



Annual Report

of the ...

Department of Health

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The City of New York
1909





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ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE

DEPARTMENT OF HEALTH OF THE CITY OF NEW YORK

FOR THE

YEAR ENDING DECEMBER 31, 1909.



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BOARD OF HEALTH.

December 31, 1909

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THEODORE A. BINGHAM, . . . Commissioner of Police (to July 1, 1909).

WILLIAM F. BAKER, Commissioner of Police (July 1, 1909, to December 31, 1909).

General Medical Officer of the Department, HERMAN M. BIGGS, M. D.

Secretary,
EUGENE W. SCHEFFER.

JOHN P. HILLY,
CHARLES D. O'CONNELL.



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Borough Chief of the Division of Contagious Diseases, Manhattan.

ROBERT H. HERKIMER, M. D.,

(January 1, 1909, to June 10, 1909),

S. DANA HUBBARD, M. D.,

(June 17, 1909, to December 31, 1909),

Borough Chief of the Division of Contagious Diseases, Brooklyn.

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Borough Chief of the Division of Contagious Diseases, The Bronx.

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Borough Chief of the Division of Communicable Discases, Brooklyn.

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Borough Chief of the Division of Communicable Diseases, The Bronx.

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H. W. PATTERSON, M. D.,

Borough Chief of the Division of Communicable Diseases, Richmond.

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Chief of the Division of Child Hygiene.

JOHN J. CRONIN, M. D.,

Borough Chief of the Division of Child Hygiene, Manhattan.

R. H. WILLIS, M. D.,

Borough Chief of the Division of Child Hygiene, Brooklyn.

BAYARD C. FULLER,

Supervising Food Inspector.

WILLIAM H. PARK, M. D., Director, Research Laboratory.

IOHN H. HUDDLESTON.

Director, Vaccine Laboratory.

ROBERT J. WILSON, M. D.,

Superintendent of Hospitals.

JAMES P. ATKINSON.

Chemist.

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CLARENCE C. RICE, M. D	Consulting Laryngologist.
GEORGE HENRY FOX, M. D	Consulting Dermatologist.
ROGER S. TRACY	Consulting Statistician.
DANIEL DRAPER, PH.D	Consulting Meterorologist.
STEVENSON TOWLE	Consulting Engineer.
ARTHUR B. DUEL, M. D	Consulting Otologist.
SIMON FLEXNER, M. D	Consulting Pathologist.
ERNST J. LEDERLE, PH. D	Consulting Sanitarian.



MEDICAL BOARD OF THE WILLARD PARKER AND RIVERSIDE HOSPITALS.

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Ex-Officio Members.

The Commissioner of Health.

The General Medical Officer

The Director of the Research Laboratory.

The Chief Medical Inspector, Division of Contagious Diseases.

Consulting Physicians to the Willard Parker and Riverside Hospitals.

J. WINTERS BRANNAN, M. D. W. P. NORTHRUP, M. D.

Attending Physicians to the Willard Parker and Riverside Hospitals.

JOSEPH E. WINTERS, M. D.

HENRY D. CHAPIN, M. D.

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HENRY W. BERG, M. D.

JOHN HOWLAND, M. D.

MATTHIAS NICOLL, JR., M. D.

Visiting Physicians to the Sanatorium for Tuberculosis at the Riverside Hospital.

S. A. KNOPF, M. D.

WILLIAM J. PULLEY, M. D.

IOHN H. HUDDLESTON, M. D.



DEPARTMENT OF HEALTH.

REPORT FOR THE YEAR ENDING DECEMBER 31, 1909.

New York, September 27, 1910.

To his Honor the Mayor of The City of New York:

SIR—I have the honor to transmit herewith the report of all the operations of the Department of Health of The City of New York, during the year ending December 31, 1909, as required by Section 1168 of the Greater New York Charter.

Respectfully yours,

Eugene W. Scheffer, Secretary.

DIVISION OF GENERAL SANITARY INSPECTION.

The Division of General Sanitary Inspection is the oldest Division in the Department of Health. At the time that the Department commenced its activities, all inspectors were appointed as sanitary inspectors, and subsequently they were divided into two classes, viz.: lay

sanitary inspectors and medical sanitary inspectors.

The medical sanitary inspectors not only performed sanitary work, but in addition, work of a medical nature in relation to infectious diseases. As the work of the Department increased, it was divided into the Sanitary Division and the Division of Contagious Diseases. The larger percentage of inspections of the Department of Health devolve upon this Division. A great deal of the work originates through complaints received from citizens, either in person, by telephone, through the mails or from the other Departments.

The administration of the work is carried on through the branches in each Borough of the Division, each having a Borough Chief in charge. Inspectors are assigned to each Borough in accordance with its size and population. The respective Boroughs are divided into districts, to each of which is assigned a sanitary inspector, who is held

responsible for the district to which he is detailed.

He is required to devote all of his time during working hours, when not engaged in complying with direct orders of the Department, to original investigations of the sanitary conditions existing within his district, submitting reports when necessary upon which notices or orders may be issued. This Division further requires its inspectors to investigate, submit reports, and make recommendations upon the numerous applications for permits of various kinds, which are granted by the Board of Health.

Each inspector is also required to visit, from time to time, the premises in his district for which permits have been granted, and to see that the premises in question are maintained in a sanitary condition

and in accordance with the existing law.

The reports upon which all notices and orders are issued, are handled through the office of the Chief of the Division of General Sanitary Inspection, with the result that all papers of the indicated character emanating from the Department of Health are uniform in substance, and recommendations for abatement of nuisances are couched in the same language throughout the entire city.

APPLICATIONS FOR PERMITS.

The granting of permits for various purposes has been conducted with the same regulations in force as have been prescribed in former

years. No changes have been made in the character of permits issued. The most frequent permits found necessary are the following:

To maintain manure dumps.

To yard and keep cattle, swine, geese, ducks and fowl.

To keep birds and small animals for sale.

To keep cows.

To maintain slaughter houses.

To render fat and lard. To keep stables in cellars.

To keep bathing establishments.

To keep lodging houses.

To use well water.

To operate smoke houses.

To manufacture carbonated and mineral waters.

To cart offensive materials.

To sell milk.

To pasteurize milk:

REFUSE MATERIAL.

The collection and transportation of refuse materials is a public necessity, and one of growing importance. Wagons engaged in this business are all operated under permits issued by this Division. All permits of this character expire within the calendar year, and are subject to revocation at any time for violation of their provisions.

The members of the Health Squad are required to exercise a constant supervision over these wagons and mode of conducting the business, for which permits have been issued. In 1909, permits were

granted by this division as follows:

	Manhattan.	Bronx.	Brooklyn.	Queens.	Total.
Manure	811	138	107	436	1,492
Fat and Bone	199	138 13 21	24	37	
Swill	• 43	21		1	²⁷³ 65
Garbage	100			12	112 85 723
Street-Sweepings	85 640				85
Ashes	640	3	80	• • • •	723
Grease	41	• • • •	• • • • •	• • • •	41
Offal	3		••••		- 3
Scavengers	I	358	420	2,091	2,870
Total	1,923	533	631	2,577	5,664

STABLES.

Frequent complaints are received in this Department as regards the condition of the stables of this City. Owing to the excessive value of land, stables are so constructed as to harbor the greatest number of horses possible in the smallest space. The wood construction of many stables becomes saturated with liquid matter in a condi-

tion of decomposition, and often gives rise to nuisance in the form of odors, and requires constant vigilance on the part of the Department. The decomposition of manure in these stables, is often the cause of additional nuisance. The enforcement of the provision of the Sanitary Code regarding its storage within buildings, and its removal every twenty-four hours unless pressed into barrels, bales or boxes to one-third its original size, the regular cleansing of the removable racks, floors and stalls, are the only effectual means of preventing a considerable number of offensive nuisances.

In the Borough of Manhattan, a large number of stables are located in cellars. To maintain these stables it is necessary to obtain a per-

mit from the Board of Health.

No applications for permits are granted unless stables are well ventilated and lighted, and have floors of concrete or cement which are properly graded towards sewer-connected valley drains; have provision for removing manure daily, and have at least 800 cubic feet of air space for each horse. A further nuisance which may be attributed to stables is the prevalence of flies, which in turn become the carriers of filth to exposed foodstuffs throughout the markets and houses, and may become in many cases a source of infection and a carrier of disease.

There is no doubt but what the fly question is fully as serious as that of the mosquito, but unfortunately the breeding places of the fly are not so completely localized as the mosquito, consequently work over a much larger field is necessary in order to accomplish an appreciable result in the extermination of this insect.

SLAUGHTER HOUSES.

The increase in the industry of slaughtering cattle and fowl within this City, has during the past year, made necessary a series of changes as regards their supervision by the Department of Health. At various times in the past they were inspected and supervised daily by members of the Health Squad, or by the Sanitary Inspector of the district, under the charge of the Sanitary Inspector especially detailed for that purpose. For various reasons, none of these methods proved to be completely satisfactory.

The system in force at the present time requires the inspector of the district to make frequent inspections of the slaughter houses and their allied industries; at stated intervals, an additional inspection of a most thorough nature, by an inspector expressly detailed for that pur-

pose.

As is well known there are no cattle slaughter houses in the Borough of The Bronx or in the Borough of Queens. The two slaughter house areas in Manhattan are both very small and restricted by law. The slaughter houses are so situated in the Borough of Brooklyn that they cannot be conveniently increased in number without violating the Charter restrictions; therefore, there has been no increase in the number of beef and small stock slaughter house permits. There has been, however, a very material increase in the number of poultry slaughter

houses. The following table will show the increase of poultry slaughter houses during the past year:

Poultry Slaughter Houses.

	January 1, 1909.	December 31, 1909.	Increase.
Manhattan. The Bronx Brooklyn. Queens	48 6 26 2	52 11 45 3	. 5 19
Total	82	111	29

The slaughter houses have been kept under such thorough supervision, that in the Borough of Manhattan practically no complaints have been received against them, nor against disposal plants. Four complaints were received against the slaughter houses other than poultry in the Borough of Brooklyn.

Upon investigation the causes of these complaints were found to be minor defects, which were readily remedied, so it is safe to say that there is practically no nuisance or offense arising from this industry

within the City.

POULTRY SLAUGHTER HOUSES.

More complaints have been received against poultry slaughter houses than against those where larger animals are killed. This arises from a number of causes. The character of the animals handled, and the fact that the slaughter houses are conducted in a smaller way, with but few irresponsible employees, who do not realize the necessity of scrupulous cleanliness, gives additional cause for a complaint in regard to the odors arising from such premises.

It has been necessary during the year to recommend a revocation of quite a number of permits for poultry slaughter houses. In some instances where the premises were cleaned and repaired, the permits were

reissued.

HOUSEHOLD DRAINAGE IN OUTLYING DISTRICTS.

The question of drainage in a growing community is always a most serious one. The fact is, that there are many sections in this City where there are no sewer accommodations of any kind, and where a large number of houses are compelled to depend upon cesspools for the disposal of their liquid waste. In other instances, there are places where the sewers are simply intended and used to dispose of surface water and no house connections permitted. In some parts of the City there are small freshwater streams which were originally unpolluted country brooks, but during the advance of years have become open sewers. During the past year, inspections have been made along the banks of these streams. Where it was found that the house sewers were discharging into them, orders requiring the discontinuance of this

practice were issued. This, of course, entails considerable expense and hardship upon the individual owners, but it has been essential for the benefit of the community at large. In all instances where these conditions were found in addition to the action taken by the Board of Health, the matter was referred, through the proper channels, to the Borough President of the respective Boroughs. In some of the worst cases in the Boroughs of Brooklyn and The Bronx, plans have been drawn for the construction of sewers.

In connection with this subject, there is another one of vital importance. In growing communities, where there are no sewers and perhaps no public water supply, the inhabitants are compelled to depend entirely upon wells for their water supply. The construction of any considerable number of cesspools or defective privy vaults will necessarily lead to the pollution of the wells, so that where a defective cesspool or privy have been found in the immediate vicinity of a well, a sample of the water has been taken, and if upon chemical and bacteriological examination the water was found to be contaminated, its use was prohibited.

Mosquitoes.

During the spring and early summer, a large amount of work was done by district inspectors, especially in The Bronx and Brooklyn, in reference to the cleaning, grading and draining of vacant lots in order that the smaller breeding places for mosquitoes might be removed.

This work was in connection with the work accomplished in draining the large areas of marsh lands in the Boroughs of Queens and The Bronx and in the southwesterly portion of the Borough of Brooklyn. In the furtherance of this work 4,968 acres were drained or graded and 1,638,952 lineal feet of trenches were dug, distributed as follows:

Bronx Queens	
Total	1,638,952

At the present time there are 920 acres of undrained areas against which notices or orders have been issued, but the owners have not as yet taken steps to accomplish the desired results. They are distributed as follows:

Bronx	8oa
Queens (exclusive of Jamaica and Train Mead-	
ows)	120
7D + 1	
Total	920

The work accomplished is described more in detail in the following statement prepared by the Sanitary Engineer who has had the supervision of the drainage work since its inception.

BOROUGH OF QUEENS.

Little Neck.—Early in the spring the laborers cleaned the trenches dug in 1908. Several inspections were made during the year and no

evidence of mosquito breeding found.

The track of 20 acres adjoining, across the line in Nassau County, has been acquired by a progressive realty concern, who have promised to drain the entire area in the coming spring. This will not only complete the work in this entire section, but will prevent the Bayside and Douglaston section being troubled by migrations from Little Neck.

Acres drained	125
Acres undrained	None
Linear feet	15,562
Orders issued	
Orders complied with	12

Bayside and Douglaston.—In the spring two laborers were sent to look after the trenches for two weeks, and the Civic Association of Douglaston furnished one man, who continued the work of general

maintenance until October 1.

An appointment was also made with the Secretary of the Association, the ground was thoroughly gone over with him, and the people living along the margin of the meadows visited. They all agreed in saying that there were no mosquitoes, that the entire neighborhood was practically mosquitoless.

Acres drained	200
Acres undrained	None
Linear feet	73,300
Orders issued	
Orders complied with	48

Flushing (Including Corona, Elmhurst, Head of the Vleigh, Hill Creek, College Point).—Flushing Meadow proper, from Flushing Bay to Strong's Causeway, is all drained, with three exceptions.

First, 28 acres north of Jackson avenue. The responsibility for this

property is not yet definitely fixed.

Second, about 15 acres just south of Jackson avenue, the owner-ship of which it has been impossible to ascertain. The City laborers have worked at this when they were not needed on other work, thus keeping them employed and preventing the necessity of asking that the Department give out contract for the performance of this work.

Third, in the area south of the Long Island Railroad, and up to Strong's Causeway, about 75 acres, the ownership of which has not been definitely learned, was therefore undrained. This is now included in the large area being filled by the Brooklyn Development Company, both by dumping from cars on railroad sidings and by material arriving on scows. The filling is partly on the undrained 75 acres, and has rendered the drainage of the remainder difficult by stopping up the small creeks, which run through it and furnish natural outlets. A system of drainage has been devised to take their place, and the owners

have agreed to have the necessary trenches dug and filled before the

end of the year.

Head of the Vleigh (from Strong's Causeway South).—This area has been entirely drained and is in good condition. This section will require considerable maintenance work to prevent ditches from being stopped up, as the natural drainage is poor. This is true of all the other arms of the creek running up to Corona, Elmhurst and elsewhere.

