis of liver.....	24	18	26	18	32	19	21	18	24	20
27. Bright's disease and nephritis....	202	195	204	194	171	149	170	133	158	172
28. Diseases of women (not cancer)..	4	8	11	11	4	7	10	7	7	8
29. Puerperal septicæmia.....	12	7	9	9	13	5	4	7	4	8
30. Other puerperal diseases.....	12	12	15	9	9	10	11	11	6	11
31. Congenital debility and mal- formations.....	91	95	75	89	85	120	85	90	95	98

Causes of Death during the Year 1903.

BROOKLYN.			BOROUGH OF QUEENS.												
Nov.	Dec.	Total.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1,790	1,988	22,192	220	229	216	196	204	221	274	256	221	208	229	202	2,676
31	25	267	1	4	2	..	2	3	1	4	1	2	2	..	22
..
2	5	36	2	1	1	..	..	1	1	2	3	..	..	..	11
1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
14	12	167	..	1	..	..	3	1	2	1	..	..	2	7	17
19	30	244	2	2	1	1	5	6	2	1	..	2	..	..	22
6	4	118	1	3	5	..	..	..	1	3	..	..	..	..	13
74	75	830	8	8	8	9	4	11	4	5	7	12	20	9	105
5	4	144	1	9	4	1	1	..	..	..	..	..	..	1	17
..
..
9	10	143	5	..	1	1	2	..	2	1	..	..	..	1	13
200	250	2,396	20	22	15	20	16	21	13	16	21	24	24	17	229
11	17	223	1	1	..	1	1	1	1	1	1	2	..	..	10
14	9	182	1	2	..	..	2	1	1	1	1	1	1	3	14
59	60	778	6	7	7	5	9	13	7	8	9	5	5	6	87
13	10	197	..	2	7	3	5	7	9	7	4	3	3	2	52
92	107	1,002	11	12	12	8	18	5	8	7	13	13	24	11	142
120	163	1,515	17	18	21	23	10	21	23	11	20	14	18	13	209
66	73	653	3	6	2	4	4	1	..	1	..	3	10	4	38
15	15	143	1	..	2	2	2	1	..	1	..	2	..	..	11
239	239	2,104	32	45	29	17	14	22	9	10	11	13	21	51	274
93	98	806	15	6	9	8	7	8	5	5	6	3	7	12	92
18	18	220	4	1	3	2	1	..	3	3	..	1	..	..	18
39	28	1,471	2	1	4	8	5	12	64	65	23	11	3	5	203
13	14	151	3	1	2	3	1	..	1	1	2	2	2	7	25
18	25	263	1	4	3	5	4	5	2	7	6	2	4	1	44
187	186	2,123	24	21	24	9	18	16	24	15	13	14	21	15	214
10	7	94	..	..	..	..	..	..	..	..	1	..	1	..	2
1	10	89	2	2	1	2	1	..	..	1	4	1	2	..	16
16	17	139	1	..	1	3	3	..	..	..	1	2	1	..	12
99	95	1,117	9	10	17	7	11	7	25	23	20	26	16	12	183

CAUSE OF DEATH.	BOROUGH OF									
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.
32. Old age.....	43	35	24	40	21	23	17	20	27	17
33. Violent deaths.....	86	75	65	89	97	87	174	102	99	105
<i>a.</i> Sunstroke.....	..	..	..	..	8	..	49	2	..	..
<i>b.</i> Other accidents.....	66	59	37	67	62	59	104	78	71	72
<i>c.</i> Homicide.....	1	4	2	3	2	6	5	6	2	8
<i>d.</i> Suicide.....	19	12	26	19	25	22	16	16	26	25
34. All other causes.....	231	233	241	240	251	192	284	206	187	218
35. Ill-defined causes.....	25	28	24	13	28	43	43	47	62	46
Under one year.....	290	329	331	260	291	441	662	543	450	384
One year and under two years.....	92	89	110	88	99	112	152	122	93	85
Total under five years.....	488	513	534	465	535	671	955	743	607	550
Sixty-five years and over.....	382	399	316	324	303	225	264	216	235	263
Males.....	1,019	1,049	996	947	996	896	1,127	936	884	881
Females.....	915	928	902	841	867	786	1,038	840	737	829
Colored.....	61	53	59	32	46	37	53	27	43	38

BROOKLYN.			BOROUGH OF QUEENS.												
Nov.	Dec.	Total.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
28	36	331	7	2	5	4	1	7	5	4	3	3	4	4	49
76	89	1,144	16	14	4	9	21	14	22	15	22	21	13	5	176
..	..	59	..	..	..	..	1	..	2	1	..	..	..	..	4
58	66	799	14	12	2	7	16	10	17	11	18	17	10	3	137
5	8	52	..	1	..	..	..	..	..	1	..	1	..	..	3
13	15	234	2	1	2	2	4	4	3	2	4	3	3	2	32
175	231	2,689	20	18	24	36	31	33	36	33	28	24	21	16	320
27	15	401	3	6	2	5	2	4	3	4	1	2	4	..	36
325	295	4,601	45	43	50	39	35	33	101	104	58	51	38	37	634
83	99	1,224	14	11	10	12	10	10	18	10	10	11	10	24	150
504	498	7,068	61	59	67	55	51	59	122	135	67	68	79	78	901
325	398	3,650	47	40	49	35	32	42	35	26	33	26	42	43	450
945	1,015	11,691	112	124	105	96	114	116	148	142	127	125	123	121	1,452
845	973	10,501	108	105	111	100	90	105	126	114	94	83	106	81	1,224
34	49	532	5	7	8	2	3	4	15	12	6	14	6	7	89

* Table of Mortality from the Principal

CAUSE OF DEATH.	BOROUGH OF										
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
Total, all causes.....	82	91	108	102	83	76	161	117	89	104	101
1. Typhoid fever.....	2	2	1	2	2	..	..	2	1	1	1
2. Typhus fever.....	..	..	..	..	..	..	..	..	..	..	..
3. Malarial fevers.....	..	..	..	..	..	1	..	..	..	1	1
4. Small-pox.....	..	..	..	..	..	..	..	..	..	..	..
5. Measles.....	..	..	..	..	..	..	2	..	..	..	..
6. Scarlet fever.....	1	..	..	..	..	..	1	1	..	..	..
7. Whooping-cough.....	..	..	1	..	..	2	2	..	..	..	..
8. Diphtheria and croup.....	3	3	1	1	1	1	3	1	..	3	4
9. Influenza.....	..	2	1	1	1	..	..	..	..	..	..
10. Asiatic cholera.....	..	..	..	..	..	..	..	..	..	..	..
11. Cholera nostras.....	..	..	..	..	..	..	..	..	..	..	..
12. Other epidemic diseases.....	..	..	..	..	1	..	..	..	..	..	2
13. Phthisis.....	9	12	19	15	12	12	9	9	8	13	5
14. Tubercular meningitis.....	..	..	1	4	..	..	1	1	1	4	1
15. Other forms of tuberculosis.....	1	..	2	..	..	..	..	..	..	..	..
16. Cancer, malignant tumors.....	6	7	4	6	4	3	4	6	4	5	4
17. Meningitis, simple.....	..	1	..	1	3	1	1	2	..	..	..
18. Apoplexy, congestion and softening of brain.....	3	1	7	4	3	5	3	2	2	4	14
19. Organic heart disease.....	7	8	4	11	6	9	8	6	10	8	7
20. Acute bronchitis.....	..	3	..	1	..	..	1	1	..	1	..
21. Chronic bronchitis.....	..	..	..	3	1	..	..	..	1	3	..
22. Pneumonia (excluding broncho- pneumonia).....	11	10	7	15	17	3	1	3	1	3	9
22a. Broncho pneumonia.....	4	5	5	4	2	2	2	2	..	..	2
23. Diseases of the stomach (cancer excepted).....	4	1	2	1	2	..	1	1	1	1	2
24. Diarrhoea; (under 2 years).....	1	2	5	..	1	3	55	28	13	4	7
25. Hernia, intestinal obstruction.....	1	..	..	..	..	1	..	..	..	..	..
26. Cirrhosis of liver.....	3	1	2	..	..	1	2	1	..	..	..
27. Bright's disease and nephritis.....	7	14	16	9	3	5	9	6	8	5	11
28. Diseases of women (not cancer).....	..	1	1	..	1	..	1	..	1	..	..
29. Puerperal septicaemia.....	..	..	1	..	..	..	..	..	..	..	..
30. Other puerperal diseases.....	..	..	..	..	..	..	1	..	1	2	1
31. Congenital debility and malforma- tions.....	4	1	5	5	1	7	2	6	1	6	3
32. Old age.....	..	2	3	..	3	1	3	1	2	5	..

* Actual mortality.

Causes of Death during the Year 1903.

RICHMOND.		CITY OF NEW YORK.												
Dec.	Total.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
103	1,220	6,060	6,011	6,085	5,761	5,816	5,089	6,234	5,443	4,960	5,123	5,263	5,974	67,864
..	14	40	42	42	40	46	31	56	70	74	84	69	59	653
..
..	4	6	4	7	3	14	10	8	7	10	8	7	6	90
..	..	2	..	..	1	..	..	..	..	..	..	1	1	5
1	3	33	44	47	42	70	64	66	25	14	19	42	42	508
..	3	65	70	80	107	87	76	55	50	23	23	41	17	734
1	6	37	34	36	26	31	30	19	40	27	13	16	15	324
2	23	213	179	205	201	221	201	175	113	118	159	186	219	2,190
..	5	23	146	131	42	18	5	1	..	1	6	14	31	418
..
..
..	3	28	28	39	30	56	27	48	48	43	18	19	21	385
9	132	761	733	734	725	688	577	596	626	564	640	647	729	8,020
..	13	64	71	80	85	80	89	80	48	60	62	40	52	812
..	3	38	38	40	40	45	35	47	42	36	46	35	30	472
6	59	238	218	235	217	204	218	227	227	186	217	191	230	2,608
..	9	50	56	85	94	116	84	76	85	68	66	64	56	901
2	50	263	243	207	217	246	169	174	149	179	215	251	260	2,573
10	94	451	444	434	440	402	378	349	329	317	370	427	430	4,771
3	10	165	191	162	149	158	84	68	71	89	102	152	169	1,560
1	9	34	28	26	21	26	14	14	16	13	26	23	27	276
16	96	701	793	757	629	642	338	268	238	265	349	611	81	6,402
6	34	370	363	359	313	280	218	212	148	159	194	309	388	3,312
3	19	50	49	41	45	83	29	45	55	38	52	36	39	512
1	12	114	112	123	120	146	397	1,215	992	625	341	148	109	4,443
3	5	31	41	42	37	35	37	39	48	39	36	44	14	483
3	13	62	65	79	65	70	68	67	76	72	56	60	67	807
6	99	579	512	541	488	485	409	435	368	384	435	499	501	5,636
..	5	21	31	22	25	28	17	32	20	24	19	27	24	293
..	1	28	25	29	28	25	13	17	14	11	19	15	23	247
..	5	29	32	34	34	41	28	34	28	26	36	37	31	390
5	46	319	287	287	308	276	333	314	333	316	355	274	283	3,695
3	23	88	87	84	87	56	50	49	50	59	50	74	77	811

CAUSE OF DEATH.	BOROUGH OF										
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
33. Violent deaths.....	4	8	7	7	7	8	21	10	13	14	11
<i>a.</i> Sunstroke.....	..	..	..	..	..	..	3	..	..	..	..
<i>b.</i> Other accidents.....	3	5	5	7	7	5	18	9	10	11	8
<i>c.</i> Homicide.....	..	1	..	..	..	..	..	1	1	1	..
<i>d.</i> Suicide.....	1	2	2	..	..	3	..	..	2	2	3
34. All other causes.....	9	8	11	10	11	10	17	17	16	17	13
35. Ill-defined causes.....	2	2	2	2	..	1	11	11	5	4	3
Under one year.....	13	11	18	12	6	13	62	51	19	10	16
One year and under two years.....	3	2	2	1	3	4	18	2	2	2	..
Total under five years.....	21	14	22	16	9	20	84	54	22	26	24
Sixty-five years and over.....	11	27	28	30	17	17	22	16	22	24	27
Males.....	44	60	62	65	54	42	106	72	56	72	57
Females.....	38	34	46	37	29	34	55	45	33	32	44
Colored.....	..	1	2	2	1	2	10	7	5	1	2

RICHMOND.		CITY OF NEW YORK.												
Dec.	Total.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
7	117	335	264	240	328	373	310	538	333	362	373	314	298	4,068
..	3	..	..	..	..	19	..	116	6	1	..	..	..	142
4	92	272	204	170	252	258	215	343	258	263	281	238	230	2,984
..	4	7	9	4	10	16	11	14	11	12	22	8	13	137
3	13	56	51	66	66	80	84	65	58	86	70	68	55	805
13	152	738	704	772	725	760	668	763	653	594	645	619	701	8,343
2	45	79	77	84	45	78	82	147	160	164	88	72	54	1,120
15	256	1,038	1,051	1,122	973	1,021	1,188	1,920	1,711	1,391	1,147	928	923	14,413
2	41	331	334	399	345	349	317	475	364	284	246	230	331	4,005
22	334	1,706	1,681	1,829	1,689	1,753	1,851	2,720	2,314	1,869	1,615	1,451	1,566	22,044
36	277	959	1,010	920	910	834	651	696	599	592	725	867	994	9,757
62	752	3,235	3,255	3,283	3,110	3,182	2,707	3,318	2,919	2,707	2,817	2,894	3,149	36,586
41	468	2,824	2,747	2,802	2,651	2,634	2,382	2,916	2,524	2,253	2,306	2,474	2,765	31,278
4	37	182	178	179	152	170	143	169	141	103	100	94	133	1,744

Actual Number of Deaths from Zymotic and

BOROUGH OF

WARDS.	AREA IN ACRES.	POPULATION BY CENSUS OF 1900.	Number of Persons to the Acre.	Cerebro-spinal Meningitis.	Diphtheria.	Typhoid fever.
First.....	154.0	9,516	61.8	1	4	3
Second.....	81.0	1,488	18.4	..	2	2
Third.....	95.0	1,797	18.9	1	..	1
Fourth.....	83.0	19,554	232.7	7	15	6
Fifth.....	168.0	8,298	49.4	2	9	2
Sixth.....	86.0	20,004	232.7	7	14	2
Seventh.....	198.0	89,237	450.7	10	53	12
Eighth.....	183.0	29,059	158.8	1	19	9
Ninth.....	322.0	59,650	185.2	6	38	15
Tenth.....	110.0	71,879	653.4	10	45	6
Eleventh.....	196.0	99,144	505.8	4	36	9
Twelfth.....	5,504.0	476,602	86.6	42	268	87
Thirteenth.....	107.0	64,117	599.2	5	29	2
Fourteenth.....	96.0	34,035	354.5	5	32	6
Fifteenth.....	198.0	24,066	121.5	..	13	1
Sixteenth.....	349.0	52,808	151.3	9	23	7
Seventeenth.....	331.0	130,796	395.1	14	92	15
Eighteenth.....	450.0	61,325	136.3	6	70	12
Nineteenth.....	1,481.0	257,448	173.8	18	113	51
Twentieth.....	444.0	89,798	202.2	7	51	11
Twenty-first.....	411.0	60,211	146.5	1	37	14
Twenty-second.....	1,529.0	199,261	123.7	17	84	44
Total.....	12,576.0	1,850,093	147.2	173	1,077	317

BOROUGH OF

Twenty-third.....	4,267.0	132,413	31.0	16	118	20
Twenty-fourth.....	22,255.8	43,009	1.9	6	37	13
Total.....	26,522.8	175,422	6.6	22	155	33

* The greater part of the deaths in institutions in the Borough of The Bronx were of non-residents.

Certain Other Preventable Diseases, by Wards.

MANHATTAN.