Corona and Elmhurst.—Both these districts were so congested by reason of their flat topography and winding creeks, that it has been necessary to dig long, straight canals to furnish inlet and outlet. Those in the Corona section were dug by property owners; those in Elmhurst by the Department. Both sections will require considerable maintenance care.

Mill Creek and the Bowne Mill Dam.—The drainage is as good as can be obtained under existing conditions, except one piece of property at the upper end, and which is now under contract. The trouble along Mill Creek is doubtless due to the Bowne Mill Dams, which were built over 100 years ago. Removing the dams will not remove the trouble, because the sediment of 100 years has gradually filled up the creek and the mill pond itself. The dams should be taken out and dredges will then be needed to remove the sediment. The Flushing Bay Improvement Company plans to do this as soon as it can acquire the ownership of the adjacent properties.

The canal dug by the Department along the northerly side of Mill Creek serves two purposes. First, to drain the meadow along the creek, which had become a morass; second, to furnish a straight outlet to the large amount of water constantly flowing down from Kissena Lake. This flow was almost stopped at Jamaica avenue, and had it not been for this channel, serious conditions would have prevailed. The canal also carries off the discharge from two sewers, which before

discharged over a large area.

The owners of the property east of Jamaica avenue, extending to Kissena Park, have agreed to dig the necessary ditches in their property early in the spring, and efforts will be continued to get the Park Department to drain the Kissena Park property which they can do by connecting with these ditches. By these means, Kissena Park can be

made an attractive and desirable resort.

College Point.—The meadow from Flushing Bay to the Whitestone Branch of the Long Island Railroad is all satisfactorily drained. One part, west of, and adjoining the College Point Causeway, has been filled, in an admirable manner, and will require no attention. West of the railroad and up to Fifth avenue, the property differs from all others. Many years ago a tide gate was put in to prevent the inflow of tide water. This gate, although repaired at the direction of the Department, does not fully perform its function, admitting more or less tide water, and a large amount of sewerage from College Point and Flushing. The inspectors succeeded in having a great deal of work done, and there was no mosquito breeding here during the past summer. It is, however, a very difficult region to deal with, and it will be kept

under constant observation. The owners, who have so far complied with the orders have been informed that some further drainage may be required in another and more unfavorable season. There is one small tract of about two acres, the ownership of which has only recently been ascertained, which is still undrained.

In this section north of Fifth avenue, only two properties have been drained. This is due to the fact that it was necessary to clean up the outlets below Fifth avenue, and also to get the Department of Highways to put in better drains at lower levels under that avenue. These

drains have been provided for.

The City laborers have been practically confined in their work to the region about Flushing, in order to secure the maintenance of such conditions as would prove the efficacy and value of systematic mosquito

extermination.

Acknowledgment is made to the Sewer Department in clearing up and deepening, at the request of the Department of Health, that section of Jackson Creek which lies between Flushing avenue and Jackson avenue, which has, for many years, been used by the City for sewer purposes.

Acres drained	200
Orders issued	15
Orders complied with	15

Maspeth.—This section running back from Newtown Creek to the Adler Monumental Works at Old Brook School road, was in bad condition. It has been successfully remedied by draining everything up to Adler's, and by requesting the Department of Highways to remove the obstruction in Old Brook School road and provide a large and roomy culvert. This furnished a complete outlet for the water which has for years stood in a badly congested pond at this point.

Acres drained	134
Acres undrained	None
Linear feet of drainage	28,706
Orders issued	
Orders complied with	IO

Jamaica Meadows.—Work was begun on the Jamaica Meadows at the westerly line of the Borough of Queens, and most of the meadows have been covered. About 685 acres have been drained, or are now under contract. About 300 acres are in process of filling. The adverse result of the jury trial at Elmhurst, in attempting the forcible execution of orders of the Department of Health regarding drainage has had a tendency to inhibit the accomplishment of such work. Efforts have continued, however, in spite of the difficulties, and about 985 acres have been drained. Another difficulty, which the Department encountered, was the unusually large number of tracts, the ownership of which, could not be ascertained. These tracts, aggregating 81 acres, were finally submitted to the Board of Health with the recommendation that they authorize the performance of this work. Contracts have been let and the work will be started when weather con-

ditions permit. The building of the Long Island Railroad from Aqueduct to the Bay cut off one hundred acres of natural drainage. The co-operation of the railroad company has finally been secured, and a pipe will be laid for a length of several hundred feet to conduct water to the culvert at the creek just north of Ramblersville, by which outlet to tide water can be secured. Following this, the meadow south of this point and east of the railroad will be promptly drained.

Acres drained or under process of drainage	685
Acres in process of being filled	300
Linear feet of trench so far actually completed	113.031
Orders issued	. 86
Orders complied with	42
Orders pending	44

In closing the report on the Borough of Queens, it may be mentioned that the successful results of drainage work, as regards mosquito extermination, have been favorably commented upon by several of the civic and business associations of this Borough.

BOROUGH OF THE BRONX.

Work commenced in this Borough, February 13, 1909. First ditch dug March 17, 1909.

Claremont Heights (inland).—The mosquito breeding grounds in this district are inland, and differ essentially from those found in the Borough of Queens, which are exclusively salt water breeding grounds. Numerous streets being filled in and regraded has created new breeding places for mosquitoes. These foci have been removed by the Department's orders upon these properties, requiring them to be filled or drained.

Orders	issued	13
Orders	complied with	13
Orders	pending	

South of One Hundred and Sixty-seventh Street, between River and Jerome Avenue.—The northwest corner of One Hundred and Sixty-second street and River avenue was found to be the most prolific breeding place in this section. These foci were on both City and private properties, and were caused by the neglect of proper filling in of the streets. These were eliminated, as were also those in the Cromwell Creek section.

Orders	issued	I
	complied with	I
Orders	pending	

Riverdale.—Owing to lack of proper sewer connections, and improper care in maintaining tanks and wells, covered or otherwise, mosquito breeding places during the past year were numerous and large in area. Unused tanks and wells were emptied of water and filled

in, while those found defective and in use were repaired and screened.

Orders issued	8
Orders complied with	4
Orders rescinded	I
Orders pending	3

Salt Meadows.—The Bronx Salt Meadows comprise parts of Kingsbridge, Hunts Point, Classon Point, Castle Hill, Unionport, Westchester, Throgg's Neck, Eastchester, Baychester and Locust Point.

Clason Point.—Fifty per cent. of the meadows between the Bronx River and Clason Point road have been drained and filled. Great difficulty in ascertaining the names of the owners, in locating small lots and in getting proper service on the heirs of different estates, has made the work of the Department in this locality particularly difficult. The removal of a dam, which occupies a portion of this property, would remedy the nuisance to a great extent. Larvae have been found plentifully this year on the Trask estate. The Watson estate in this section is being filled rapidly.

Between Pugsley Creek and Clason Point road there exists an area

of land which has been partially drained.

Castle Hill.—All meadows were drained in this section.

Unionport and IVestchester.—All meadows belonging to known owners are being drained or filled.

Throggs Neck .- The mosquito producing areas in this section have

been drained with the exception of ten acres.

Fort Schuyler.—The meadows adjacent to the Government Reservation have been drained.

Eastchester.—Fifty-four per cent. of the meadows have been drained. Of the undrained meadows there are 60 acres, the ownership

of which the Department has been unable to determine.

Baychester.—All meadows of known owners have been drained with the exception of Plot 5, Lot 10-A, now under contract. The culverts under the N. Y., N. H. & H. R. R. tracks were necessarily lowered 18 inches before work could be started over this area.

Locust Point.—One piece of meadow, about 50 acres, the ownership of which was not ascertainable, was drained by the Department of

Health.

It is a noticeable fact that since the work of drainage of marsh lands in The Bronx, by the Department, has been instituted, there has

not been a case in Court.

Salt Marsh.—Acreage privately drained, 1,439; acreage drained by Department of Health, 50; acreage undrained, 800, exclusive of Pelham Bay Park, consisting of 450 acres, as computed by Department of Parks. Number of linear feet of trenches, 490,996; trenches average two feet deep and ten inches wide.

Orders	issued	323
Orders	complied with	257
Orders	rescinded	13
Orders	pending	53

Special.—It may be remarked that active larvae were found under thin ice on Castle Hill meadows on October 20, which definitely proves that larvae of the Culex Sollicitans do not become completely extinct with the first appearance of ice.

Some difficulty has been encountered in keeping the trenches from being clogged with sods and debris constantly thrown up by the tide.

During the summer season of the past year, numerous complaints were received regarding the prevalence of mosquitoes in the upper and middle sections of the Borough of Manhattan. As there exist no mosquito breeding areas in these neighborhoods, attention was called to water tanks on the roofs, and approximately 10,000 inspections, with this object in view, were made. In slightly more than two per cent. of the houses inspected, the tanks were found to be unprotected, and in a considerable number of them, the larvae were found in active condition. Suitable notices were issued requiring that tanks be cleaned and provided with proper tight fitting covers or screens. When these notices were complied with, there was a marked diminution in the number of mosquitoes.

By far the most notable results of the work of the Department of Health regarding drainage of land and filling, for mosquito extermination have been obtained in The Bronx. Accomplishment of this work has been made possible because the property is owned by a few large estates; and active building operations under way in this vicinity have furnished quantities of rock and earth, which could be used for filling purposes. A few weeks of continuous work in the coming year will

complete these improvements.

Public Water Supplies.

In addition to the usual samples of the City Water Supplies, which have been taken frequently in former years for chemical analysis, it has been the custom, during the past year, for bacteriological analyses and accumulations to be made at regular intervals. Where these combined reports have given reason to suspect that the water was contaminated, inspections have been made to discover and remove the source of the pollution.

The water supplies of Greater New York being of varied characters, they have to be classified according to their distinct and respective

sources.

A searching investigation is being made of the Croton Watershed, and a complete classification as to the characters, chemical and bacteriological, of the subterranean waters of the Boroughs of Brooklyn and Queens.

SMOKE.

The smoke nuisance has called for but little action during the year 1909. The rigid enforcement of the provisions of the Sanitary Code in regard to smoke has placed the power plants of the City in such a condition that little, if any, action has been required on the part of this Department. During the year 204 notices against smoke nuisance were issued, most of which were abated upon receipt of the notice. There were made in addition, in order to enforce the notices, three arrests.

Early in the year the method of inspection of smoke complaints, and of reinspection of notices issued in consequence thereof, was improved. The system, at present, is to require the inspector to watch the premises under observation, for three periods of at least thirty minutes each, on three consecutive days, the hour of observation being different on each day. No complaint can be returned as "no cause for complaint" or no notice returned as "complied with" unless these nine inspections show that no dense smoke is discharged. In cases where it is reported that dense smoke is discharged, a report is submitted on the comparative chart, illustrated in this report. The use of this chart has been of great assistance in the proper preparation of "smoke cases" for presentation to the Criminal Courts, as it shows graphically, the conditions existing at the plants in question.

BARBER SHOPS.

The manner of enforcing the regulations of the Board of Health, in relation to barber shops, is the same as in former years. Inspections were made of all barber shops, and, in those instances where it was found that the shops were being operated in violation of the rules of the Board of Health, the necessary notices were issued. If, after the lapse of a reasonable length of time, the notices were found to be "not complied with," it was recommended to the Board of Health that the business or pursuit be declared a public nuisance. The enforcement of these public nuisance notices resulted, in every instance, either in the closing of the shop, or in placing it in a condition to comply with the Sanitary Law.

Rules and Regulations Governing Barber Shops.

I. No person with any disease of the skin of the face shall be shaved in a public barber shop.

2. Barbers must wash their hands thoroughly with soap and hot

water before attending any person.

3. No alum or other astringent shall be used in stick form. If used at all to stop flow of blood, it must be applied in the form of powder.

4. The use of powder puffs is prohibited.

5. No towel shall be used for more than one person without being laundried.

6. The use of sponges is prohibited.

7. Mugs and shaving brushes must be thoroughly washed after use on each person.

8. Combs, razors, clippers and scissors shall be thoroughly cleansed

after every separate use thereof.

9. Floors must be swept or mopped every day and all furniture and woodwork kept free from dust.

10. Hot and cold running water must be provided.

11. A copy of these regulations is to be hung in a conspicuous place in each shop.

LODGING HOUSES.

There are at the present time in existence in The City of New York 146 lodging houses, with 24,004 accommodations distributed as follows:

	Houses.	Accommodations.
Manhattan Bronx Brooklyn Queens	117 1 28	19,988 162 3,884
Total	146	24,004

Lodging houses, from the nature of their occupancy, are fruitful sources of complaint. The Charter of The City of New York requires that all lodging houses shall be inspected by the Department of Health at least once in six months. It has been found that the semi-annual inspection has not been sufficient to maintain these lodging houses in a proper condition, and consequently special inspectors have been detailed in the Boroughs of Manhattan and Brooklyn.

The number of lodging houses in the City has slightly increased during the past year, but as these houses are in new buildings, especially constructed, or so altered for that purpose, the addition in numbers has not materially increased the problem of supervision.

TENT LIFE.

The same problem confronted the Department in regard to the so-called camp cities as in former years. The question, however, was attacked very early in the season, and no permits for the maintenance of camps were issued until after the sites had been placed in proper condition. The nuisance which existed in former years, caused by the disposition of waste material upon the ground about the camp, was this year done away with. No permits were issued for camps until they were supplied with an adequate amount of potable water, properly distributed throughout the camp. The open privy vaults in inaccessible places, which had existed in former years, were done away with, and it was required that all camps be provided with privy accommodations so situated that every tent should be within 150 feet of the same. Where possible, these accommodations are required to consist of sewers properly connected. In those locations where it was impossible to meet with this requirement, earth closets were installed consisting of small removable galvanized iron pails or cans, and it was stipulated in the application for a permit that these receptacles were to be removed, emptied and cleaned at least once in twenty-four hours. It was also required that adequate and readily accessible receptacles for garbage and household waste be placed throughout the camp. As a supplement to these precautions taken

prior to the granting of a permit, constant inspections were made of all camps located within the City. In some instances daily inspections were the rule, so that they were conducted with as little nuisance as is consistent with their peculiar form of occupancy.

BATHING ESTABLISHMENTS.

Bathing establishments may be roughly divided into two classes tide water baths, which are used only during a few months of the year, and so called public baths scattered throughout the City. During the summer months in the Boroughs of Brooklyn and Queens, inspectors who had supervision of camp cities were also required to make frequent inspections at the various bathing establishments operated in connection with these camp cities, or on the beaches immediately adjacent to them. The provisions of the Sanitary Code, in relation to life saving appliances were strictly adhered to and vigorously enforced. In all cases before permits were granted to maintain bathing establishments, it was required that proper means of sterilizing the bathing suits and towels be installed. In some instances the proprietors closed their establishments rather than make the required expenditure at this time, expecting to make the necessary improvements and reopen in the early summer of 1910.

Routine inspections of the public baths and bathing establishments within the City have been conducted as in former years. There has been no appreciable change in their number. The location of some of these baths has been brought to the attention of the Department of Health during the past year, and some of them required to be closed on account of proximity to sewer discharges. Provision will be made for the year 1910 regarding the locations of baths within The City of New York.

OYSTERS.

The sale of ovsters is regulated by Section 185 of the Sanitary

"Sec. 185. No oysters shall be held, kept or offered for sale anywhere in the city of New York, without a permit in writing from the board of health, and subject to the rules and regulations of said board."

LIQUOR TRAFFIC.