Malarial Fever.	Measles.	Scarlet Fever.	Small-pox.	Whooping Cough.	Diarrhoeal Diseases.	Phthisis.	All Causes.	Deaths in Institutions.	Deaths of Children Under 5 Years.
..	3	4	..	2	29	61	403	49	99
..	..	..	..	..	3	13	71	..	15
I	..	..	..	..	2	12	77	1	15
I	5	3	..	1	41	92	694	1	263
I	..	4	..	..	10	26	240	263	45
..	10	2	..	2	43	112	587	14	218
..	12	20	..	2	106	95	1,300	560	530
I	4	4	..	4	64	86	738	1	258
I	9	6	..	5	112	175	5,477	391	368
..	13	16	..	8	115	130	1,211	3	530
..	11	17	..	5	86	70	952	208	433
10	71	74	..	40	592	839	8,690	1,720	2,603
..	4	15	..	5	83	61	814	1	413
..	20	9	..	8	113	52	867	1	543
..	2	2	..	1	31	42	398	4	131
I	1	11	..	10	66	136	1,082	13	248
I	38	19	..	12	241	260	2,610	79	1,044
I	10	9	..	10	107	172	1,596	1,461	554
4	25	28	..	20	475	619	5,873	4,184	2,118
I	14	15	..	10	124	313	2,054	103	553
3	13	10	..	2	94	189	1,526	2,207	362
I	11	23	..	19	241	416	2,753	672	1,185
27	276	291	..	166	2,778	3,971	37,013	11,936	12,528

THE BRONX.

2	40	166	3	12	169	946	3,300	1,390	678
10	5	8	..	9	72	346	1,463	446	335
12	45	174	3	21	241	1,292	4,763	1,835	1,213

WARDS.	AREA IN ACRES.	POPULATION BY CENSUS OF 1900.	Number of Persons to the Acre.	Cerebro-spinal Meningitis.	Diphtheria.	Typhoid Fever.
First	233.0	20,307	87.2	..	13	..
Second.....	97.7	8,565	87.7	..	19	1
Third.....	161.4	17,949	111.2	2	9	2
Fourth.....	111.3	12,568	112.9	..	12	..
Fifth	119.4	18,862	158.0	..	20	4
Sixth.....	302.9	42,485	140.2	4	24	19
Seventh.....	485.5	40,471	88.3	5	9	5
Eighth.....	1,843.2	52,414	28.4	4	32	20
Ninth	623.6	42,876	68.8	1	42	9
Tenth.....	318.7	39,100	122.7	..	26	3
Eleventh.....	252.6	22,608	89.5	..	13	13
Twelfth.....	663.1	30,354	45.8	1	16	3
Thirteenth.....	230.3	24,029	104.3	1	10	5
Fourteenth.....	282.6	31,483	111.4	2	52	1
Fifteenth.....	244.8	30,269	123.6	2	40	2
Sixteenth.....	244.8	56,550	231.0	2	34	1
Seventeenth.....	823.3	57,309	69.6	3	43	9
Eighteenth.....	873.0	25,133	28.8	4	22	16
Nineteenth.....	413.8	37,645	91.0	1	23	4
Twentieth.....	461.5	25,446	55.1	1	16	8
Twenty-first.....	483.2	58,957	122.0	..	43	8
Twenty-second.....	1,361.6	66,575	48.9	1	39	15
Twenty-third.....	736.0	61,813	94.0	3	25	21
Twenty-fourth.....	1,198.5	31,767	26.5	2	11	15
Twenty-fifth.....	567.8	48,328	85.1	3	21	12
Twenty-sixth.....	3,590.2	65,036	18.4	4	31	3
Twenty-seventh.....	400.7	43,961	109.7	..	32	5
Twenty-eighth.....	884.4	77,912	88.1	2	54	25
Twenty-ninth.....	3,800.0	27,188	7.2	5	84	21
Thirtieth.....	5,404.1	24,700	4.6	2	10	9
Thirty-first.....	6,312.3	14,609	2.3	1	2	5
Thirty-second.....	5,479.5	8,243	1.5	1	3	3
Total.....	38,977.8	1,166,532	29.9	57	830	267

BROOKLYN.

Malarial Fevers.	Measles.	Scarlet Fever.	Small-pox.	Whooping Cough.	Diarrheal Diseases.	Phthisis.	All Causes.	Deaths in Institutions.	Deaths of Children Under 5 Years.
1	..	1	..	1	17	29	314	15	90
..	..	4	..	1	14	14	173	..	70
..	..	2	..	2	21	25	250	23	71
..	3	2	..	1	21	23	198	2	63
..	..	2	..	2	35	29	366	..	151
1	6	8	..	1	63	223	1,321	610	276
1	..	4	..	5	54	47	674	96	252
4	8	7	..	4	85	91	964	98	362
4	4	9	..	6	43	69	778	67	260
..	3	9	..	7	91	83	750	..	324
..	..	2	..	3	36	59	656	264	159
1	6	11	..	7	60	39	539	..	217
..	1	4	..	1	28	44	475	107	102
..	18	9	..	3	85	63	675	..	347
1	7	2	..	3	72	61	550	..	215
1	2	15	..	3	86	58	707	1	326
2	9	22	..	6	136	76	1,056	2	463
1	2	3	..	11	71	133	794	361	238
3	..	5	..	5	36	42	516	3	161
1	3	6	..	3	33	57	611	228	172
3	4	3	..	8	65	86	825	2	273
1	3	13	..	3	79	104	1,144	223	317
..	4	14	..	4	51	72	913	130	204
1	2	2	1	..	35	217	872	429	155
2	6	4	..	3	40	76	768	66	210
3	16	7	..	5	109	85	954	43	406
1	6	5	..	6	67	65	657	47	214
1	4	8	..	3	87	104	1,215	168	344
2	48	51	1	8	55	270	1,726	1,346	365
..	2	7	..	2	28	26	401	13	124
1	..	..	..	..	29	16	230	14	70
..	..	3	..	1	8	10	120	..	37
36	167	244	2	118	1,740	2,396	22,192	4,358	7,068

BOROUGH OF

WARDS.	AREA IN ACRES.	POPULA- TION BY CENSUS OF 1900.	Number of Persons to the Acre.	Cerebro-spinal Meningitis.	Diphtheria.	Typhoid Fever.
First	4,650	48,272	10.4	7	28	13
Second	14,700	40,903	2.8	2	32	4
Third.....	22,000	25,870	1.2	..	13	2
Fourth.....	36,600	30,761	.8	6	30	3
Fifth.....	3,770	7,193	1.9	..	2	..
Total.....	81,720	152,999	1.9	15	105	21

BOROUGH OF

WARDS.	AREA IN ACRES.	POPULA- TION BY CENSUS OF 1900.	Number of Persons to the Acre.	Cerebro-spinal Meningitis.	Diphtheria.	Typhoid Fever.
First	3,340	21,441	6.4	1	14	8
Second	4,130	13,200	3.2	1	2	3
Third.....	10,050	13,701	1.4	..	3	1
Fourth.....	8,180	9,516	1.2	..	3	1
Fifth.....	10,900	9,163	.8	2	1	1
Total.....	36,600	67,021	1.8	4	23	14

QUEENS.

Malarial Fever.	Measles.	Scarlet Fevcr.	Small-pox.	Whooping Cough.	Diarrhical Diseases.	Phthisis.	All Causes.	Deaths in Institutions.	Deaths of Children under 5 Years.
2	7	11	..	4	78	104	986	218	310
5	..	3	..	3	69	47	631	11	230
2	..	3	..	1	29	27	398	50	129
2	10	1	..	3	41	41	552	50	200
..	..	2	..	2	10	10	109	5	32
11	17	22	..	13	229	229	2,676	334	901

RICHMOND.

Malarial Fever.	Measles.	Scarlet Fever	Small-pox.	Whooping Cough	Diarrhical Diseases.	Phthisis.	All Causes.	Deaths in Institutions.	Deaths of Children under 5 Years.
1	1	2	..	..	45	50	525	235	108
1	..	..	..	1	23	42	235	60	64
..	1	..	..	2	23	21	187	15	56
2	1	1	..	..	34	8	159	49	80
..	..	..	..	3	10	11	114	14	26
4	3	3	..	6	135	132	1,220	373	334

Deaths According to Nativity of Deceased

COUNTRY.	NATIVITY OF DECEASED.		
	BOROUGH OF—		
	Manhattan.	The Bronx.	Brooklyn.
Africa	2	....	1
Armenia.....	2	....	....
Asia	2	....	1
At sea.....	1	....	1
Australia	6	....	6
Austria-Hungary.....	1,011	64	130
Azores .....	....	....	1
Belgium.....	19	2	4
Bermuda	3	....	....
Bohemia	191	11	7
British America.....	177	34	150
Brazil	2	....	....
Ceylon	1	....	....
China	75	1	5
Canary Islands.....	1	....	1
Chili .....	....	....	1
Cuba.....	25	2	8
Denmark	32	6	36
Egypt.....	1	1	....
England.....	658	106	575
Fiji Islands.....	....	....	....
Finland.....	9	8	15
France	212	23	41
Germany.....	3,433	645	2,267
Gibraltar.....	....	....	2
Greece.....	38	....	5
Holland.....	26	7	17
India.....	2	1	1
Ireland	5,063	652	2,722
Italy.....	1,418	142	574
Japan	3	2	3

and Parents of Deceased for the Year 1903.

NATIVITY OF DECEASED.			NATIVITY OF PARENTS OF DECEASED.					
BOROUGH OF—		City of New York.	BOROUGH OF—					City of New York.
Queens.	Richmond.		Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
....	....	3	2	....	1	....	....	3
....	....	2	2	....	....	....	....	2
....	....	3	....	....	....	....	....	....
....	....	2	....	....	1	....	....	1
....	....	12	3	1	1	2	....	7
29	6	1,240	1,930	102	262	45	14	2,353
....	....	1	....	....	....	....	....	....
....	1	26	14	2	7	....	1	24
....	....	5	2	....	1	....	....	3
14	....	223	330	19	11	22	....	382
12	10	383	97	10	101	12	5	225
....	1	3	....	....	....	....	1	1
....	....	1	1	....	....	....	....	1
....	....	81	73	1	3	....	....	77
....	....	2	1	....	....	....	....	1
....	....	1	....	....	....	....	....	....
1	1	37	19	1	7	1	1	29
7	10	91	29	7	45	8	1	90
....	....	2	....	1	....	....	....	1
42	37	1,418	623	105	657	70	44	1,499
....	....	....	....	....	....	....	1	1
1	3	36	16	12	34	3	2	67
20	6	302	235	26	41	31	6	339
390	110	6,845	4,504	942	3,435	640	143	9,664
....	....	2	....	....	1	....	....	1
....	....	43	31	....	6	....	....	37
....	2	52	26	4	18	6	....	54
....	....	4	....	1	....	....	....	1
166	161	8,864	7,940	1,073	4,572	427	207	14,219
60	26	2,220	4,082	497	1,506	130	51	6,066
....	1	9	1	2	1	....	....	4

COUNTRY.	NATIVITY OF DECEASED.		
	BOROUGH OF		
	Manhattan.	The Bronx.	Brooklyn.
Mexico.....	1	....	1
Norway.....	49	9	....
Palestine.....	1	....	....
Panama.....	1	....	....
Poland.....	61	4	32
Porto Rico.....	2	1	3
Portugal.....	1	....	3
Roumania.....	77	12	17
Russia.....	1,349	85	284
Scandinavia.....	....	....	362
Scotland.....	258	37	164
Servia.....	1	..	....
South America.....	2	1	3
Spain.....	18	....	15
Sweden.....	149	34	....
Switzerland.....	123	25	52
Syria.....	17	1	5
Turkey.....	12	....	1
United States.....	22,050	2,788	24,461
Unknown.....	385	48	171
Wales.....	....	1	11
Other West Indies.....	43	10	33
Mixed nationalities.....	....	....	....
Total.....	37,013	4,763	22,192

NATIVITY OF DECEASED.			NATIVITY OF PARENTS OF DECEASED.					
BOROUGH OF		City of New York.	BOROUGH OF					City of New York.
Queens.	Richmond.		Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
....	....	2	1	....	1	....	....	2
2	15	75	39	15	....	3	18	75
....	....	1	1	....	....	....	....	1
....	2	3	....	....	....	....	2	2
....	....	97	82	10	86	3	....	181
....	....	6	1	....	2	....	....	3
....	....	4	1	....	4	....	....	5
....	....	106	136	16	35	....	....	187
23	4	1,745	2,583	163	685	83	17	3,531
....	....	362	....	....	542	....	....	542
25	7	491	254	49	210	29	8	550
....	....	1	1	....	....	....	....	1
2	....	8	2	....	2	2	....	6
....	1	34	13	....	23	....	....	36
8	10	201	187	42	....	11	8	248
8	7	215	100	27	56	12	4	199
....	....	23	27	1	9	....	1	38
....	....	13	16	....	....	1	....	17
1,748	782	41,829	5,933	952	5,652	784	329	13,650
16	10	630	4,377	273	1,701	108	265	6,724
2	5	19	....	2	12	3	2	19
....	1	87	43	10	38	....	1	92
....	1	1	3,255	597	2,423	240	88	6,603
2,676	1,220	67,864	37,013	4,763	22,192	2,676	1,220	67,864

Deaths by Suicide in

NATIVITY.	Cuts and Stabs.		Drowning.		Gunshots.		Hanging.		Leaps.		Throwing Self Before Train.		Arsenic.		Carbolic Acid.		Cyanide of Mercury.		Cyanide of Potassium.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Austria-Hungary	2	..	..	I	8	..	I	..	..	2	..	..	..	..	5	3	..	..	..	..
Bohemia.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	I	I	..	..	..	..
British-America.	..	I	..	..	I	..	I	..	I	..	..	..	..	..	I	..	..	..	..	..
England.....	..	..	..	..	2	..	..	..	I	..	..	..	..	..	5	2	..	..	..	..
France.....	..	..	..	..	I	..	..	..	..	..	..	..	..	..	I	I	..	..	I	..
Germany.....	5	I	..	..	26	..	14	2	I	2	I	..	..	..	23	8	..	..	..	..
Ireland.....	3	I	..	..	4	..	I	..	..	I	..	..	..	..	9	9	..	..	..	..
Italy.....	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Russia.....	..	..	..	..	2	..	4	..	2	..	..	..	..	..	13	6	..	..	..	..
Other foreign countries.... }	I	..	..	..	9	..	4	I	I	..	..	..	..	..	2	7	..	..	I	..
United States....	5	3	I	I	18	I	4	2	..	I	I	..	I	..	36	27	..	I	..	..
Unknown.....	I	..	..	..	16	..	3	..	..	..	..	..	..	..	16	8	..	..	..	..
Total.....	17	6	I	2	99	I	32	5	6	7	2	..	I	..	111	72	..	I	2	..

Borough of Manhattan.

Hydrochloric Acid.		Hydrocyanic Acid.		Illuminating Gas.		Irritant Poison.		Lead Poison.		Morphine.		Oxalic Acid.		Paris Green.		Potassium.		Strychnine.		Wool Alcohol.		Total by Sexes.		Total of Both Sexes.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	7	26
..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	4
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	5
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	3	11
..	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	7
..	18	8	1	..	..	..	1	..	1	1	..	1	..	..	1	..	..	..	93	23	116
..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	17	13	30
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	3
..	3	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	25	8	33
..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	8	32
..	13	9	..	..	..	..	1	2	..	..	1	1	1	..	1	..	..	..	93	48	141
..	6	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	43	9	52
1	1	54	26	1	..	1	..	2	3	1	1	1	2	2	..	1	..	1	..	336	126	462

*Deaths by Suicide in

NATIVITY.	Cuts and Stabs.		Drowning		Gunshots.		Hanging.		Leaps.		Throwing Self in in Front of Cars.		Arsenic.		Carbolic Acid.		Cocaine.		Corrosive Sublimate.		Cyanide of Mercury.		Cyanide of Potassium.		Hydrochloric Acid.		Hydrocyanic Acid.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Austria-Hungary	3	..	..	I	10	..	2	..	..	2	..	..	..	..	8	4	..	..	..	..	..	..	..	..	..	..	..	..
Bohemia.....	..	..	..	..	..	..	I	..	..	..	..	..	..	..	I	I	..	..	..	..	..	..	..	..	..	..	..	..
British-America	..	I	..	..	I	..	I	..	I	..	..	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..	..	..
England.....	I	..	..	..	3	..	I	..	I	..	..	..	..	..	10	2	..	..	..	..	..	..	..	..	..	..	..	..
France.....	..	..	..	..	3	..	..	..	..	..	..	..	..	..	I	I	..	..	..	..	..	..	I	..	..	..	I	..
Germany.....	8	I	2	I	37	I	27	3	2	3	I	I	..	..	54	22	..	..	..	..	..	..	..	..	..	I	..	I
Ireland.....	4	I	I	..	5	..	2	I	I	2	..	..	..	..	13	17	..	..	..	..	..	..	..	..	..	..	..	..
Italy.....	I	..	..	..	3	..	..	..	..	..	..	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..	..	..
Russia.....	..	..	..	..	2	..	3	..	2	..	..	I	..	..	16	7	..	..	..	..	..	..	..	..	..	..	..	..
Other foreign countries.....	2	..	..	..	14	..	6	I	I	..	..	..	..	..	8	8	..	..	..	..	..	I	..	..	..	..	..	..
United States....	16	6	I	3	52	2	8	4	2	2	..	..	I	..	75	60	..	..	I	..	I	..	..	..	..	..	..	..
Unknown.....	1	..	2	..	18	..	7	..	..	..	..	..	..	..	23	12	I	..	..	..	..	..	..	..	..	..	..	..
Total.....	36	9	6	5	148	3	58	9	10	9	I	2	I	..	211	134	I	..	I	..	I	..	I	..	2	..	I	I

* The 805 Suicides in The City of New York occurred in the boroughs as follows: Manhattan, 462; The

The City of New York.