As in former years the State Superintendent of Elections, in accordance with Section 483, Chapter 17, Consolidated Laws of 1909, demanded of the Department of Health that inspections be made of all premises within the City in which the business of trafficking in liquors is conducted. These inspections were made and the results forwarded to the Bureau of Elections. At that time it was suggested that recommendations be forwarded to the Legislature, proposing the modification of this law to the extent that this Department be required to

inspect only those premises which were expressly designated by the State Superintendent of Elections.

GASOLINE.

In October, 1909, there were a series of explosions in sewers on the West Side of the Borough of Manhattan, due to the presence of gasoline vapors. These vapors mixed with the sewer air in the proper proportion produce an explosive mixture, and upon the introduction of a spark of flame ignition follows. Fortunately the consequences of these explosions were not as serious as in previous years. Inspections have been made of all garages within the Borough of Manhattan, and, where necessary, orders have been issued requiring such changes as will prevent the discharge of gasoline into the sewers.

HEALTH SQUAD.

The Health Squad has performed valuable services in connection with the inspecting force of this Division. Their duties comprise, primarily, the making of inspections upon complaints, which can be readily removed, such as complaints against filthy yards and areas, the obstruction of air shafts, with clothes lines, beating of rugs and carpets and nuisances arising from dust, nuisances from noise especially at night, defective and unclean garbage and ash cans, complaints against the spitting ordinance, supervising the handling and removal of manure and other waste, and the enforcement of quarantine upon the request of the Chief of the Division of Contagious Diseases; the killing of glandered horses is also one of the duties of the Health Squad and is performed upon request, and finally the enforcement of those orders of the Board of Health that relates to stray dogs comes under their jurisdiction.

In the enforcement of the resolution of the Board of Health regarding the restriction of dogs in the City, there were killed during 1909, 783 dogs, and in the latter part of the period during which the resolution was enforced, there were practically no dogs at large, indicating that the action of the Board of Health regarding this condition, and the work of the Department in enforcing the resolution resulted

in a great benefit to the community.

The Sanitary Police have also been very active in the enforcement of the section of the code prohibiting expectoration on ferry boats, railway stations and cars, and of the more recently enacted section of the code prohibiting smoking, or the carrying of lighted cigars or cigarettes on underground cars or railroads. In the enforcement of the first mentioned section there were 27 arrests made, of which ten were convicted and corresponding fines imposed. There is every evidence to show that the nuisance arising from the two indicated causes has been very materially reduced.

Division of General Sanitary Inspection—Sanitary Inspection—Number and Nature of Items Investigated on Citizens' and Inspectors' Complaints and Action Taken.

CITY OF NEW YORK.

Sanitary Police.	7,918	3,055	27 7,029 3,177	115 445	229	7,661	5,181 1.081	379	2,594	95 69 808,1	93 260 1,220	55,755
Inspectors.	23,839	8,295	1,542 24,457 16,295	3,473	2,463	5,743	14,975	4,663	23,368	39	2,688	3,000
Referred to Other Departments.	2,298	580	2,068 1,866	495 216	1,180	2,021	1,300	985 S1	2,017	1,500	75 97 1,860	437
1No Cause for Action.	19,494	5,754	20,173 20,173 12,399	3,311	5,914 6,620 1,638	20,013	13,796	3,525	3,924	85. 10,276	855 1,052 10,212	2,299
Duplicates.	165	260 394	14 477 314	130	302	2 2	320	25.2	28.53	30: 3	278 86 278	5,503
Valid and Re- turned for Or- ders or Notices.	9,374	4,756 6,015	8,768 4,893	1,891	3,697 2,095	10,885	4,000 4,250 400 800 800 800 800 800 800 800 800 80	480	8,408	2,233 22 4.657	1,713	95,319
*Number of Items Investigated.	31,757	11,350	1,509 31,486 19,472	3,517	11,799	33,404	20,156	5,042	5,962 24,935	3,310.	2,948	4,333
Nature of Complaints,	in	Andas paving paving Animals kept without permit. Apartments need cleaning oventilating.	Earber shops do not comply with rules and regulations. Cellings or walls need cleaning, whitewashing or repairing. Cellars need cleaning, cementing or draining.	Cellars inhabited contrary to law, or apartments overcrowded	Defective drainage or repairing Excavations or vacant lots need cleaning, draining, repairing or fencing	Floors need cleaning or repairing	Garbage of rash receptacies need to be provided, removed or cleaned Halls or stailways need cleaning or repairing, tee boxes need cleaning or draining.	Lighting needed in dark halls or rooms. Manure dumps.	Offensive trades. Plumbing needs cleaning, repairing, trapping or removal of obstructions.	Trives uced cteating, disinfecting or repairing Public conveyances Roofs or roof drains need cleaning or repairing	Smoke nuisance. Stables should be cleaned, repaired, drained or removed. Water closets need cleaning, repairing, or to be provided.	Water tanks of cisterns need cleaning or repairing

† Either no cause for complaint or cause of complaint removed without issuance of notice. * By both citizens and inspectors.

	General Santary Inspection.	
Sanitary Police.	4,828 3,028 1,413 1,628 1,454 1,454 1,454 1,454 1,454 1,454 1,527	31,797
Inspectors.	7,677 4,385 8,774 4,9774 4,9774 1,027 1,037	92,939
Referred to Other Departments.	374 374 375 375 375 375 375 375 375 375	2,000
†Xo Cause for Action.	8.427 1,174 6,012 6,012 1,023 1,035 1,037 1,031	72,515
Duplicates.	22	1,905
Valid and Re- turned for Or- ders or Notices.	3,482 1,725 1,725 1,720 1,720 1,720 1,720 1,200 1,500 1,604 6,408 1,604 6,408 1,637	37,137
*Number of Items Investigated,	12,50 1,708 1,708 1,063 1,044 1,	114,730
Nature of Complaints.	Alleys in draining lead draining lead draining lead draining lead for a draining lead by a for a lead of paving lead lead lead lead lead lead lead lead	Total

* By both citizens and inspectors.

† Either no cause for complaint or cause of complaint removed without issuance of notice.

Sanitary Police.	824 133 133 133 133 133 133 133 133 133 13	4,753
Inspectors.	7,075 5,086 5,086 5,086 1,176 1,196 1,	82,711
Referred to Other Departments.	25.1 50.1	15,133
† No Cause for Action.	5,397 1,785 1,785 1,375 1,	58,134
Duplicates.	2 07.0 1000 0 0 0 0 0 1 4 × 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	235
Valid and Returned for Orders or Notices.	1,096 1,096 1,096 1,096 1,328 1,328 1,328 1,338	13,962
* Number of Items Investigated.	7,899 7,899 7,811 7,811 7,811 7,811 7,811 7,811 7,811 7,812 8,032 8,032 8,032 8,032 8,033 1,335 1,335 1,335 1,335 1,335 1,335 1,235 1,	87,464
Nature of Complaints.	Animals head draining boy and draining boy and the part of draining boy and the part without permit. A partments need cleaning or vontilating. Barber shops do not comply with rules and regulations. Barber shops do not comply with rules and regulations. Barber shops do not comply with rules and regulations. Cellars inhabited contrary to law. Excavations or vacant lots need cleaning or repairing. Floors need cleaning or repairing. Gas mains or pulse need to propried, removed or cleaned. Lighting needed land and kalls or rooms. Offensive trades. Offensive trades. Chubic Conveyances. Privies need cleaning, disinfecting or repairing. Public Conveyances. Stables should be cleaned, repairing, trapping or removed Water closed apartments need cleaning or repairing. Sanoke missance. Stables should be cleaned, repaired, drained or removed Water closed apartments need cleaning or repairing.	Total

* By both citizens and inspectors.

† Either no cause for complaint or cause of complaint removed without issuance of notice.

Sanitary Police.	2.219	1,184	1,922 1,561 35	2821	828 288	1,915	1,553	431 203	136	0,190 39	497	121		18,423
Inspectors.	3,187	806	2,753	44.0 766	2,217	2,739 648	947	213	જુજ,	2,671	2,171	394	2,189	30,438
Referred to Other Departments.	394	279	323 332 10	201	233	337	194	33.55	0 4	314	205	5-9	33	3,645
†No Cause for Action.	3,545	1,055	3,183 2,781 65	234	1,327	3,174	1,740	403	153	2,546 149	1,965	219	2,078	32,043
Duplicates.	134	69	102	24 16	182	0° 80°	47	10	∞ 4	82 19	51	22	40	1,270
Valid and Re- turned for Or- ders or Notices.	1,333	848 827	1,067	178	890	1,043	519	176	43	916 861	447	272	663	11,903
* Number of Items bestigated.	5,406	1,990	39.79 3,979 3,979	824	2,280	4.654	2,500	913	162 204	3,861	2,668	5112	2,990	48,861
, Nature of Complaints.	Alleys in cleaning Arras need draining Arras need or or	Yards of paving Anima's kept without permit. Apartments need cleaning or ventilating	Barber shops do not comply with unlest and regulations. Ceilings or walls need cleaning, whitewashing or repairing. Ceilars need cleaning, cementing or draining.	Celiars inhabited contrary to law or apartiments overcrowned	Configures a rect reading of repairing Forestive drainage Forestive drainage Forestive or vacant lats need cleaning, draining, repairing of febuling	Floors need cleaning or repairing	Garbage or says receptating. Hall one extraord cleaned.	italis or stati ways need creaming or repairmed. The boxes need cleaning or draining.	Manrie dumps. Officier trades	Plumbing needs cleaning, repairing, trapping or removal of obstructions. Privies need cleaning, disinfecting or repairing.	Public Conveyances. Roofs or roof drains need cleaning or repairing	Smoke nuisance.		Total

Sanitary Police.	2 42
Inspectors.	4,046 4,046 3,337 2,779 2,779 2,779 2,779 2,737 2,736
Referred to Other Departments.	299 21::20 21::20 249 249 249 249 249 249 249 249 249 249
†No Cause for Action.	553 544 553 553 553 553 553 553
Duplicates.	4 119 : 127 - 127
Valid and Returned for Orders or Motices.	2,673 2,673 2,320 2,320 2,320 1,731 1,544 1,163 1,163 1,163 1,163 1,165 1,166 1,185 1,185 1,173 1,173 1,173 1,173 1,173 1,173
*Number of Items Investigated.	4,049 4,049 4,049 2,322 2,729 2,
Nature of Complaints.	Alleys in draining Areas need

† Either no cause for complaint or cause of complaint removed without issuance of notice. * By both citizens and inspectors.

Sanitary Police.	4 81 : 24 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	658
Inspectors.	1,554 1,526 1,526 1,526 1,526 1,526 1,603 1,415 1,415 1,415 1,170 1,025 1,170 1,025 1,170 1,025 1,170 1,025 1,170 1,025	21,407
Referred to Other Departments.	26 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	231
†No Cause for Action.	1,192 1,396 1,355 1,100 1,353 1,100 1,353 1,315 1,315 1,315 1,315 1,315 1,315 1,315 1,315 1,315 1,315 1,315 1,315 1,110 1,315	17,070
Duplicates.	20 884 :88822 825 547 11 5 : 47E : E : 4E8	675
Valid and Re- turned for Or- ders or Motices.	65 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4,089
*Number of Items. .bəfsgifsəvnl	88.1 200.1 2	22,065
Nature of Complaints.	Alleys in draining Areas need Salatis of draining Areas need Parish of paving Area of	Total

Sanitary Inspection—Notices and Orders Disposed of During Year Ending December 31, 1999.

	Number of Notices and Orders Disposed of.	Wit	sed of thin Days.	Wi	sed of thin Days.	of W	isposed ithin ays.		
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.		
New York Manhattan Brooklyn The Bronx Queens Richmond	30,888 14,933 7,718 3,463 3,324 1,450	21,817 12,771 4,518 1,906 2,121 501	70.63 85.52 58.54 55.04 63.80 34.55	5,721 1,757 1,806 1,006 594 558	18.52 11.76 23.40 29.05 17.87 38.48	3.350 405 1.394 551 609 391	10.85 2.71 18.06 15.91 18.33 26.96		

Sanitary Inspection-Notices and Orders Pending December 31, 1909, and when Issued.

	New York.		New York. Manhattan.		Bro	Brooklyn. The		The Bronx.		Queens.		Richmond	
	No.	Per Cent. of Total.	No.	Per Cent. of Total.	No.	Per Cent. of Total.	No.	Per Cent. of Total.	No.	Per Cent. of Total.	No.	Per Cent. of Total.	
Notices and orders pending Dec. 31, 1909	1,465	100.00	361	100.00	266	100.00	326	100.00	381	100.00	131	100.00	
Number first is- sued in—													
December, 1909. November, 1909. October, 1909. September, 1909. August, 1909. July, 1909. June, 1909. May, 1909. March, 1909. March, 1909. February, 1909 January, 1909	863 255 81 51 29 25 29 13 62 24 3	58.91 17.41 5.53 3.48 1.98 1.71 1.98 4.23 1.64	292 56 9 2 1	80.88 15.51 2.49 .55 .27	129 54 19 8 9 8 10 8 8	48.49 20.30 7.14 3.01 3.38 3.01 3.76 3.01 3.75 	184 50 15 7 6 2 7 	56.54 15.33 4.60 2.14 1.84 .61 2.14 9.81 5.52	211 58 26 12 11 10 8 5 20 4 3	55.38 15.22 6.82 3.15 2.88 2.62 2.10 1.31 5.25 1.05 -79 2.88	47 37 12 22 2 5 4	35.88 28.24 9.16 16.79 1.53 3.82 3.05	
Total, 1909		98.77	360	99.72	256	96.24	321	98.47	379	99.47	131	100.00	
Year 1908 Year 1907 Year 1906 Year	14 3 1	.95		.27	8 1 1	3.0I •37 •37	3 2	.92	2	.52			

Sanitary Inspection-Lodging House Inspection.

	Permits.	Inspections.
New York. Manhattan Brooklyn. The Bronx. Queens. Richmond.	146 117 28 1	1,362 1,020 332 10

Sanitary Inspection—Shore Inspection.

	Brooklyn.		Richr	nond.
	1909.	1908.	1909.	1908.
nspections	3,402	3,553	3,142	3,282
ound and disposed of—				
Human bodies.	15	7		• • • • • •
Carcasses of animals		******		
Dogs	219	265	938	1,166
Cats	161	139	569	700
Rats	265	219	7	
Goats		12	107	174
Sheep	3	12	190	303
Hogs		I	62	65
Calves		6		6
Horses		2	3	27
Fowls	123	151	1,038	990
Fish	443	518	2,381	543
ieces of offal	367	492	,,,,,,	
ieces of meats	961	1,013	1,055	1,20
	161	142	501	528
lieces of bedding	573	415	1,328	1,320
ieces of clothing	5/3	159	485	600

Sanitary Inspection—Complaints, Notices and Orders.

NEW YORK.	General Sanitary Inspection.	Milk.	Total.
Complaints— Complaints pending December 31, 1908. Citizens' complaints received. Citizens' complaints received from other divisions. Inspectors' complaints filed. Total	313 29,693 3.566 17,206	544 23 663 1,232	315 30,237 3,589 17,869
* No cause for action Duplicates Complaints referred to other divisions Complaints found valid and referred to other departments Complaints found valid and returned for notice or order Complaints pending December 31, 1909	15,631 1,439 27 4,061 29,319 301	413 3 1 2 811 2	16,044 1,442 28 4,063 30,130 303
Notices— Notices and orders pending January 1, 1909 Notices and orders issued	1,836 30,093 31,929	51 816 867	1,887 30,909 32,796
Notices and orders complied with before legal action	4,204 444 1,450	752 98 2 15	26,583 4.302 446 1,465
Number of civil actions	31,929 667 2,578	3	32,796 6-0 2,694

^{*} Either no cause for complaint or cause for complaint removed without issuance of notice.