Illuminating Gas.		Irritant Poison.		Lead Poison.		Opium.		Morphine.		Narcotic Poison.		Nitric Acid.		Oxalic Acid.		Paris Green.		Potassium.		Strychnine.		Sulphate of Copper.		Swallowing Hairpins.		Wood Alcohol		Total by Sexes.		Total of Both Sexes.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
1	2	25	9	34
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	5
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	5
2	2	..	..	..	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	4	24
1	2	..	..	..	..	..	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	3	10
28	9	I	..	..	I	..	I	..	..	..	..	..	..	I	I	I	I	I	..	..	..	..	I	..	I	..	167	45	212	
..	1	..	..	..	..	..	..	..	..	I	..	..	..	..	..	..	I	..	..	..	..	..	..	I	..	..	27	24	51	
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	7
4	2	..	..	..	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	11	38
9	..	I	..	..	I	I	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	43	10	53
28	20	..	..	..	..	..	I	I	2	..	..	..	..	..	..	I	I	I	..	1	I	..	..	..	..	..	..	187	104	291
7	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..	61	14	75
84	40	2	..	1	..	2	2	3	3	I	..	I	..	I	I	3	3	2	..	I	I	..	I	..	I	I	..	579	226	805	

Bronx, 59 ; Brooklyn, 234 ; Queens, 32 ; Richmond, 18.

Deaths by Accident and Negligence.

	BOROUGH OF					CITY OF NEW YORK.
	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	
Fractures and Contusions—						
Crushed by boats, bridges, etc.....	1	..	..	2	..	3
“ by elevator.....	26	1	4	..	..	31
“ by machinery.....	5	1	14	1	4	25
“ by other means.....	33	4	8	..	1	46
Diving.....	1	..	1	..	..	2
Jumped from burning building.....	6	..	..	..	..	6
Struck by falling derrick.....	1	1	..	..	..	2
“ by falling stone from blast.....	..	1	..	..	..	1
“ by other falling bodies.....	26	4	14	3	..	47
Not defined by Coroners.....	157	..	25	4	1	187
Falls—						
From bridge.....	2	1	..	..	..	3
“ building.....	64	7	12	1	..	84
“ fire-escape.....	21	3	1	..	..	25
“ scaffold.....	17	2	15	1	1	36
“ window.....	52	9	31	1	1	94
Down air-shaft.....	11	2	2	..	..	15
“ areaway.....	3	..	1	1	..	5
“ elevator shaft.....	14	..	2	..	..	16
“ hatchway.....	3	..	..	..	..	3
“ stairs.....	44	5	50	4	2	105
On ship.....	5	..	11	..	2	18
“ sidewalk.....	15	..	15	1	1	32
Others.....	38	13	56	2	1	110
Not defined by Coroners.....	76	5	..	..	..	81
Street Vehicles—						
Run over by automobile.....	8	..	3	..	1	12
“ by trucks, wagons, etc.....	142	10	23	9	..	184
Fall from wagons, trucks, etc.....	24	4	14	1	..	43
Fall, knocked down by or thrown from bicycle.....	1	..	1	1	..	3

	BOROUGH OF—					CITY OF NEW YORK.
	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	
Burns—						
Explosion of lamp.....	5	..	10	1	..	16
In burning buildings, boats, etc.....	59	..	7	..	5	71
Oil or gas stoves.....	5	5	8	3	1	22
Other causes.....	13	6	67	5	4	95
Not defined by Coroners.....	110	..	2	1	..	123
Scalds -						
Escaping steam.....	..	..	2	..	1	3
Hot fluids.....	25	5	27	3	..	60
Not specified by Coroners.....	24	..	..	2	..	26
Explosions—						
Explosive compounds.....	3	1	6	1	..	11
Gases.....	2	2	..	..	..	4
Steam boilers, pipes, etc.....	1	..	..	..	..	1
Drowning—						
In tubs, pails, etc.....	..	..	1	2	..	3
In rivers, bays, etc.....	221	34	127	19	39	440
Horses—						
Kicked by.....	5	..	3	..	..	8
Runaways, falls, etc.....	5	1	3	..	..	9
Suffocation—						
Caving-in of embankment.....	2	..	2	..	..	4
Food in larynx.....	1	..	3	..	..	4
Foreign body in larynx.....	8	1	5	..	..	14
In burning buildings.....	..	..	2	..	..	2
Overlaid in bed.....	10	2	5	2	..	19
Others.....	9	8	3	1	2	23
Not specified by Coroners.....	4	1	..	1	1	7
Killed by Railroads—						
Elevated railroad.....	17	2	7	..	..	26
Trolley cars.....	25	13	54	6	17	115
Steam railroads.....	8	22	5	45	..	80
Cars not specified.....	56	3	2	4	..	65

	BOROUGH OF—					CITY OF NEW YORK.
	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	
Poisons—						
Alcohol.....	1	..	2	..	..	3
Ammonia.....	5	..	1	..	..	6
Arsenic.....	2	..	..	..	..	2
Bichloride of mercury.....	1	..	1	..	..	2
Bug mixture.....	1	..	..	..	..	1
Carbolic acid.....	43	1	10	..	..	54
Caustic potash.....	2	..	..	..	..	2
Chloral hydrate.....	3	..	..	..	..	3
Chloroform.....	6	..	2	..	..	8
Colchicum.....	1	..	..	..	..	1
Creosote.....	..	..	1	..	..	1
Ether.....	2	..	..	..	..	2
Hydrochloric acid.....	3	..	..	..	..	3
Illuminating gas.....	167	9	74	7	1	258
Gasolene.....	..	..	1	..	..	1
Irritant poison.....	5	1	1	..	..	7
Morphine.....	7	1	1	..	..	9
Opium.....	4	..	4	1	..	9
Oxalic acid.....	2	..	..	..	..	2
Paris green.....	1	..	..	..	..	1
Ptomaines.....	9	..	3	..	..	12
Soothing syrup.....	1	..	..	..	..	1
Strychnine.....	..	..	1	..	..	1
Stramonium.....	..	..	1	..	..	1
Sulphuric acid.....	1	..	..	..	..	1
Wood alcohol.....	3	..	1	..	..	4
Wounds—						
Gunshot.....	7	..	2	..	..	9
Incised.....	5	..	2	..	..	7
Lacerated.....	4	..	6	..	1	11
Others.....	1	..	4	..	..	5
Not specified by Coroners.....						
Circumcision.....	6	..	3	..	..	6

	BOROUGH OF—					CITY OF NEW YORK.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Caisson.....	1	..	..	..	..	1
Criminal abortion.....	6	3	8	..	..	17
Electric current.....	5	3	12	1	4	25
Neglect and exposure.....	2	..	4	..	1	7
Sunstroke.....	66	10	59	4	3	142
Surgical operations.....	27	..	..	..	..	27
Total.....	1,825	207	858	141	95	3,126

RECAPITULATION.

	BOROUGH OF—					CITY OF NEW YORK.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Fractures and contusions.....	256	12	66	10	6	350
Falls.....	365	47	196	11	8	627
Vehicles.....	185	14	41	11	1	252
Burns and Scalds.....	241	16	123	15	11	406
Explosions.....	6	3	6	1	..	16
Railroads.....	106	40	68	55	17	286
Drowning.....	221	34	128	21	39	443
Poison.....	270	12	104	8	1	395
Suffocation.....	34	12	20	4	3	73
Wounds.....	18	..	14	..	1	33
Horses.....	10	1	6	..	..	17
Criminal abortion.....	6	3	8	..	..	17
Sunstroke.....	66	10	59	4	3	142
Neglect and exposure.....	2	..	4	..	1	7
Surgical operations.....	27	..	..	..	..	27
Electric current.....	5	3	12	1	4	25
Circumcision.....	6	..	3	..	..	9
Caisson disease.....	1	..	..	..	..	1
Total....	1,825	207	858	141	95	3,126

Deaths in Institutions for Year of 1903.

BOROUGH OF MANHATTAN.

Almshouse	523
Babies' Hospital	194
Bellevue Hospital	2,163
Beth Israel Hospital.....	182
City Hospital	369
Columbus Hospital	41
Flower Hospital	145
Foundling Asylum	731
French Hospital	56
General Memorial Hospital.	41
German Hospital	204
Gouverneur Hospital	347
Hahnemann	33
Harlem Hospital	312
Home for Aged (Little Sisters of Poor).....	82
Home for Aged and Infirm Hebrews.....	30
House of Relief.....	251
Immigrants' Hospital	48
Infants' Hospital, Randall's Island.....	96
Lying-in Hospital	138
Manhattan State Hospital	402
Maternity Hospital	57
Metropolitan Hospital	881
Montefiore Home	99
Mount Sinai Hospital	325
New York Hospital	432
New York Infant Asylum	95
New York Infirmary for Women and Children.....	46
Nursery and Child's Hospital.....	107
Polyclinic Hospital	46
Post Graduate Hospital	327
Presbyterian Hospital	465
Randall's Island Hospital	85
Reception Hospital	78
Roosevelt Hospital	454
St. Francis' Hospital	206
St. Luke's Hospital	265

St. Mark's Hospital	80
St. Mary's Hospital	40
St. Vincent's Hospital	364
Skin and Cancer Hospital.....	4
Sloane Maternity Hospital	97
Trinity Hospital	14
Willard Parker Hospital	355
Workhouse Hospital	65
Wright Memorial Hospital	162
Other Institutions	399
	<hr/>
Total.....	11,936
	<hr/> <hr/>

BOROUGH OF THE BRONX.

Catholic Protectory	4
Fordham Hospital	115
Hebrew Infant Asylum	6
Home for Incurables	55
House of Nazareth	10
Lincoln Home and Hospital.....	314
Lebanon Hospital	202
Odd Fellows' Home	10
Riverside Hospital	261
St. Joseph's Hospital	606
St. Joseph's Home	2
Seton Hospital	209
Workhouse (Branch, Hart's Island).....	12
Other Institutions	30
	<hr/>
Total	1,836
	<hr/> <hr/>

BOROUGH OF BROOKLYN.

Almshouse	277
Brooklyn Maternity	15
Brooklyn Hospital	257
Bushwick Hospital	60
Cumberland Hospital	221

Eastern District Hospital	77
German Evangelical Home	36
German Hospital	126
Home for Aged (Little Sisters of Poor).....	90
Home for Consumptives	155
House of Good Shepherd.....	8
Infants' Hospital and Brooklyn Nursery.....	32
Kings County Hospital.....	815
Kings County Jail	7
Kingston Avenue Hospital	175
Long Island College Hospital.....	201
Long Island State Hospital.....	78
Lutheran Hospital	21
Methodist Episcopal Hospital.....	171
Memorial Hospital	35
Norwegian Hospital	98
St. Catharine's Hospital.....	350
St. Christopher's Hospital	10
St. John's Hospital	79
St. Mary's Hospital	216
St. Peter's Hospital	410
Williamsburg Hospital	29
Other Institutions	277
	<hr/>
Total	4,358
	<hr/> <hr/>

BOROUGH OF QUEENS.

Coombe's Sanitarium	11
Flushing Hospital	41
Jamaica Hospital	29
Mary Immaculate Hospital	20
Queens County Jail	5
Rivercrest Sanitarium	24
Sanford Hall	2
St. John's Hospital, Long Island City.....	189
Other Institutions	13
	<hr/>
Total	334
	<hr/> <hr/>

BOROUGH OF RICHMOND.

Almshouse	15
Mariners' Family Asylum.....	5
Mt. Loretto	10
Nursery and Child's Hospital.....	12
Quarantine Hospitals	4
Sailors' Snug Harbor	73
Seaside Hospital	45
S. R. Smith's Infirmary.....	159
United States Marine Hospital.....	43
Other Institutions	7
Total	<u>373</u>

Recapitulation.

Almshouses	815
Homes for Aged	464
Hospitals	15,202
Institutions for Children	1,601
Institutions for Insane	517
Prisons	148
Other Institutions	90
Total	<u>18,837</u>

Births by Nativities of Parents.

COUNTRY.	BOROUGH OF—										NEW YORK CITY.	
	MANHATTAN.		THE BRONX.		BROOKLYN.		QUEENS.		RICHMOND.		Nativity of Both Parents.	Nativity of Mother Only.
	Nativity of Both Parents.	Nativity of Mother Only.	Nativity of Both Parents.	Nativity of Mother Only.	Nativity of Both Parents.	Nativity of Mother Only.	Nativity of Both Parents.	Nativity of Mother Only.	Nativity of Both Parents.	Nativity of Mother Only.		
Austro-Hungary.....	6,089	926	109	48	640	180	47	16	21	1	6,906	1,171
Bohemia	600	145	7	9	6	2	50	15	..	..	663	171
British America.....	76	159	15	31	72	107	15	10	4	4	182	311
England.....	226	536	48	82	138	349	18	54	30	13	460	1,036
France.....	121	100	4	14	6	22	21	8	3	..	155	144
Germany.....	2,636	979	581	262	1,944	623	459	169	141	25	5,761	2,058
Ireland.....	3,870	1,681	337	212	1,485	782	149	116	119	56	5,960	2,847
Italy.....	9,912	142	606	15	3,704	32	274	1	129	2	14,625	192
Russia and Poland.	8,799	535	289	29	2,251	137	77	9	45	2	11,462	712
Scotland	72	139	21	23	71	101	18	28	5	6	187	297
Sweden	266	138	91	24	473	125	23	16	49	5	902	308
Switzerland.....	50	88	13	14	12	18	5	12	..	3	80	136
United States.....	11,372	4,011	2,400	676	10,630	2,485	1,736	408	680	162	27,318	7,742
Other foreign countries. ...	1,492	390	60	31	747	149	24	24	13	4	2,336	598
Unknown.....	16	11	1	1	1	..	..	..	5	..	23	12
Total.....	46,097	9,931	4,582	1,471	22,180	5,112	2,916	886	1,245	285	77,020	17,735

Disposition of the Dead, and of Still-born Infants in The City of New York.

CEMETERY.	BOROUGH OF—					NEW YORK CITY.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
Acacia.....	108	....	108
Aqueduct.....	1	....	1
Astoria.....	20	....	20
Bayside.....	551	....	551
Baron Hirsch.....	77	77
Bethel.....	47	47
Calvary.....	18,592	....	18,592

CEMETERY.	BOROUGH OF					New York City.
	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	
New Union Fields.....	194	25	219
Nursery and Child's Hospital.....	3	3
Paulist Fathers.....	I	....	....	....	....	I
Springfield.....	27	...	27
Sailors' Snug Harbor.....	59	59
Salem Fields.....	192	....	....	192
Sandy Hill.....	4	4
St. Andrew's.....	I	I
St. John's.....	1,884	....	1,884
St. Joseph's.....	15	15
St. Luke's.....	7	7
St. Mark's Churchyard.....	I	....	....	....	....	I
St. Mary's.....	155	9	164
St. Mary's, Third Ward.....	29	29
St. Mary's, Fourth Ward.....	98	98
St. Michael's.....	1,534	3	1,537
St. Monica's.....	48	....	48
St. Peter's.....	27	....	....	268	295
St. Raymond's.....	1,623	....	....	....	1,623
Silver Lake.....	1,266	1,266
Silver Mount.....	83	83
Staten Island.....	20	20
Sylvan.....	17	17
Trinity.....	107	....	....	....	....	107
Trinity Churchyard.....	II	....	....	....	....	II
Union Fields.....	437	....	437
United States Crematory.....	715	....	715
Vaughn.....	4	4
Washington.....	2,857	3	....	2,860
Woodhaven.....	5	....	5
Woodland.....	141	141
Woodlawn.....	1,766	....	....	....	1,766
Woodrow Church.....	II	II
West Baptist.....	5	5
Total.....	135	8,058	17,373	41,890	2,720	70,176

Deaths of Persons 100 Years of Age and Over.