Sanitary Inspection-Complaints, Notices and Orders-Continued.

BOROUGH OF MANHATTAN.	General Sanitary Inspection.	Milk.	Total.
Complaints— Complaints pending December 31, 1908. Citizens' complaints received. Citizens' complaints received from other divisions. Inspectors' complaints filed. Total.	104 12,841 272 8,998 22,215	385 8 220	106 ,13,226 280 9,218 22,830
* No cause for action Duplicates. Complaints referred to other divisions. Complaints found valid and referred to other departments. Complaints found valid and returned for notice or order. Complaints pending December 31, 1909.	516 10 867 13,642	333 3 1 277 1	7,476 519 11 867 13,919 38
Notices— Notices and orders pending January 1, 1909. Notices and orders issued. Total.	502 14,634 15,136	29 286 315	531 14,920 15,451
Notices and orders complied with before legal action. Notices and orders complied with after legal action. Notices and orders rescinded. Pending December 31, 1909. Total.	349	301 2 12	14,843 90 157 361
Number of civil actions			4 91

^{*} Either no cause for complaint, or cause for complaint removed without issuance of notice.

BOROUGH OF BROOKLYN	General Sanitary Inspection.	Milk.	Total.
Complaints— Complaints pending December 31, 1908. Citizens' complaints received. Citizens' complaints received from other divisions. Inspectors' complaints filed Total.	8,391 689 3,560	138 395 533	146 8,529 689 3,955 13,319
* No cause for action Duplicates Complaints referred to other divisions. Complaints found valid and referred to other departments Complaints found valid and returned for notice or order Complaints pending December 31, 1909	3.353 213 4 2,059 7,144 13	53 2 477 1	3,406 213 4 2,061 7,621 14
Notices— Notices and orders pending January 1, 1909 Notices and orders issued	605 7.007 7,612	22 477 499	627 7,484 8,111
Notices and orders complied with before legal action Notices and orders complied with after legal action. Notices and orders rescinded. Pending December 31, 1999. Total	5,331 1,891 127 263 7,612	401 95 3 499	5,732 1,986 127 269
Number of civil actions Number of criminal actions	2,276	116	2,392

^{*} Either no cause for complaint or cause for complaint removed without issuance of notice.

Sanitary Inspection-Complaints, Notices and Orders-Continued.

BOROUGH OF THE BRONX.	General Sanitary Inspection.	Milk.	Total.
Complaints— Complaints pending December 31, 1908 Citizens' complaints received Citizens' complaints received from other divisions Inspectors' complaints filed Total	29 4,521 1,623 1,707 7,880	21 2 29 52	29 4,542 1,625 1,736 7,932
* No cause for action Duplicates Complaints referred to other divisions. Complaints found valid and referred to other departments Complaints found valid and returned for notice or order Complaints pending December 31, 1909.	3,044 383 13 552 3,674 214	27 25	3,071 383 13 552 3,699 214
Notices — Notices and orders pending January 1, 1909. Notices and orders issued. Total.	3,836	21 21	3,614 3,857
Notices and orders complied with before legal action Notices and orders complied with after legal action Notices and orders rescinded Pending December 31, 1909. Total	2,848 594 68 326 3,836	18 3 21	2,866 597 68 326 3.857
Number of civil actions Number of criminal actions	599 44		602 44

^{*} Either no cause for complaint or cause for complaint removed without issuance of notice.

BOROUGH OF QUEENS	General Sanitary Inspection.	Milk.	Total.
Complaints— Complaints pending December 31, 1908 Citizens' complaints received Citizens' complaints received from other divisions. Inspectors' complaints filed Total * No cause for action. Duplicates Complaint ref+rred to other divisions. Complaints found valid and referred to other departments. Complaints found valid and returned for notice or order. Complaints pending December 31, 1909.	3,150 504 1,749 5,425 1,281 238 	13 19 32 	22 3,150 517 1,768 5,457 1,281 238 593 3,407 28
Notices— Notices and orders pending January 1, 1909 Notices and orders issued	385 3,375 3,760	32 32	385 3,407 3,792
Notices and orders complied with before legal action	2.282	32	2,314 1,010 87 381 3,792
Number of civil actions	148		148

^{*} Either no cause for complaint or cause for complaint removed without issuance of notice.

Sanitary Inspection-Complaints, Notices and Orders-Continued.

BOROUGH OF RICHMOND.	General Sanitary Inspection.	Milk.	Total.
Complaints— Complaints pending December 31, 1908. Citizens' complaints received. Citizens' complaints received from other divisions. Inspectors' complaints filed. Total.	790 478 1,192		790 478 1,192 2,472
* No cause for action Duplicates Complaint referred to other divisions. Complaints found valid and referred to other departments. Complaints found valid and returned for notice or order Complaints pending December 31, 1909	89		810 89 80 1,484
Notices— Notices and orders pending January 1, 1909 Notices and orders issued. Total	0		101 1,484 1,585
Notices and orders complied with before legal action Notices and orders complied with after legal action Notices and orders rescinded Pending December 31, 1909. Total	131		828 619 7 131 1,585
Number of civil action Number of criminal actions	64		64

^{*} Either no cause for complaint or cause for complaint removed without issuance of notice.

Dead Animals, Offal and Night Soil Ordered Removed.

Vork							
Large Animals: 17,809 8,726 5,547 1,547 1,426 56 Mules. 17 14 1 1 1 Donkeys. 12 11 1 1 1 Colts. 34 25 6 2 2 Ponies. 15 12 3 21 22 62 2 Cattle 265 133 21 22 62 2 Other large animals. 4 2 2 Total large animals. 18,156 8,923 5,574 1,575 1,490 59 Small Animals— 715 711 1 2 2 Sheep 255 253 1 2 Sheep 255 253 1 2 Hogs 112 29 55 1 21 Hogs 36 36 Pigs 1 1 Cats and dogs from streets 116,545 80,202 16,924 11,997 1,836 5,55 Cats and dogs from public pound 216,993 154,234 <						Queens.	Rich- mond.
Large Animals: 17,809 8,726 5,547 1,547 1,426 56 Mules. 17 14 1 1 1 Donkeys. 12 11 1 1 1 Colts. 34 25 6 2 2 Ponies. 15 12 3 21 22 62 2 Cattle 265 133 21 22 62 2 Other large animals. 4 2 2 Total large animals. 18,156 8,923 5,574 1,575 1,490 59 Small Animals— 715 711 1 2 2 Sheep 255 253 1 2 Sheep 255 253 1 2 Hogs 112 29 55 1 21 Hogs 36 36 Pigs 1 1 Cats and dogs from streets 116,545 80,202 16,924 11,997 1,836 5,55 Cats and dogs from public pound 216,993 154,234 <	Carcasses Removed—						
Horses							
Mules. 17 14 1 1 Donkeys. 12 11 0 1 Colts. 34 25 6 2 0 Ponies. 15 12 3 21 22 62 Other large animals. 4 2 2 2 2 Total large animals. 18,156 8,923 5,574 1,575 1,490 59 Small Animals— 2 715 711 1 2 2 Sheep. 255 253 1 1 2 Goats. 112 29 55 1 21 Hogs. 36 36 1 1 1 1 Pigs 36 36 1 1 1 1 1 Cats and dogs from streets. 116,545 80,202 16,924 11,997 1,836 5,58 Cats and dogs from public pound. 216,993 154,234 61,226 11,998 1,860 7,12 Total small animals. 334,657 235,465 78,207 11,998 1,860 7,12 Total all animals. 352,813 244,388 83,781 13,573 3,350 7,72	Horses	17,809	8,726	5,547	1,547	1.126	563
Colts 34 25 6 2 Popoles 15 12 3 2	Mules	17	14				2
Ponies	Donkeys						I
Cattle 265 133 21 22 62 2 Total large animals 18,156 8,923 5,574 1,575 1,490 59 Small Animals—Calves 715 711 1 2 2 2 1 59 Sheep 255 253 3 1 1 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 2 1 2 2 2 1 1 2 2 2 1 2 2 2 2 1 2 2 2 2 2 2 1 1 2 <td>Colts</td> <td></td> <td></td> <td>1</td> <td>_</td> <td>• • • •</td> <td>1</td>	Colts			1	_	• • • •	1
Other large animals. 4 2 2	Cattle						****
Total large animals	Other large animals	1					27
Small Animals— Calves. 715 711 1 2 Sheep 255 253 1 1 Goats. 112 29 55 1 21 Hogs. 36 36 1 1 2 Pigs. 1 1 1 1 2 Cats and dogs from streets. 116,545 80,202 16,924 11,997 1,836 5,58 Cats and dogs from public pound. 216,993 154,234 61,226 1,53 Other small animals. 334,657 235,465 78,207 11,998 1,860 7,12 Total all animals. 352,813 244,388 83,781 13,573 3,350 7,72		l	I				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Total large animals	10,130	0,923	5,5/4	1,5/5	1,490	594
Sheep 255 253 1 1 Goats 112 29 55 1 21 Hogs 36 36 1 Pigs 1 Cats and dogs from streets 116,545 80,202 16,924 11,997 1,836 5,58 Cats and dogs from public pound 216,993 154,234 61,226 153 Other small animals 334,657 235,465 78,207 11,998 1,860 7,12 Total all animals 352,813 244,388 83,781 13,573 3,350 7,72	Small Animals—						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Calves		711	1		2	1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							Į
Pigs Cats and dogs from streets Cats and dogs from public pound					_	21	6
Cats and dogs from streets.			_	••••			••••
Cats and dogs from public pound. 216,993 154,234 61,226 1,53 Other small animals. 334,657 235,465 78,207 11,998 1,860 7,12 Total all animals. 352,813 244,388 83,781 13,573 3,350 7,72	Cats and dogs from streets		80.202	16.024			86
Total small animals. $334,657 = 235,465 = 78,207 = 11,998 = 1,860 = 7,12$ Total all animals. $352,813 = 244,388 = 83,781 = 13,573 = 3,350 = 7,72$	Cats and dogs from public pound				,,,,,	, •	
Total small animals 334,657 235,465 78,207 11,998 1,860 7,12 Total all animals 352,813 244,388 83,781 13,573 3,350 7,72	Other small animals	,,,,		1 '			*1333
Total all animals	Total small animals	334.657	235.465	78,207	11.008		
337 333. 333.			====				7,127
Quantity of Meat, Offal, etc., Removed—	Total all animals	352,813	244,388	83,781	13,573	3,350	7,721
Quantity of Meat, Offal, etc., Kemoved—	0 11 (35 : 0%)	====	===				===
	Quantity of Meat, Offal, etc., Removed-	06 - 4-	06				
Pounds of poultry		86,030					•••
Quantity of Meat, Offal, etc., Ordered Re-	Quantity of Meat Offal, etc. Ordered Re-	00,920	00,920				• • • • •
moved—	moved—						
Pounds of fish	Pounds of fish	3,258,314	2,650,490	607,824			
Pounds of offal	Pounds of offal		3,456,275	1,219,755			
Total pounds	Total pounds	8,117,514	6,279,935	1,837,579			
Overtitud Viet Seil Remand	Quantity of Night Sail Remand						
Quantity of Night Soil Removed— Cubic yards of night soil removed 3,262 32 952 2,278	Cubic yards of pight soil removed	2 262	20	077		0.000	
Cubic yards of night soil removed $3,262$ 32 952 $2,278$	Cubic yards of hight soft femoved	3,202	32	952	••••	2,278	

Sanitary Inspection-Criminal Actions.

Total.	4,886	4,941	3,696 413 5 30	\$4,751 80
Violations of Rules, etc., Con- tagious Diseases.	= 4	20	тон н · · · и	
Spitting.	2,513	2,513	414 1,789 310	\$1,936 80
2токе,	2010	20	r	11
.ssio.V	9	9	9	
Removal of Filth.	:	ı		-
Offensive Afaterials.	5.5	56	4 : 6 : 5	2 :
Offensive Trades.	491	20	77	00 11\$
Keeping and U se of Animals.	3 47	50	332	\$81 00
Street Drainage or Obstruction.	I :	1	H	
Violations of Ordinances and Regulations.	36	2,281	1,883	\$2.69800
CITY OF NEW YORK.	Cases pending December 31, 1908.	Total	Discharged. Fined. Sentence suspended. Cases dropped Imprisoned. Cases pending December 31, 1999.	Amount of fines imposed.

Sanitary Inspection-Criminal Actions-Continued.

Total.	3,732	3,744	3,211	3,744	\$4,093 55
Violations of Rules, etc., Contagious Diseases.	: "		. M		\$25 00
Spitting.	1,722	1,722	355	1,722	\$1,455 55
Зтоке.	1 2	3	£	m	
.9sioN	:0	2	v	20	:
Removal of Filth.	::				:
Offensive Materials.	::				:
Offensive Trades.	10	oJ		Io	\$11 00
Keeping and Use of Animals,	1 0	11	6 н	II	\$31 00
Street Drainage or Obstruction.	::				:
Violations of Ordinances and Regulations.	1,982	1,992	1,827	1,992	\$25 71
BOROUGH OF MANHATTAN.	Cases pending, December 31, 1908.	Total	Discharged Fined Fined Senteme suspended Cases dropped Imprisoned Cases pending, December 31, 1909.	Total	Amount of fines imposed

Sanitary Inspection-Criminal Actions-Continued.

Total.	34 926	096	182 359 399 20 20 960
Violations of Rules, etc., Contaggious Diseases.	1 2	3	2
Spitting.		621	308 308
Зтоке,	4-	5	4
.9sio.X	::		
Removal of Filth.	. H	-	
Offensive Materials.	515	95	9 56
Offensive Trades.	49	01	10 :
Keeping and Use of Animals.	31	33	118 3 10 2 2 2 33 33 \$20 00
Street Drainage or Obstruction.	:	-	-::::: " :
Violations of Ordinances and Regulations.	17	230	102 48 68 68 12 230 :***
BOROUGH OF BROOKLYN.	Cases pending December 31, 1908	Total	Discharged. Fined. Sentence suspended Cases dropped. Cases produing December 31, 1909. Total.

Sanitary Inspection-Criminal Actions-Continued.

Total.	174	177	57	€ 6	:-	1771	\$143.75
Violations of Rules, etc., Contagious Diseases.			::	::	: :	:	:
Spitting.	191	191	54	: :	: :	161	\$108 75
Зтоке.	::			: :	::		
.9sio.Z	:-	-	- :	: :	::	-	
Removal of Filth.	::		::	: :	::		1:
Offensive Materials.	::		::	: :	::		:
Offensive Trades.	::		::	: :	::		:
Keeping and Use of Amimals.	9	9	17	- :	::	9	#30 00
Street Drainage or Obstruction.			::	::	::		
Violations of Ordinances and Regulations.	63	6	- 17	N 01	: -	6	\$5 00
BOROUGH OF THE BRONX.	Cases pending December 31, 1908	Total	Discharged. Fined	Sentence suspended Cases dropped	Imprisoned	Total	Amount of fines imposed

Sanitary Inspection-Criminal Actions-Continued.