DATE OF DEATH.	NAME.	AGE.			NATIVITY.	CAUSE OF DEATH.	BOROUGH OF—			
		Years.	Months.	Days.			Manhattan.	The Bronx.	Brooklyn.	New York City.
1903.										
Jan. 21..	Cohn, Esther.....	105	..	..	Russia.....	Senility.....	..	..	1	1
Apr. 30..	Bates, Eliza.....	103	..	..	United States..	Senility.....	..	1	..	1
May 30..	Davis, Barnet.....	100	..	..	Russia.....	Dilatation heart.	..	..	1	1
Nov. 3..	McNally, Margaret.	100	..	..	Ireland.....	Senility.....	1	..	..	1
Nov. 10..	Schneiderman, Chas.	100	..	..	Russia.....	Senility.....	1	..	..	1
Nov. 14..	Harrison, Maria....	100	..	..	England.....	Heart diseases...	..	..	1	1
Nov. 19..	O'Brien, Nora.....	102	..	..	Ireland.....	Senility.....	1	..	..	1
Nov. 27..	Cohen, Hannah R..	100	..	..	Russia.....	Senility.....	1	..	..	1
Nov. 28..	Mitnitsky, Isaac....	105	..	..	Russia.....	Senility.....	..	..	1	1
Dec. 11..	Price, Isaac.....	101	8	17	United States.	Apoplexy.....	..	..	1	1
Dec. 12..	Morgan Mary,	100	..	..	United States..	Senility.....	1	..	..	1
						Total.....	5	1	5	11

Report of Births for the Year ending

MONTHS.	TOTAL.	WHITE.		COLORED.	
		Male.	Female.	Male.	Female.
January.....	8,038	4,037	3,858	63	80
February.....	7,574	3,774	3,677	75	48
March.....	8,169	4,086	3,931	83	67
April.....	7,487	3,692	3,663	63	69
May.....	6,729	3,315	3,252	84	78
June.....	8,446	4,192	4,112	66	76
July.....	8,266	4,174	3,966	59	67
August.....	8,460	4,316	3,978	71	65
September.....	8,093	4,049	3,908	65	71
October.....	8,133	4,054	3,946	59	64
November.....	7,423	3,784	3,522	67	50
December.....	7,937	3,977	3,814	72	74
Total.....	94,755	47,492	45,627	827	809

Report of Marriages for the Year ending

MONTHS.	TOTAL.	WHITE.	
		Male.	Female.
January.....	3,363	3,263	3,263
February.....	2,930	2,838	2,844
March.....	2,697	2,615	2,615
April.....	3,214	3,213	3,123
May.....	2,412	2,334	2,337
June.....	4,268	4,128	4,123
July.....	2,907	2,805	2,807
August.....	2,603	2,535	2,536
September.....	3,207	3,102	3,107
October.....	3,436	3,330	3,332
November.....	3,582	3,475	3,476
December.....	3,555	3,450	3,451
Total.....	38,174	36,998	37,020

December 31, 1903, City of New York.

NATIVE PARENTS.		FOREIGN PARENTS.		MIXED PARENTAGE.		UNKNOWN PARENTAGE.		ATTEND- ED BY PHYSI- CIAN.	ATTEND- ED BY MID- WIVES.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		
1,139	1,129	2,537	2,238	563	537	41	34	4,280	3,758
1,172	1,115	2,133	2,064	514	520	30	26	4,257	3,317
1,206	1,237	2,370	2,171	558	552	36	38	4,592	3,576
1,026	1,023	2,120	2,188	508	489	31	32	4,056	3,431
1,012	996	1,912	1,854	444	443	31	37	3,598	3,131
1,297	1,270	2,352	2,312	582	574	27	32	4,705	3,741
1,163	1,118	2,456	2,327	583	563	31	25	4,532	3,734
1,269	1,131	2,506	2,311	618	576	24	25	4,667	3,793
1,183	1,126	2,236	2,236	561	594	34	23	4,468	2,825
1,120	1,099	2,404	2,307	569	574	30	30	4,432	3,701
1,070	947	2,252	2,096	500	496	29	33	4,046	3,377
1,142	1,092	2,316	2,263	562	503	29	30	4,292	3,645
13,869	13,283	27,515	26,367	6,562	6,421	373	368	51,945	42,810

December 31, 1903, City of New York.

COLORED.		NATIVE.		FOREIGN.		SINGLE.		WIDOWED.	
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
100	100	1,435	1,531	1,928	1,832	3,002	2,042	361	321
92	86	1,287	1,385	1,643	1,555	2,620	2,666	310	264
82	82	1,177	1,255	1,520	1,442	2,380	2,423	317	274
91	91	1,435	1,545	1,779	1,669	2,832	2,911	382	303
78	75	1,067	1,162	1,345	1,250	2,140	2,166	272	246
140	139	2,036	2,174	2,232	2,094	3,835	3,897	433	371
102	100	1,426	1,519	1,481	1,388	2,567	2,604	340	303
68	67	1,136	1,211	1,467	1,392	2,254	2,317	349	286
105	100	1,500	1,670	1,707	1,537	2,843	2,901	364	306
106	104	1,679	1,787	1,757	1,649	3,030	3,075	406	361
107	106	1,632	1,747	1,950	1,835	3,200	3,217	382	365
105	104	1,489	1,648	2,066	1,907	3,150	3,221	405	334
1,176	1,154	17,290	18,624	20,884	19,550	33,853	34,440	4,321	3,734

Table of Maximum, Minimum and Mean Temperature and Rainfall in the Vicinity of The City of New York at Fort Columbus, from 1822 to 1854; Deaf and Dumb Asylum from 1855 to 1868, and New York Observatory, Central Park, from 1869 to Date.

(Figures furnished by Daniel Draper, Ph. D., Director of Central Park Observatory)

YEAR.	TEMPERATURE—FAHR.					RAINFALL IN INCHES (INCLUDING SNOW WATER),					Depth of Snow (Inches).
	Maximum.	Month.	Minimum.	Month.	Mean.	Maximum.	Month.	Minimum.	Month.	Total.	
1822.....	100	July ..	-1	Jan....	54.2	....	....	....	....	....	....
1823.....	91	July ..	3	{ Feb. } { Mar. }	{ 50.5	....	....	....	....	....	....
1824.....	96	July ..	2	Feb....	52.1	....	....	....	....	....	....
1825.....	104	July ..	-3	Dec...	54.4	....	....	....	....	....	....
1826.....	97	July ..	-1	Jan. ..	52.5	....	....	....	....	....	....
1827.....	96	July ..	0	Jan. ..	51.8	....	....	....	....	....	....
1828.....	99	July ..	9	Jan. .	54.	....	....	....	....	....	....
1829.....	95	July ..	7	Jan. ..	52.5	....	....	....	....	....	....
1830.....	98	July ..	5	Jan. ..	54.8	....	....	....	....	....	....
1831.....	98	Aug...	8	Jan. ..	51.6	....	....	....	....	....	....
1832.....	97	Aug...	1	Jan. ..	51.5	....	....	....	....	....	....
1833.....	94	July ..	8	Mar...	51.5	....	....	....	....	....	....
1834.....	94	{ July } { Aug. }	{ 6	Dec...	{ 51.	....	....	....	....	....	....
1835.....	89	{ July } { Aug. }	{ -1	Jan...	{ 49.6	....	....	....	....	....	....
1836.....	89	{ July } { Sept. }	{ 0	Feb...	{ 47.6	6.46	June..	63	May...	27.57	....
1837.....	86	{ July } { Aug. }	{ 10	{ Jan... } { Feb. }	{ 49.1	9.50	May...	2.10	Sept. .	65.31	....
1838.....	94	{ July } { Aug. }	{ 13	Feb...	50.3	4.96	Sept...	1.83	July ..	41.90	....
1839.....	86	July ..	6	Jan...	51.2	7.61	Dec...	.69	Jan. ..	42.97	....
1840.....	91	June..	2	Jan...	51.2	4.59	Oct...	1	Dec...	29.80	....
1841.....	92	June..	9	Jan...	51.2	5.30	Jan...	.80	Feb. .	42.08	....
1842.....	85	{ July } { Sept. }	{ 16	{ Jan... } { Feb. }	{ 53.4	4.30	Oct ...	1.07	Jan...	33.98	....
1843.....	93	{ June } { July }	{ 9	Feb...	51.4	15.26	Aug...	.76	June. .	41.37	....
1844.....	92	June..	3	Jan...	52.	6.	July...	.55	April .	36.38	....
1845.....	99	July...	6	Feb...	53.3	4.87	Jan ..	1.22	April..	34.08	....
1846.....	95	July...	5	Feb...	52.3	9.70	May ..	.48	Sept...	48.91	....
1847.....	94	June..	12	{ Feb. } { Nov. } { Dec. }	{ 52.3	6.93	Aug...	1.53	April .	64.85	....
1848.....	91	{ June } { July }	{ 3	Jan...	52.3	7.28	May ..	1.16	April..	36.80	....
1849.....	94	July ..	0	Jan...	50.2	5.63	Oct...	.61	Jan ...	31.74	....

YEAR.	TEMPERATURE—FAHR.					RAINFALL IN INCHES (INCLUDING SNOW WATER.)					Depth of Snow (Inches).
	Maximum.	Month.	Minimum.	Month.	Mean.	Maximum.	Month.	Minimum.	Month.	Total.	
1850.....	94	July ..	9	Feb...	50.9	9.20	May ..	2.33	Nov...	54.53	....
1851.....	93	July ..	4	Dec...	52.1	6.94	April..	.90	June..	40.88	....
1852.....	93	July ..	—2	Jan...	51.4	6.20	Aug...	2.06	Oct...	43.84	....
1853.....	98	June..	9	Jan...	52.2	6.89	Nov...	1.04	Dec...	52.20	....
1854.....	93	July...	5	Dec...	50.7	8.80	April..	.70	Mar...	45.18	....
1855.....	93	July ..	—7	Feb...	50.7	7.37	Oct...	1.57	Sept...	51.76	....
1856.....	95	July ..	—5	Jan...	50.5	6.73	Aug...	.66	Feb ..	41.92	....
1857.....	90	Aug...	0	Jan...	52.1	9.05	April..	1.30	Nov...	53.88	....
1858.....	93	June..	—3	Feb...	53.1	6.42	June ..	1.47	Mar...	52.87	....
1859.....	96	July...	—5	Jan...	53.1	8.21	Mar...	1.75	Oct...	57.28	....
1860.....	89	July...	—7	Feb...	52.9	7.57	Nov...	1.43	June..	45.17	....
1861.....	92	Aug...	—3	Feb...	53.8	8.09	Nov...	1.73	Dec...	56.52	....
1862.....	95	Aug...	8	Dec...	53.2	9.03	June..	1.91	Dec...	53.98	....
1863.....	90	June ..	6	Feb...	54.2	8.60	July ..	1.05	Sept...	57.03	....
1864.....	97	June ..	8	Feb...	55.4	5.90	Dec...	2.04	Feb...	48.01	....
1865.....	95	July...	6	Jan...	55.5	10.42	June..	2.23	Aug...	62.86	....
1866.....	98	July ..	—13	Jan...	52.1	10.09	Feb...	1.67	July ..	51.68	....
1867.....	91	June..	4	Jan...	49.8	10.18	June...	.78	Sept...	54.61	....
1868.....	92	July...	0	Feb..	48.6	9.60	Sept ..	2.01	Oct...	64.02	....
1869.....	94	Aug ..	4	Mar...	51.4	6.87	Feb..	1.39	Apr...	46.47	30.67
1870.....	94	June ..	9	{ Feb. . Dec.. }	53.5	5.11	Apr. .	1.83	May ..	42.12	25.49
1871.....	92	May ..	—2	Dec...	51.1	7.50	Oct. .	2.07	Jan. .	51.26	34.22
1872.....	95	July...	3	{ Mar.. Dec.. }	51.0	7.83	July ..	1.29	Feb....	42.49	40.37
1873.....	94	July...	—1	{ Jan .. Feb.. }	50.9	9.56	Aug ..	1.28	June..	47.99	40.93
1874.....	98	June ..	3	Feb..	51.3	8.77	Apr. .	1.70	Oct...	45.83	35.62
1875.....	93	June ..	—3	Jan...	49.4	8.97	Aug...	1.33	May ..	40.90	48.25
1876.....	98	July...	3	Dec ..	51.8	8.79	Mar ..	.94	Jan...	41.77	30.74
1877.....	92	July...	10	Mar...	52.7	8.14	Oct ...	.68	Dec...	40.13	27.37
1878.....	94	July...	7	{ Jan .. Feb.. }	53.5	7.97	Aug ..	1.97	Apr. .	48.66	13.74
1879.....	98	July...	—4	Jan. .	52.3	7.95	Aug ..	.43	Oct ...	39.03	37.62
1880.....	96	May ..	—6	Dec. .	53.2	8.53	July ..	.62	May. .	36.64	27.62
1881.....	101	Sept...	—3	Feb...	52.3	5.81	Mar ..	.86	Aug ..	36.26	23.75
1882.....	93	July ..	—6	Jan. .	51.9	16.85	Sept...	1.14	Aug ..	45.30	20.14
1883.....	95	July...	—1	Dec...	50.4	4.53	Oct ...	1.49	Mar...	35.77	52.50

YEAR.	TEMPERATURE—FAHR.					RAINFALL IN INCHES (INCLUDING : (SNOW WATER).					Depth of Snow (Inches)
	Maximum.	Month.	Minimum.	Month.	Mean.	Maximum.	Month.	Minimum.	Month.	Total.	
1884.	91	{ June . Aug.. Sept..	-3	Dec...	52.4	6.17	Dec. . .	.21	Sept ..	52.25	31.50
1885.	99	July...	-2	Feb. . .	51.1	5.67	Aug ..	.41	Sept ..	38.34	23.25
1886.	94	July...	-4	Feb. . .	51.0	5.40	May...	.95	Aug...	39.38	31.00
1887.	96	July...	4	Jan. . .	50.9	7.76	June. .	.31	May...	43.99	31.87
1888.	96	June...	0	Jan. . .	49.3	8.16	Sept . .	1.53	July...	53.32	37.75
1889.	91	{ May . June..	3	Feb ...	52.7	11.89	July ..	1.10	Dec...	57.16	21.00
1890.	98	July...	7	Mar...	52.7	6.56	Oct....	.71	Nov ..	45.63	29.63
1891.	98	Aug...	9	Mar...	58.8	6.12	Jan ...	1.48	June ..	39.55	17.37
1892.	97	July...	9	Jau. . .	51.8	7.14	Nov...	.59	Oct. . .	35.60	34.63
1893.	95	June. .	1	Jan ...	50.4	8.72	Aug ..	1.13	July...	48.26	45.62
1894.	96	July ..	1	Feb. . .	52.7	8.68	Sept...	.98	June..	41.01	35.25
1895.	97	Sept ..	-4	Feb. . .	52.6	5.01	Jan. . .	.46	Feb ...	35.37	22.75
1896.	98	Aug ..	-5	Feb. . .	53.4	7.41	July ..	.96	Jan...	41.96	64.00
1897.	93	{ July . Sept..	6	Jan ...	53.4	9.56	July ..	.72	Oct ...	44.55	31.75
1898.	100	July ..	8	Feb. . .	54.5	6.72	May ..	1.25	June. .	47.90	35.25
1899.	95	{ July.. Aug. .	-6	Feb. . .	53.5	6.12	Sept ..	1.09	Mar ..	38.57	35.37
1900.	97	July...	5	Feb. . .	53.7	5.38	Feb. . .	2.01	Dec. . .	41.19	13.37
1901.	100	July ..	8	Jan ...	52.0	7.64	July ..	.55	Feb...	48.63	10.62
1902.	90	July ..	8	Dec. . .	52.8	7.16	Oct....	1.28	Nov ..	52.77	42.74
1903.	95	July ..	4	Fel ...	52.4	13.31	Oct ...	.30	May. .	58.32	20.50