Total.	35.2	37	112 88 3	37	\$43 00
Violations of Rules, etc., Contagious Diseases.	::			:	i
Spittings	6	6		6	\$7 00
Smoke.	::				:
Noise.	::				:
Removal of Filth.	::				:
Offensive Materials.	::				:
Offensive Trades.	::			:	:
Leeping and Use of Animals,	: :	:		: ()	:
Street Drainage or Obstruction,	::				:
Violations of Ordinances and Regulations.	26	28	3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28	\$36 00
BOROUGH OF QUEENS.	Cases pending December 31, 1908	Total	Discharged Fined Sentence arispended Cases dropped. Imprisoned Cases pending December 31, 1909	Total	Amount of fines imposed

Sanitary Inspection-Criminal Actions-Continued.

	•	-								
Total.	4 61	23	22		:	:	:	:	23	:
Violations of Rules, etc., Contagious Diseases.				:	:	:	:	:	1	:
Spitting.	::	:		:	:	:	:	:	:	i
Зтоке.	: :	:	:	:	:	:	:	:	:	:
Noise.	::				:	:	:	:	:	:
Removal of Filth.				:	:	:	:	:	:	
Offensive Materials.	::				:	:	:		:	:
Offensive Trades.	::	:		:	:	:	:	:	:	:
Keeping and Use of Animals.	::			: :	:	:	:	:	:	:
Street Drainage or Obstruction.		:		:	:	:	:		:	÷
Violations of Ordinances and Acgulations.	4∞	22	22	:	:	:	:	:	22	
BOROUGH OF RICHMOND.	Cases pending December 31, 1908 New arrests.	Total		Fined	Sentence suspended	Cases dropped		Cases Defiding December 31, 1909	Total	Amount of fines imposed

Samples of Milk Taken for Bacteriological Examination.

	Whos	SE BACTERIAI	CONTENT PI WAS FOUN	ER CUBIC CEN	NTIMETER		
YEAR 1909.	Under 100,000.	Between 100,000 and 250,000.	Between 250,000 and 500,000.	Between 500,000 and 1,000,000.	Over 1,000,000.	Spoiled.	Total.
January February March April May June July Angust September October November December	71 34 74 118 129 75 11 39 29 121 54	30 51 93 73 75 98 61 31 3 52 25 13	20 36 18 48 62 44 46 48 6 37 13	23 22 21 18 54 46 45 20 2 26 21 18	27 8 116 124 76 174 220 124 11 8 8 83 39	2 17 9 6 6 4 3 4	173 168 331 387 402 441 386 236 51 248 196 270
Total	941	605	362	316	1,010	55	3,289

Milk Inspection—Creamery Scores.

Scores at Last Inspection.	Number Registered.
Between 1 and 25 per cent. Between 26 and 50 per cent. Between 51 and 75 per cent. Between 76 and 100 per cent.	5 215 1,056 914
Total	2,190

Average score for year 1909...... 70.92 per cent.

Milk Inspection—Dairy Scores.

Scores at Last Inspection.	Number Registered.
Between 1 and 25 per cent. Between 26 and 50 per cent Between 51 and 75 per cent Between 76 and 100 per cent.	122 17,163 24,724 2,457
Total	44,466

Average score for year 1909..... 54.52 per cent.

			'	UE	nera.	Sami	ur_	\' <i>I</i>	115	pe		on.								
nond.	Wagons.	16	1,240	1,240	1,343	०उ	φα	:	:::					6	101	3	01	:		1111
Richmond.	Stores.	36	3,755	3,755	3,760	7 7	- :	:	: :	:	: :			2.1	174	6	20	:		203
Queens.	Wagons.	139	122	122	232	~> ~>	- 5	:	: :	:		: =		~	250	:	:	:		250
Que	Stores.	243 161 133 28	1,726	1,726	454	22	10	566	31	2,5	\$. %	26	v	315	6	153	:		468
3ronx.	Wagons.	74	1,168	1,193	1,239	7	N-00	:	: :	: '	~~	33	CC	1	153	:	:	:		153
The Bronx.	Stores.	759 496 415 81	13,579	13,582	10,435	40	53	903	2.5	120	112	172		40	909	48	894	3	17	1,417
Brooklyn.	Wagons.	749	4,204	4,227	5,326	23	34	:		:	: :			2.3	752	∞	69	2	73	894
Broo	Stores.	1,327 580 264 316	21,302	21,899	22,017	156	212	:	: :	-			0//	921	2,142	113	1,527	3	56	3,695
Manhattan.	Wagons.	3,310	3,956	4,091	7,430	7 67	25	:	: :		0 4		141	1	252	62	36	:		288
Manh	Stores.	2,892 3,388 2,907 481	63,391	63,415	45,828 4,615	165	376 305	5,193	62	3,570	2,505	87	301,6	166	2.498	801	2,587	9	114	5,199
York.	Wagons.	4,363	10,690	10,873	15,750 4,693	49	25.20	:			~ .v	196	204	Q	1,508	13	115	2	73	969,1
New York.	Stores.	5,294 4,661 3,755 906	103,753	104,377	82,494 6,918	390	657	6,362	98	3,696	3,740	88 %	4,100	300	5,635	287	5,190	12	157	10,982
		Field— Permits issued during 1909 Permits revoked during 1909 Permits revoked during 1909 For discontinuance of selling For violation of law	Inspection— Regular inspections Inspections at receiving stations.	Total	*Specimens examined	Conditions found— Inspections finding milk above {		Rooms connected contrary to	Ice box badly drained	Store unclean.	Milk not properly cooled	Infectious disease	permitf	Action taken—Destruction of Milk— Lots of milk destroyed for be-	over 50 degrees)	Lots of milk destroyed for be-	Quarts so destroyed	Lots of milk destroyed for be-	Quarts so destroyed	Total quarts destroyed

* Several specimens may be examined at a single inspection.

† Samples taken and analyzed.

† The technical definition of adulteration is found in serior or the Sanitary Code, the chief items being "containing less than 12 per centum of fats." In enforcement a distinction is made between samples whose milk solids are found between 12 per cent. and 114 per cent.; the former are made occasions for warning only, the latter for prosecution.

** For criminal actions see Table —

Milk Inspection-Criminal Actions.

	Adulterated Milk.	ulterated Milk.	Adulterated Cream.	Aulterated Cream.	Unclean	Unclean eceptacles.	Adult	Adulterated	Sellin	Selling Milk Without a	Interfere	Interference with Inspector.	Total.	al.
NEW YORK.					•		IN	Mulk.	Fe.	Permit.	•			
	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.
Magistrates' Court— New arrests. Held on bail* Discharged. Fined Sentence suspended. Amount of fines	382	256	142	0000	261 147 4 110 \$478 00	15 9 2 2 4 4 4 4 4 825 00		нн					788 672 672 110 \$478 00	82 76 76 4 4 825 00
Court of Special Sessions— Cases pending Decem- } ber 31, 1908	58	11 56	33	H 00	17	0	::		: let	. 0	: :	: :	108	13
Total	440	49	175	6	164	IO		I	I	2	:		780	89
Discharged Fined Sentence suspended. Imprisoned Cases pending Decen ber 31, 1999	18 237 130	16 31 18 2	6 11.8 22 1 28	1 Q	\$58 			н	: H : : :	61			31 438 210 210 1	19 44 20
Total	440	49	175	6	164	IO		I	I	2			780	89
Amount of fines	\$4,335 00	\$1,460 00 \$1,795 00	\$1,795 00	\$170 00 \$530 00	\$530 00	00 c 8#		:	\$10 00				*6,670 00	\$1,710 00

Note—Milk cases for Boroughs of Manhattan and The Bronx are tried in Court of Special Sessions, Manhattan. Milk cases for Boroughs of Brooklyn and Queens are tried in Court of Special Sessions, Brooklyn. Milk cases for Borough of Richmond are tried in Court of Special Sessions, Richmond. * Cases held on bail in Magistrates' Courts are transferred to Court of Special Sessions for trial.

Milk Inspection-Criminal Actions-Continued.

	Adulterated Milk.	erated. lk.	Adult	Adulterated Cream.	Unc Recep	Unclean Receptacles.	Adult Cond Mi	Adulterated Condensed Milk.	Sellin With Per	Selling Milk Without a Permit.	Interfere Insp	Interference with Inspector.	Total.	al.
<i>5</i> 2	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.	Store.	Wagon.
• • •	215	22 22	88 : : : :	00	190 77 3 110	13 8 25 00 52							494 379 5 110 \$478 00	39 34 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
	16	22	1 89	7	177	ı 8	::	i i	: :	I	: :		379	34
	229	22	8	2	78	6		I		1			397	35
: :	161 49	13 13 0	69 8		71 7 2		::::::			H			301 61 1	22 7 7 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	229	22	8	2	78	6		-		-			397	35
2,28	Amount of fines \$2,825 00	\$680 oo	\$680 00 \$1,140 00	\$35 00	\$35 00 \$440 00	\$80 00	:	:	:	:	:	:	*4,405 00	\$795 00

* Cases held on bail in Magistrates' Courts are transferred to Court of Special Sessions for trial.

Note—Milk cases for Bronogh's of Manhattan and The Bronx are tried in Court of Special Sessions, Manhattan.

Milk cases for Boroughs of Brooklyn and Queens are tried in Court of Special Sessions, Brooklyn.

Milk cases for Borough of Richmond are tried in Court of Special Sessions, Richmond.

Milk Inspection-Criminal Actions-Continued.

Total.	Wagon.	272 200 1	12 26 38	111	38
Tot	Store.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	86 252 338	28 109 138 63	338
Interference with Inspector.	Wagon,				
Interfer	Store.				
Selling Milk Without a Permit.	Wagon.				
Sellir With Per	Store.				
Adulterated Condensed Milk.	Wagon.				
Adul Conc M	Store.			:::::	
Unclean Receptacles.	Wagon.	2	I	i i i	I
Un	Store.	19	14 61 75	6 51 13	75 \$45 00
Adulterated Cream.	Wagon.	0 0	1 2 2	I : I	\$50 00
Adul	Store.	49 49	32 49 81	4 47 14 16	\$625 00
Adulterated Milk.	Wagon.	533	23	11 13 10	\$625 00 \$625 00
Adultera Milk.	Store.	, 142 142	40 142 182	1.8 57 73 34	182
BOROUGH OF BROOKLYN.		Magistrates' Court— New arrests *Held on bail Discharged Fined Sentence suspended Amount of fines	Cases pending De-Cases camber 31, 1908} O New cases	Discharged Fined Sentence suspended Cases pending De. t cember 31, 1999 i	Total 182 Amount of fines 51,200 00

* Cases held on bail in Magistrates' Courts are transferred to Court of Special Sessions for trial.

NOTE—Milk cases for Boroughs of Manthattan and The Bronx are tried in Court of Special Sessions, Manhattan.
Milk cases for Boroughs of Brooklyn and Queens are tried in Court of Special Sessions, Brooklyn.
Milk cases for Borough of Richmond are tried in Court of Special Sessions, Richmond.

Milk Inspection—Criminal Actions—Continued.

Total.	Wagon.	00 20	% 3 : 5: 8
То	Store.	28 27 27 27 27 27 27 27 27 27 27 27 27 27	30 30 30 \$275 00
Interference with Inspector.	Wagon.		
Interfer	Store.		
Selling Milk Without a Permit.	Wagon.		
Sellin With Per	Store.		
Adulterated Condensed Milk.	Wagon.		
Adult Conc M	Store.		
Unclean Receptacles.	Wagon.		
Un	Store.	P = 1 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0	8 6 8 8 8 6 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9
Adulterated Cream.	Wagon.	44:::	4 4 4 885 00
Adult	Store.	н	I I I S 10 00
ulterated Milk.	Wagon.	44 4	4
Adulterated Milk.	Store.	50 1 50 50	2 14 5 220 00 00 \$\$
BOROUGH OF THE BRONX.		Nagistrates' Court- New arrests. *Hel on bail. Discharged Fined Sentence suspended Amount of fines Court of Special Sessions- Cases pending De. Cases pending De. New cases	Total Discharged Fined suspended Cases pending De-{ cember 31, 1909 } Total

*Gases held on bail in Magistrates' Courts are transferred to Court of Special Sessions for trial.

NOTE—Milk cases for Biotoughs of Manhattan and The Bronx are tried in Court of Special Sessions, Manhattan.

Milk cases for Boroughs of Brooklyn and Queens are tried in Court of Special Sessions, Brooklyn.

Milk cases for Borough of Richmond are tried in Court of Special Sessions, Richmond.

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Milk Inspection-Criminal Actions-Continued.

al.	Wagon.	::::		-	i i i i	1	\$100 00
Total	Store.	<u> </u>	I 14	15	2 6	15	\$120 00
Interference with Inspector.	Wagon.						
Interfer	Store.			:			:
Selling Milk Without a Permit.	Wagon.					:	
Sellir With Per	Store.	H H	i i	-	: H : : :	I	00 01%
Adulterated Condensed Milk.	Wagon.						
Adult Conc M	Store.			:			:
Unclean Receptacles.	Wagon.						:
Un	Store.			3		3	:
Adulterated Cream.	Wagon.					:	
Adub	Store.	ww		3	- : 8	3	\$20 00
Adulterated Milk.	Wagon.	H H	: I	1	: }*** : : : : : : : : : : : : : : : : :	I	\$100 00
Adulte	Store.	77	1 2	8	70.60	00	30 06\$
BOROUGH OF QUEENS.		Magistrates' Court-New arrests. "Hed on ball. Discharged Fined Sentence suspended Amount of fines.	Court of Special Sessions— Cases pending Decem-(ber 31, 1908)	Total	Discharged Fined Sentence suspended Cases pending Decem-1 ber 31, 1909.	Total	Amount of fines

* Cases held on bail in Magistrates' Courts are transferred to Court of Special Sessions for trial.

Note—Milk cases for Broughs of Manhattan and The Bronx are tried in Court of Special Sessions, Manhattan.

NIR cases for Boroughs of Brooklyn and Queens are tried in Court of Special Sessions, Brooklyn.

Milk cases for Borough of Richmond are tried in Court of Special Sessions, Richmond.

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Milk Inspection—Criminal Actions—Continued.

al.	Wagon.			7			₩50 00
Total.	Store,						:
Interference with Inspector.	Wagon.						:
Interfer	Store						:
Selling Milk Without a Permit.	Wagon.	P. H	1	I	H : : : :	I	:
Sellir With Per	Store.						i
Adulterated Condensed Milk.	Wagon.						:
Adult Conc M	Store.		::				:
Unclean Receptacles.	Wagon.						:
Un	Store.						:
Adulterated Cream.	Wagon.						:
Adul	Store.						:
Adulterated Milk.	Wagon.	99	9 ,	9	000	9	\$20 00
Adultera Milk.	Store.						:
BOROUGH OF RICHMOND.		Magistrates' Court— New arrests. *Held on bail. Discharged Fined. Sentence suspended Amount of fines.	Court of Special Sessions— Cases pending Decem-1 ber 31, 1908	Total	Disclarged Fined Sentence suspended Cases pending December 31, 1999.	Total	Amount of fines

* Cases held on bail in Magistrates' Courts are transferred to Court of Special Sessions for trial.

NOTE—Milk cases for Boroughs of Manhattan and The Bronx are tried in Court of Special Sessions, Manhattan Milk cases for Boroughs of Brooklyn and Queens are tried in Court of Special Sessions, Brooklyn.

Milk cases for Borough or Richmond are tried in Court of Special Sessions, Richmond.

General Sanitary Inspection-Summary of Public Nuisance and Vacation of Premises Orders Issued by the Board of Health During Year 1909.

	New York.	ork.	Manhattan.	uttan.	Brooklyn.	clyn.	The 1	The Bronx.	Que	Queens.	Richmond	nond.
	Public Nuisance.	Vacation of Premises,	Public Zuisance.	Vacation of Premises.	Public Nuisance.	Vacation of Premises.	Public Zuisance.	Vacation of Premises.	Public Xuisance.	Vacation of Premises.	Public Xuisance.	Vacation of Premises.
Number of orders issued Number complied with Number not complied with.	243 213 30	277 228 49	99	65	138	131	23 16 7	4550	550	57 43 11	:::	:::
Of those not complied with— Work in progress. Work not in progress.	17	31	-	::	9 01	17	N 0	4.0	9 ::	0 4	::	::
Of those work not in progress— Vacant. Order partly complied with. Nothing done.	Io	15	::"	:::	6 :	5 = 2	H	2 ::	:::	4 : :	:::	:::

MILK.

During the year 1909 there has been no increase in the force assigned to the duty of inspecting milk, nor have there been any radical changes in the methods pursued in the supervision of the milk supply. Milk inspection is divided as heretofore, first, the inspection of the product and the handling of milk prior to its being offered for sale in The City of New York. Secondly, the inspection of the milk itself and the conditions under which it is offered for sale within the City. There is a supervising inspector of foods detailed in charge of each of these branches, each having inspectors assigned to them to investigate the conditions under their charge.

The milk supply, consisting of 1,650,000 quarts daily, is at present supplied from about 44,000 farms, delivering milk to 1,100 creameries, located in parts of Vermont, Massachusetts and Connecticut, New Jersey, Pennsylvania, one place in Ohio, two in Maryland, and almost

the entire State of New York,

During the latter part of 1909 shipments of cream were taken from across the Canadian border into New York City. This milk is transported over eleven railroads and transportation companies, who deliver an average daily amount of milk as set forth in the following table:

Railroad.	Quarts Per Day.
Erie	. 238,240
Harlem	. 112,440
Ontario	
Susquehanna	78,840
West Shore	67,440
Delaware, Lackawanna & Western	
New York, New Haven & Hartford	
New York Central (Long Haul)	402,720
Hudson River Transportation Co	
Lehigh Valley	
Other sources	. 28,000
Total	1.676.000

When the milk arrives at the terminals the distributors remove it in trucks. That, which is intended for sale from the original cans in grocery stores and dairies is immediately delivered, and that, which is bottled and intended for wholesale consumption is taken to the distributing station where it is reloaded into small delivery wagons and then delivered to the householder. Practically no milk is bottled in the raw state in New York City. There are a number of large plants in which milk is put through a process of so-called pasteurization or heating, and where after treatment, it is bottled and sold in the same manner as milk bottled in the country. There are also situated in New Jersey, several milk handling plants, where raw milk from the

country is delivered in cans, and where the milk is treated and bottled and then delivered within the City. For all administrative purposes these plants may be considered as being located within The City of New York for the reason that they receive their shipment of milk at the same time as those plants within the City, and the milk is handled, prepared and sold in the same manner, so far as time is concerned, as the milk which is prepared within the City. The area of milk supply is divided into five large districts. Inspectors, known as District Supervisors, are placed in charge of these districts, supervising the work of five or six men under them, who are required to have a thorough knowledge of all conditions which exist, within his territory. He is also required to visit the various dairy farms and creameries for the purpose of making special inspections, or to decide questions which may arise from time to time owing to the difference of opinion between the owners of plants and the inspector who had previously inspected it. In addition to these assignments, one inspector was detailed to investigate all cases of infectious diseases, which were reported in the usual manner by milk producers.

The system of country milk inspection is based upon a score card on which fixed values are assumed for all of the various conditions which exist on an ideal dairy farm. The assigned score indicates the percentage of perfection attained by the farm. There is also a similar

score card for creameries, or milk shipping stations.

If, upon investigation of a dairy, it is found that the score is over go per cent. an engraved certificate of merit is issued by the Board of

Health, signed by the Secretary of the said Board.

In all other cases, after an inspection and report has been submitted by the inspector to the Department, a suitable letter of instruction is sent to the dairyman notifying him of the score which his dairy received, and also notifying him of the various defects, which must be remedied in order to make the condition of his premises perfect. is, of course, to be understood that a perfectly proper and usable milk may be produced on a dairy where the score does not reach 100 per cent., or even 90 per cent., but there is no questioning the fact that the more nearly the score approaches perfect, the more nearly will the milk produced on that farm approach perfection. As an illustration of this. during the past year twenty-four (24) samples of milk were taken from a creamery supplied by 142 dairy farms; of these but five scores were below 60 per cent., the average score being 71 per cent., and the average bacterial content per c. c. was 44,991. Samples were taken from a creamery which was supplied by 300 dairies, 218 of which scored below 50 per cent., the average being 43 per cent. Twenty-four (24) samples from this creamery showed an average bacterial content of 2,500,000 per c. c. Numerous other instances can be cited to prove the accuracy of this theory. Acting upon the foregoing facts a decisive effort was made during the year to bring up all low score dairies to a higher standard. Letters of warning were written to the dairymen calling attention to the low score, and to previous notices requiring improvements. Notification was also given that re-inspections would be made at a designated time, usually thirty days after date. As a result over

7,000 letters of warning were sent to the owners or operators of these low score dairies. Reinspections were made at or about the time stated. It was found that at 1,560 farms no effort whatever had been made to improve the conditions surrounding the milk production. The dealers, who received the milk from these tarms were notified of the existing conditions, and were informed that to continue to receive milk from farms of this character would be considered as sufficient cause to recommend the revocation of their permits to sell within the City. In addition to these exclusions, there were found 16 farms on which there were infectious diseases, which had not been reported, six of which were supplied by grossly contaminated water. Seventeen of these farms had submitted false infectious disease reports, and three others had combinations of the above condition, resulting in a most impure milk supply. In all of the above cited cases, the milk was excluded from use, the total exclusions numbering 1,602.

This action on the part of the Department has had a most beneficial result to the producers throughout the milk supplying districts, as they have almost invariably taken steps to raise their score at least above the very low one of 50 per cent. Many of the owners and tenants of farms, the milk of which had been excluded, took steps to immediately comply with the requirements of the Department. In this connection, it will be interesting to note, that the average score of all dairies inspected during the year 1908, was 57 per cent.; and that the average score of all dairies inspected during the year 1909, exclusive of the City dairies, was 70.92 per cent. The average creamery score for 1908 was 71 per cent., and the average score of creameries inspected during 1909 was

per cent. This remarkable increase, which is greater than has been made in any year since the installation of the country milk inspection, is undoubtedly due to the improvements of the methods of producing milk, to the thorough training of the inspectors, many of whom have been on this work since its inception, and to a spirit of co-operation on the part of the dairy farmers and creamery owners, who have banded together in many instances to assist each other in complying

with the recommendations of the Department of Health.

The dairies within the City during this past year were also considered as being part of the country work, and their inspections have been performed by men detailed from the country milk inspection force, assisted by sanitary inspectors from the various Borough offices loaned temporarily for that purpose. Department of Health notices were issued against nearly every dairy stable in the City and enforced with rigor even to the point of declaring some of the stables public nuisances and preventing the sale of milk produced therein. At the present writing the dairy stables within the City have a far higher average score than those on the milk shed due in a very large measure to the constant supervision to which they are subjected.

One of the many serious problems which is met with in the conservation of the milk supply is the question of infectious diseases as transmitted by milk. The infectious disease reports required by the Department are submitted with more regularity and with more accuracy than ever before, but notwithstanding this, there were in 1909,

two outbreaks of typhoid fever in New York City which were traced eventually to the milk supply. In one instance the infection apparently came from a "carrier" of many years standing, which of course was not reported, and in the other from cases which were unreported until the creamery supply came under suspicion and was investigated by

inspectors of this Department.

On August 26, several cases of typhoid fever were reported to this Division from the Division of Communicable Diseases as having obtained their milk supply from a grocery store located in The Bronx. The milk supply from this store was obtained from three distinct sources, one from Vermont and the other two from two towns in the State of New York. The Bronx store received milk from a specified creamery in the State of New York, but at times it also received this product from other points. The milk which was sold by the Bronx store was always milk from the same company, however. It was found that a clerk in the employ of the owner of this store had typhoid fever, and while he seemed to be so isolated as not to be a menace to the public health by infecting the milk, there were so many typhoid patients who had been using milk from this store that it seemed best to stop the sale. The family of the owner consisted of a wife and two children. Specimens were taken for the Widal and Daizo reactions. One of the children gave a positive result to the test. This child was later taken seriously ill with the disease. The sale of milk at this store was discontinued until the patient's entire recovery. Twenty-one cases of typhoid fever, which had been previously reported to the Department, were found to have been using milk from this store, while four other cases in The Bronx used milk from other stores which were supplied by the same company.

About the same time as the above indicated cases, there were reported several cases of typhoid on the East Side of the Borough of Manhattan, who were using milk from stores supplied by the same company, and it was found that this milk had its origin in one town in the State of New York which we will call "C." The milk from "C." was also supplied to the previously cited store in The Bronx. Upon investigation it was found that almost all the milk shipped from this town was taken by the company, who supplied the Bronx store, and also the East Side district. As a large number of cases having in common a supply of milk from "C.," inspectors were instructed to make a thorough examination of the creamery located there, and the dairy farms producing the milk. This examination failed to reveal any present or recent cases of typhoid existing upon any of the dairy

tarms.

DIVISION OF CONTAGIOUS DISEASES.

The Division of Contagious Diseases has the following personnel:

Chief of Division.

Borough Chiefs (one for each Borough).

Assistant Borough Chief (Borough of Manhattan only).

Medical Inspectors (Diagnosticians).

Medical Inspectors (Supervisors).

Medical Inspectors (District).

Medical Inspectors (Vaccinators).

Veterinarians.

Disinfectors.

Drivers.

During the year 1909, this Division has continued its work as regards the supervision of contagious diseases largely along similar lines as have been customary heretofore.

The following contagious diseases are referred to this Division:

Diphtheria, scarlet fever, measles, German measles, smallpox, varicella, typhus fever, relapsing fever, asiatic cholera, plague, yellow fever, tetanus, anthrax, glanders, infectious diseases of the eye and

whooping cough.

In diphtheria, when a culture taken by the attending physician and forwarded to the Department of Health shows, upon examination, diphtheria bacilli, the slip accompanying the culture is accepted as a report of case. In each Borough office, every morning, Sundays and holidays excepted, all reports of contagious diseases received during the previous 24 hours, and in cases of Sundays and holidays, every 48 hours, are grouped according to the districts in which they are located. At 9 a. m. reports of these cases are telephoned to the District Medical Inspectors from the original reports, name, age, address and disease of each patient being given as well as all other necessary information. Typewritten lists, from the original reports, according to districts, are made out, which also includes, according to districts, the fumigations performed during the previous 24 hours. The daily lists from the Borough of Manhattan, Brooklyn and The Bronx are mailed by the public printer before 6 p. m. In the Boroughs of Queens and Richmond the lists are mimeographed and mailed from the Borough office. A copy of the daily list is mailed to every Medical Inspector, also each Principal of public and parochial schools, private schools, kindergartens and day nurseries, to each hospital and institution for children and all branch public libraries, the various City departments, and once a week to many Sunday schools. The envelopes, properly addressed and stamped, in which the daily printed lists are mailed to public

schools in all boroughs, are furnished by the Board of Education; all other envelopes in which these lists are mailed are furnished by the

Department of Health.

Every reported case of diphtheria, scarlet fever or measles is promptly acknowledged by mail, with instructions to attending physicians as regards his duties; isolation, quarantine of the patient, as well as the proper disinfection of rooms and other regulations of the Department pertaining to the particular disease reported. Should the contingency arise that the physician does not receive an acknowledgment, he may justly assume that his report has not been received by the Borough Office.

Complete record of each case of contagious disease reported is kept in the Department of Health, in an envelope, and filed under an alphabetical street list. In this envelope is filed everything relating to the case, from the original report of it to the official test card of final fumigation, and in cases of diphtheria, scarlet fever, and smallpox, the receipt from the family for goods returned after the sterilization of

the same at the Department plants.

DIAGNOSTICIANS.

Diagnosticians of the Department of Health are required to diagnose:

(1) Every suspected case of contagious disease reported;

(2) Every case of contagious disease reported for removal to Minturne or one of the Department hospitals;

(3) Every case reported as typhus or yellow fever, smallpox or

plague, Asiatic cholera or human glanders;

(4) Every case of varicella reported to the Department;

(5) All scarlet fever cases brought to the attention of the Department by medical school inspectors, as well as all cases of contagious diseases reported by medical school examiners or district medical inspectors, which have not been reported by attending physicians.

The supervisors of the division are required to keep the work of the district inspectors under careful surveillance, in order that the many details regarding their service may be carried out uniformly and

thoroughly, and without the possibility of neglect.

The district medical inspector must visit each case the day it is referred to him from the Borough Office, and keep it under proper sur-

veillance until it is terminated.

Should the patient be a school child, the district inspector must fill out and sign a special record card. These cards are filed under proper date, by school and class, the nature and number of contagious diseases of pupils that have been reported during the school year.

In the case of contagious diseases found in a hotel, the manager must be notified as regards rules of the Department concerning contagious diseases in hotels. In apartment or tenement houses where there is an elevator, the family and janitor must be notified that members of the family cannot use the same in going from the apartment, but are allowed to use the same when ascending from the street.

In the case of diphtheria, scarlet fever, measles, occurring in a room or apartment in the rear of or connected with a store, the latter must be closed until the case is terminated and the room fumigated. Other-

wise the patient must be removed to a Department hospital.

Should merchandise be manufactured in any room of an apartment in which there exists a case of diphtheria, scarlet fever or measles, work must be stopped immediately. Should this not occur, the patient must be removed to a Department hospital. Varicella and German measles cases must be visited the day they are reported from the Borough Office, the former to remain isolated until all scabs have been shed, and the latter from seven to ten days, or longer if the case requires.

No fumigation or placarding for either of these diseases is re-

quired by the Department.

VETERINARIANS.

The duties of the veterinarians are to visit and examine all reported cases of glanders in horses, as well as all cases reported as "suspected" glanders. Every horse diagnosed by them as glandered is destroyed, and through disinfection 1-1000 bichloride of mecury solution, and hot soda solution (one-half pound to three gallons of water) is ordered for the stall and all materials which commonly are in contact with the infected animal.

When glanders occur in one horse of a stable all the horses in that stable are carefully examined. The mallein test is also applied when necessary. The records of glanders cases are kept in envelopes similar to those used for filing contagious records and filed under an alphabetical street list of stable addresses.

On some occasions the state veterinarian, after appraisement of a glandered horse, destroyed the animal and supervised the immediate

disinfection of the stable.

The Board of Health, at a meeting held October 27, 1909, amended

Section 125 of the Sanitary Code to read:

"Sec. 125. No person shall keep, retain or allow, or cause to be kept, or retained at any place in the City of New York, any animal having the disease known as glanders or farcy, or any other contagious disease, but shall forthwith report every such case and the location thereof to the Department of Health; the Sanitary Superintendent or an Assistant Sanitary Superintendent of the said Department shall cause every such animal to be destroyed and the body thereof removed and disposed of in such manner as shall be by him designated."

The veterinarians are further required to examine, and test with

tuberculin, cattle in dairies from which City milk is supplied:

(1) When a suspected case of contagious disease is reported in the

(2) When an application is made to the Department for a permit to sell selected or guaranteed milk.

During 1908, 2,652 examinations of cattle were made.

During 1909, 10,262 examinations were made.

During the past year the work of the eight veterinarians was materially increased by a rather large number of "dog bite" complaints

received, viz.: 2,075.

When a "dog bite" complaint is received, a veterinarian is detailed to immediately examine the dog and obtain, if possible, from the owner or other persons a thorough history of the conditions under which the person was bitten. He is then required to notify the person bitten whether, the dog is rabid, vicious or neither. If rabid, the dog is destroyed and the head sent to the laboratory for verification of diagnosis, and the person bitten is advised to visit the Department Laboratory for Pasteur treatment, free of charge. If the veterinarian reports that the dog is vicious and dangerous the animal is removed to a Department plant for observation. A medical examiner examines each person bitten and reports to the Borough Office the location and extent of the wounds, and the conditions under which they were received.

After being under observation at the Department plant for a period of not less than four days each dog is again carefully examined by a veterinarian and if he be reported "vicious and too dangerous to be allowed at large," the animal is destroyed. Should the veterinarian report after four days observation that the dog is not vicious, the animal is returned to its owner. Full reports of the veterinarian and medical inspector in each case are kept in envelopes filed under the street address of the owner of the dog, with a cross card file under the street addresses

of the persons bitten.

Boroughs.	"Dog Bite" Complaints.	Number of Dogs Sent to Plant for Observation.	Number Destroyed as Vicious.
Manhattan Brooklyn The Bronx Queens. Richmond	1,013 449 . 306 194	114 157 46 8 *	102 146 31 2 26
Total	2,075	325	307

^{*} Dogs held at owners' homes under observation; not removed to Department plant.

DISINFECTORS.

Disinfectors of this division are required to fumigate with formaldehyde gas rooms infected with diphtheria, scarlet fever, measles or smallpox as per written instructions of the diagnostician and district medical inspectors. They are also required, to properly tie up and pack goods ordered removed for sterilization as well as to place test cards in the rooms from which goods are to be removed. The latter are collected, by the wagon drivers and sent to the research laboratory where they are examined and the report of this examination is sent to the Borough Office and filed in the envelope containing the records of the case.

After proper preparation of the apartments to be disinfected, as well as proper sealing of the same, the fumigation is proceeded with and a paster placed on the outside showing the time that the fumigation was started and the hour when the apartment may be opened.

Disinfections are also made by this division with bichloride of mercury in the strength of 1-1000 and hot soda solution, of all infected materials in stables where glanders has occurred, according to the written instructions of the veterinarians. All woodwork of infected stalls, etc., is removed and destroyed.

A proper uniform has been provided for the Disinfectors of the

Department of Health during the past year.

WAGON DRIVERS.

During the past year the wagon drivers of this division have been properly uniformed. They are required to remove, after fumigation of apartments, the bedding, carpets and all other materials which are to be transferred for sterilization. Such materials are removed following cases of diphtheria, scarlet fever, and smallpox, to a sterilization plant of the Department. Upon removal of the goods a proper receipt is given and the goods are returned the following day and the receipt obtained from the owner.

On November 1 the Borough Office of Richmond was removed to commodious quarters appointed in a newly erected building at 514 Bay street, Stapleton, S. I. A decided improvement in the general condition in the office in this Borough may be noted here; more office space is now available and more efficiency of office service established.

On December 31 the office of the Borough of Brooklyn was removed to a new building erected by The City of New York at Flatbush ave-

nue. Fleet and Willoughby streets.

Number of Contagious Diseases Reported and Number of Disinfections and Fumigations for Same During 1908 and 1909.

19	08.		19	09.
Number Cases Reported.	Number of Disinfections and Fumigations Performed.	Disease.	Number Cases Reported.	Number of Disinfections and Fumigations Performed.
16,431 24,426 38,276 17 1,198	13,075 19,174 25,304 16 984	Diphtheria	15,097 12,475 31,954 9 941	12.279 9.430 17,882 7 856
80.348	58,553	Totals	60,476	40,454
	710	By attending physician, in addition to above.		835

19	08.		190	09.
5,730 388 1,480	79,878 7,598 1,738	Treated at home Removed to Department hospitals by request Forced to Department hospitals. "Walked in" to Department hospitals. Total treated in Department hospitals. Treated in other hospitals or institutions.	285 1,584	64,146 6,283 1,645
	89,214	Total cases reported		72,074
			1908.	1909.
Blood s Horses d Glandere Post-mo Inspection Disinfect Vaccinate Examina Animals	pecimens tested with ed horses retem exactors of sections of citions of the referred	s taken	37,555 1,429 1,284 1,198 72 7,296 1,118 803 4,622	33,598 836 616 941 23 5,686 904 351 5,168
diag Animals Examina Cows te Cows co Examina	gnosis of found to ations of sted with ondernned ations of	rabies b have rabies cows tuberculin d other animals	250 104 2,652 58 4 66 103	199 57 10,262 6 9 1,896

Work Performed by the Hospitals for Contagious Eye Diseases During the Year 1909.

As in previous years, the treatment of cases of contagious eye diseases occurring among school children has been carried on, for the most part, at the Dispensary for Contagious Eye Diseases, situated at the foot of Gouverneur street and at the Hospital for Contagious Eye Diseases, No. 341 Pleasant avenue, Manhattan Borough. By far, the greater number of the patients have been cases of trachoma, referred by the medical school examiners. Cases of catarrhal and mucopurulent conjunctivitis excluded from the schools have also been treated. The amount and character of the work performed at these institutions from January 1 to December 31, 1909, is shown in the following tables:

Hospital for Contagious Eye Diseases.

Cases treated by operation	1,287
New cases of trachoma	2,018
New cases of conjunctivitis	1,170
New cases rejected as non-contagious	825
Total number of new cases	4,013

Number of revisits	39.988
Dispensary for Contagious Eye Diseases.	
Cases treated by operation. New cases of trachoma. New cases of conjunctivitis. New cases rejected as non-contagious.	3.011 3.054 878
Total number of new cases	6,943
Number of revisits	97.994 6.474

The treatment of the contagious eve diseases of school children by the Department of Health was inaugurated in December, 1902, and until May of the present year, it was carried on at these two institutions alone. It was not until January, 1909, that provision was made, for a hospital to be located in the Borough of Brooklyn, and, up to this time, the large and ever-increasing number of cases in that Borough had received very little attention. A small number had, indeed, found their way to the Gouverneur Street Dispensary, some, referred by the medical school examiners and others, strange as it may seem, coming of their own volition, and most of these cases had been referred to the institution on Pleasant avenue for operation. Still, their number was relatively small, and the vast majority of the cases existing in Brooklyn had received no attention from this Department. mendations in this connection had been made annually, but, on account of the additional expense entailed, it had not been possible to secure the necessary appropriations. In 1909, however, funds for a Brooklyn hospital were voted by the Board of Estimate, and a building situated on Throop avenue was rented for a term of years. In May of the same year, after the necessary alterations had been partially completed, the building was opened as a dispensary. The amount and character of the work performed in this institution from May 17 to December 31, 1909, is shown in the following table:

New cases of trachoma	383
Total number of new cases	1.371
Number of revisits	9,900

Owing to the usual delays encountered in equipping an institution of this character, it has not as yet been possible to perform operations in this hospital. The arrangements for this purpose are, however,

nearly completed, and it is expected that operative treatment will begin early in the ensuing year. This will necessitate a slight increase in the present staff (two medical inspectors, one nurse and two domestics) which it is hoped the Board of Estimate will grant. At present, cases in Brooklyn are referred to the hospital on Pleasant avenue for operation, their subsequent treatment being conducted in the Brooklyn institution. It is hardly necessary to point out that this system not only inflicts a hardship upon these patients but, by overcrowding the hospital in Manhattan with cases from Brooklyn, it necessitates a diminution in the number of cases operated upon from the former Borough. The new hospital in Brooklyn will contain twenty beds, thus doubling the present operating capacity and the advantages, therefore, that it will bring to the Department's aid in its effect to eradicate trachoma from the public schools will obviously be very great. Not only will it be able, usually to care for the operative cases derived from Brooklyn, but, should these cases at any time be few in number, it will be capable of accommodating temporarily an excess of operative cases arising in Manhattan. The converse is equally true and the good results to be obtained from two such institutions working in harmony may readily be appreciated. It is estimated, that the cases to be operated upon within the coming year as a consequence of this will be more than double those operated on during 1909. During the year 1908 investigation of patients discharged as cured was undertaken in order to ascertain the permanency of the results which had been obtained as regards the previous treatment. This investigation has been repeated in 1909, result of which is shown in the following table:

Hospital for Contagious Eye Diseases, 1909.

	Operative.	Non- Operative.
Discharged apparently cured	240	196
Investigated	240	196
Found	136	129
No relapse	96	86
Percentage of no relapse to those found	70.58	66.66
Percentage of 1908	66.66	62.83

Dispensary for Contagious Eye Diseases, 1909.

	Operative.	Non- Operative.
Investigated	169 107 82 76.63	552 224 169 75 · 44
Percentage of 1908		

When we consider the obstinate nature and well-known relapsing tendency of trachoma these results are certainly to be regarded as very gratifying. It must be remembered, furthermore, that a certain proportion which has been impossible to estimate, of the cases classi-

fied as relapsing are undoubtedly cases of reinfection.

When we attempt to estimate the percentage of cures in all cases treated, only an approximation can be arrived at. Many of the non-operative cases discontinued treatment after one or two visits, in fact, can be hardly considered as treated at all. These cases, for obvious reasons, have not been included in our statistics. In other instances, treatment is continued from one year into the next. It may be mentioned as a fact that, the list of non-operative cases includes many of follicular conjunctivitis, the tendency always being to treat doubtful cases as trachoma rather than to incur the possibility of a mistake in diagnosis. On this account, in all probability, the figures showing the number of cases of trachoma among school children in this city are much too high. Boldt in his classical treatise on trachoma finds

cause for the same complaint of the statistics in Germany,

Medical statistics, as regards trachoma, are, as a rule, unsatisfactory, due to the fact that the disease, in its earliest stages, represents such a varied clinical picture, that numerous cases are not recognized at this period of the disease. The operative cases, however, form a much better basis upon which to estimate the percentage of cures. cases have always been those of severe and clear, well-marked and defined, and it is only fair to assume that the vast majority of them have been cases of true trachoma. In recent years about 1,000 cases have been operated upon annually and approximately 400 operative cases have been discharged cured each year. Again it is obvious that the post-operative treatment in many cases extends from one year into the next and that, therefore, the number of cures of any one year is not necessarily derived from the cases operated upon during the twelve months reported upon. However, as the number operated upon each year is approximately the same, these figures form a fairly trustworthy basis upon which to estimate results, and a conservative statement may be made to the effect, that the experience in this institution has shown that 40 per cent, of well-marked cases of trachoma in children can be cured by means of expression and subsequent treatment. It may be added that investigation shows that 75 per cent. of these cures present no evidence of relapse when examined during the succeeding twelve months, and that a large but uncertain number of the relapses which come under observation are to be regarded as reinfections.

The protozoa-like bodies in the secretion of cases of trachoma, attention to which has been called by Greef, Halberstadter and Prowacek, are under observation by this Department and under investigation at the present time by the Research Laboratory. Final conclusions have not been reached as yet regarding these bodies. Of new methods of treatment there is little to be said in so far as the treatment of children is concerned. The silver salts and sulphate of copper still occupy the first place as local applications, and expression, preferably with the

Contagious Discases.

Knapp roller forceps, is the routine operative procedure. Kuhnt's expressors have been recently introduced and have been of decided service in the so-called "gelatinous trachoma."

In regard to the treatment of trachoma in adults a decided and unlooked-for advance has been made by the employment of the method known as excision. This method of treatment, although in vogue in Eastern Prussia for the past ten years, has never found its way to the United States, and the first operations of this character were performed at the Eye Hospital of this Department in the past summer. A detailed description of this method is beyond the scope of this report, but to make mention that it includes two surgical procedures; that of the combined excision of the entire diseased tissue and the Tarsal Resection of Kuhnt; the latter only being used in the cicatricial stage. Results obtained by these procedures have been more than gratifying and they possess a great advantage over other methods inasmuch as they not only cure the patient of the disease but render him, in most instances, proof against reinfection. The treatment of trachoma in adults up to the present time has been a most disappointing undertaking. Expression

Truchoma Hospitals and Dispensaries—Number and Percentage of Apparent Cures.

	Hospital, Manhattan.	Hospital, Brooklyn.	Dispensary.	Total.
Cases Treated— Trachoma: operative Trachoma: non-operative Other contagious eye diseases Discharged Apparently Cured—	1,287	93	650	2,030
	2,018	681	2,361	5,060
	1,170	382	3,054	4,606
Trachoma: operative	277	7	146	430
	258	26	300	584
	257	28	230	515
Apparently Cured— Trachoma: operative Trachoma: non-operative Other contagious eye diseases	21.52	7.52	22.46	21.18
	12.78	3.82	12.70	11.34
	21.96	7.33	7.53	11.06

Trachoma Hospitals and Dispensaries—Special Annual Investigation—Number and Percentage of Permanent Cures Among Patients Discharged; Investigation Made (Dates and Duration).

		Tracl	noma.	
	Oper	ative.	Non-ope	erative.
	Hospital, Dis-Man-hattan. Pensary. Hospi Mar-hatta			Dis- pensary.
Discharged apparently cured. Investigated Found No relapse. Percentage no relapse to those found Same percentage, previous investigation	240 136 96 70.58	146 169 107 82 76.63 82.50	258 196 129 86 66.66 62.83	300 552 224 169 75.44 84.55

Contagious Discases.

has rarely resulted in cure, and the usual course of the disease has been a steady progress towards the cicatricial stage, interrupted by periods of intense suffering due to recurrent attacks of the usual inflammations which complicate this disease. The combined excision of Heisrath performed in the follicular stage is capable of curing the patient in a comparatively short time.

Trachoma Hospitals and Dispensaries—Treatment and Disposition of Cases, Trachoma Hospital, Manhattan.

	Tracl	ionia.	Other	
	By Opera- tion.*	Non- operative only.	Contagious Eye Diseases.	Total.
Cases Treated— Under treatment January 1, 1909 New cases treated in 1909	861 1,287	2.332 2,018	529 1.170	3.722 4.475
Total treated in 1909	2.148	4.350	1,699	8,197
Disposition— † Discharged apparently cured ‡ Discontinuing before cured Under treatment December 31, 1909	277 950 921	258 1.304 2,788	257 738 708	2,992 4,417
Total	2,148	4.350	1.699	8,197
Percentage of those treated discharged apparently cured	12.89	5.93	15.13	

^{*} With post-operative treatment following.

† It is suggested that no totals be entered for these items, since by combining several unlike quantities a talse conclusion might be drawn.

‡ A patient is considered as "discontinuing" when he does not appear for 6 months.

Trachoma Hospitals and Dispensaries-Treatment and Disposition of Cases, Trachoma Hospitals, Brooklyn,

	Track	noma.	Other	
-	By Opera- tion.*	Non- operative only.	Contagious Eye Diseases.	Total.
Cases Treated— Under treatment January 1, 1910 New cases treated in 1909	See 93	Note 681	382	1,156
Total treated in 1909	93	681	382	1,156
Disposition— † Discharged apparently cured ‡ Discontinuing before cured Under treatment December 31, 1999	7 12 74	25 65 590	28 26 323	103 992
Total	93	681	382	1,156
Percentage of those treated discharged apparently cured	7.52	3.82	7.33	

^{*} With post-operative treatment following.
† It is suggested that no totals be entered for these items, since by combining several unlike quantities a false conclusion might be drawn.
‡ A patient is considered as "discontinuing" when he does not appear for 6 months.
Note—This Hospital was opened May 17, 1909.

Contagious Discases.

Trachoma Hospitals and Dispensaries—Treatment and Disposition of Cases, Trachoma Dispensary.

	Track	noma.	Other	
	By Opera- tion.*	Non- operative only.	Contagious Eye Diseases.	Total.
Cases Treated— Under treatment January 1, 1909 New cases treated in 1909	496 650	3,633 2,361	1,729 3,054	5,858 6,065
Total treated in 1909	1,146	5,994	4,783	11,923
Disposition— † Discharged apparently cured ‡ Discontinuing before cured Under treatment December 31, 1909	146 401 599	300 2,437 3,257	230 1,650 2,903	4,488 6,759
Total	1,146	5.994	4,783	11,523
Percentage of those treated discharged apparently cured	12.74	5.00	4.81	

Trachoma Hospitals and Dispensaries-Examinations, Diagnosis and Treatment.

	Hospital, Manhattan.	Hospital, Brooklyn.	Dispensary.	Total.
Examinations— Examinations for diagnosis	5,302	1,371	6,943	13,616
Diagnoses— Cases rejected as non-contagious Cases found: trachoma	827 3,305	215 774	878 3,011	1,920 7.090
Cases found: other contagious eye	1,170	382	3,054	4,606
Total	5,302	1,371	6,943	13,616
Treatments— Trachoma: operations Trachoma: post-operative Trachoma: non-operative Other contagious eye diseases	1,2 ⁸ 7 2,6 ⁸ 7 35, ⁸ 74 3,7 ¹ 7	77 2,435 5,437 2,050	650 30,817 44,970 22,207	2,014 35,939 86,281 27,974
Total	43,565	9,999	98,644	152,208
Largest number in one day	287 175	192 54	881 339	18,933

^{*}With post-operative treatment following.
† It is suggested that no totals be entered for these items, since by combining several unlike quantities a false conclusion might be drawn.
‡ A patient is considered as "discontinuing" when he does not appear for 6 months.

Contagious Diseases-Prevalence of Contagious Diseases-Case Rate by Years, Boroughs, and Diseases Reported

		Nun	Number of Cases Reported	ses Report	ed.			Numb	Number per 1,000 of Population	o of Popul	ation.	
	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- m ond.
Dipltheria and Croup— Vent 1995 Year 1906 Year 1907 Year 1908 Year 1908	13,686 14,757 15,276 16,431 15,097	7,553 7,484 7,285 8,263 7,933	4,307 5,211 5,398 5,451 4.735	992 1,251 1,478 1,648	\$27 827 821 785 764	257 224 294 284 330	88.88 9.35.68 17.75 10.88	3.56 3.26 3.60 3.60 3.60	3.71	3.63 4.79 5.04 3.84	3.000	3.57 3.02 3.92 3.73 4.23
Scarlet Fever— Year 1905 Year 1907 Vear 1907 Vear 1907 Vear 1908 Year 1908	8,071 7,881 15,788 24,426 12,475	4,233 4,068 8,184 12,059 5,909	2,884 2,760 5,436 8,123 4,275	495 566 1,205 2,529 1,161	283 342 655 1,298 856	176 1476 308 274 274	2.00 3.68 2.73	2.00 1.87 3.67 5.26 2.51	2.11 1.96 3.75 5.44	1.8t 1.95 3.91 7.73 3.33	1.63 2.98 5.59 3.49	2.1.44 1.96 3.54 3.51
Measles— Year 1905 Year 1906 Vear 1907 Year 1908 Year 1908 Year 1908	19,026 38,653 16,622 38.276 31.954	9,495 18,265 10,039 18,264 14,766	7,053 13,827 4,509 12,807 9,881	1,266 3,005 1,401 4,612 3,714	924 1,766 424 1,897 2,118	288 1,790 249 696 1,475	78.30	8++48 7-97 6-27	5.18 3.11 8.45 6.45	4.64 10.36 4.55 14.10	88.17 8.17 8.17 8.64	24.19 3.32 9.16 18.91
Small-pox— Vear 1995 Vear 1996 Vear 1997 Vear 1998 Vear 1998	100 100 58 17 17	12 148 10 10 10 12	204 4000 W		: : - 8	:::: ^H ,	.01	.006	.037 .037 .004	0000		
Chicken-pox— Vear 1995 Vear 1996 Vear 1997 Vear 1998 Vear 1998	5,473 4,667 4,308 5,928 6,765	2,699 2,398 2,050 2,718 3,244	1,943 1,483 1,452 2,045 2,264	421 396 526 710 593	162 171 107 297 347	248 219 173 158 317	1.35 1.12 1.00 1.34 1.48	1.27 1.10 .92 1.23	1.43	1.54 1.36 1.71 2.17 1.70	. 81 . 81 . 44 . 49 . 1.28	3.14 2.36 2.08 4.06

Contagious Diseases-Prevalence of Contagious Diseases-Case Rate by Years, Boroughs, and Diseases Reported-Continued.

	Rich- mond.	3.69 4.66 2.17 1.73 1.78	.50 .15 .150 .13		17.65 37.13 18.08 24.10 32.96	
ation.	Queens.	.30 .27 .15	200.02	10.1.188	10.35 14.27 18.86 18.10	
o of Popula	The Bronx.	0.00 0.45 0.10 0.10	4.6.1.4.2. - 1.6.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	. 6.5.1.0.0	12.64 18.83 15.72 30.05	:
Number per 1,000 of Population	Brook- lyn.	.66 .53 .27	23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	.00.	12.80 17.62 12.63 19.70	
Numb	Man- hattan.	. 34 . 34 . 50 . 40	4 12 12 12 14 15 15 15 15 15 15 15 15 15 15 15 15 15		12.31 15.94 13.36 19.06	
	New York.	.65	\$ 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		12.49 17.00 13.17 20.17 15.79	
	Rich- mond.	266 345 163 132 140	36 11 114 104	127 31 24	1,271 2,748 1,356 1,832 2,571	
ed.	Queens.	88 963 986 986	21.599		2,039 2,983 2,099 4,375 4,435	:
ses Report	The Bronx.	1288 888 133 358	113 90 140 140	10.46	3,452 5,462 4,842 9,827 7,381	`
Number of Cases Reported	Brook- lyn.	903 747 854 414 1,105	313 649 177 489 1,037	18 435 152 174	24,7437 24,747 18,307 29,487 23,474	
Nm	Man- hattan.	1,215 894 755 467 951	852 1,181 719 1,372 1,133	360 785 544 270	26,059 34,658 29,827 43,693 *34,212	
	New York.	2,637 2,177 1,920 1,182 2,752	1,319 1,942 982 2,131 2,438	1.477 823 582	50,258 70,598 56,431 89,214 72,073	
		Whooping Cough— Year 1905, Year 1906 Year 1907 Year 1908 Year 1909,	Parotiditis— Year 1905 Year 1906 Year 1907 Year 1908 Year 1908	German Measles—† Vear 1995 Vear 1996 Vear 1995 Vear 1998 Vear 1999	Fotal all Diseases for— Year 1905. Year 1905. Year 1907. Year 1908. Year 1908.	

* One case of Human Glanders. † No record previous to 1996.

Contagious Discases-District Medical Inspection.

	Totals.	76.52 2,346 1,531 72,073 64,146 6,182 1,745	14,504	65,638	649	182 82 44414 285 1,584
	Glanders (Human).		- 2	::	::	
	.euoigatnoo-noX	:::::::	4,724	2,934	∞∞	
	German Measles.	50 50 50 50 50 50 50 50 50 50 50 50 50 5	208	556	::	:: " : :
York.	Parotiditis.	2,476 13 19 6 6 2,438 2,285 152	91	34		
City of New York	Small-pox.	6 : : : 6 : 6 :	8 21		::	:: 6 ::
City	Whooping Cough.	2,780 4 23 1 2,752 2,632 1 119	158	243		!!"!!
	Chicken-pox.	7,073 90 115 103 6,765 6,576 164	747 838	6,612	66	: 0 :5
	Measles.	32,926 160 601 211 31,954 22,958 1,247 749	2,635	26,943 88,915	151	1,068
	Scarlet Fever.	13,022 189 282 262 76 12,475 10,002 2,214 199	3,900	73,516	225 424	15,994
	Diphtheria.	17,644 1.887 490 170 15,097 12,105 2,682 310	2,104	16,524 57,602	255 296	1,328 1,328 1,326
		Cases reported during year 1900 Cases found to be "no case" Duplicates. Cases never found. Cares to access reported. Cases quarantined at home. Cases treated in contagious disease hospitals. Cases isolated in other hospitals or institutions.	Diagnosticians—(16) Cases Visits to cases	Medical Inspectors—(65) Cases. Visits to cases.	District Nurses—(2) Cases. Visits to cases.	Inspections— Institutions Institutions Day nurseries Cases removed to hospital Cases forced to hospital Cases walked into hospital

Contagious Diseases-District Medical Inspection Continued.

	,					
	slatoT	37.139 1,732 906 229 34,212 29,064 4,208	7,448	32,422 114,879	649	2,667 2,667 187 1,354
	Glanders (Human).	-:::	- 2			
	Non-contagious.		1,909	3,361	88	
	German Measles.	276 I I I 270 270 264	132	270 491	::	
nhattan.	Parotiditis.	1,151 10 2 6 1,133 1,073	12.12	51		
Borough of Manhattan	Small-pox.	10 · · · 10 · 10 ·	410	: :	::	
Borou	.Whooping Cough.	951	88	62 81	пн	
	Chicken-pox.	3,373 23 23 23 3,124 75 75	378	3,402	66	
	Measles.	15,242 361 361 14,766 13,427 902 437	1,473 1,487	12,187 39,744	151	756
	Scarlet Fever.	6,173 78 78 162 24 5,909 4,435 1,356	2,231	5,521	225	1,171,1889
	Diphtheria.	9,967 1,567 377 90 7,933 5,790 1,933	1,288	9,228	255 296	732 70 1,131
		Cases reported during year 1905. Cases found to be "no case". Duplicates. Corrected totals of cases reported. Cases quarantimed at home. Cases treated in contagious disease hospitals. Cases isolated in other hospitals or institutions.	Diagnosticians—(7) Cases Visits to cases	Medical Inspectors—(22) Cases Visits to cases	District Nurses—(2) Cases. Visits to case?	Inspections— Institutions Day nuscrib Cases removed to hospital Cases forced to hospital Cases walked into hospital.

Contagious Diseases-District Medical Inspection-Continued.

Borough of Brooklyn.	Scarlet Fever. Measles. Whooping Cough.	4,490 10,293 2,421 1,128 3 1,054 76 11 12 128 45 11 12 128 45 11 12 128 45 12 12 12 12 12 12 12 12 12 12 12 12 12	1,134 576 111 54 3	28,468 39,727 5,379 49 1		\$68 218 7 1 3 5 5 19 5 5 1 3 1 1 3 1 1 1 3 1 1 1 1 1 1 1 1 1
	Diphtheria.	5,0,7 177,1 177,0,0 1,0,0,0 1,0,0,0,0 1,0,0,0,0,0 1,0,0,0,0	532	4,918	:::	348
		Cases reported during year 1009. Cases found to be "no case". Duplicates. Corrected totals of cases reported Cases quarantined at home Cases treated in contagious disease hospitals Cases isolated in other hospitals or institutions.	Diagnosticians—(5) Cases. Visits to cases.	Medical Inspectors—(26) Cases. Visits to cases.	District Nurses—(o) Cases Visits to cases.	Institutions— Institutions— Day Nursunies Cases removed to hospital Cases forced to hospital Cases walked into hospital

Contagious Diseases—District Medical Inspection—Continued.

	Totals.	7,554 119 46 7,381 6,733 416 232	1,054	7,168 26,363	: :	35 I	403
	Non-contagious.		266 288	559 559	::	: :	
	German Measles.	29	1.1	25 4 40	::	::	: : :
x,	Parotiditis.	192	16	00	::	::	
Borough of The Bronx.	Small-pox.		: :	::	: : : :	::	
rough of	M. hooping Cough.	3558	ব ব	53	: :		
Bo	Chicken-pox.	602 2 6 593 543 500	103	555 1,014	::	: :	
) પ્રક્લિકોલ્ક.	3,748 111 2,712 3,572 85	249	3,407	: :	: :	76
	Scarlet Fever.	1,199 32 6 1,161 1,161 1,161 1,161	286 398	1,171	::	: :	159 1
	Diphtheria.	1,426 73 1,335 1,147 1,147	123 148	1,389	: :		168 1 4
		Cases reported during year 1909. Cases found to be "no case" Duplicates Cases rever found Corrected totals of cases reported Cases quarantined at home Cases treated in contagious disease hospitals Cases isolated in other hospitals or institutions	Diagnosticians—(2) Cases Visits to cases	Medical Inspectors—(8) Cases Visits to cases	District Nurses—(o) Cases Visits to cases	Inspections— Institutions Day nurseries	Cases removed to hospital Cases forced to hospital Cases walked into hospital

· Contagious Diseases—District Medical Inspection—Continued.

	.slstoT	4,556 4,4,4 4,268 7,268 7,268	582 687	3,954	: :	20 : 20 m20 : 20 m20
	Non-contagious.		122	39		
	German Measles.	% ::: 88 4 : 4	nn	82	: :	
	Parotiditis.	666	::	W. 4	::	
Borough of Queens.	Small-pox.		: :	: :	: :	: : : : :
Borough e	.hooping Cough.	861	99	2 2 25	::	
	Chicken-pox.	35. 347 345 1	63	296 385	::	::::"
	Measles.	2,151 9 7 7 2,115 2,095 11	130	1,962 3,669	: :	: :0 : F
	Scarlet Fever.	\$25 \$25 \$25 \$25 \$25 \$25 \$25 \$25 \$25 \$25	154	789	: :	 4 4 5 8
	Diphtheria.	833 59 77 30 30 50 50 50 50 50 50 50 50 50 50 50 50 50	104	730.	::	
		Cases reported during year 1909 Cases found to be "no case") Duplicates. Cases hever found Corrected totals of cases reported Cases quarantined at home. Cases treated in contagious disease hospitals. Cases isolated in other hospitals or institutions.	Diagnosticians—(1) Cases Visits to cases.	Medical Inspectors—(5) Cases Visits to cases	District Nurses—(o) Cases. Visit to cases.	Inspections— Institutions Day nurseries Cases removed to hospital Cases forced to hospital Cases walked into hospital

Contagious Diseases-District Medical Inspection-Continued.

Borough of Richmond.	Small-pox. Parotiditis. German Measles. Xon-contagious. Totals.	2,629 3 24 2,629 49 6 6 6 6 7 1 10 24 2,521 1 10 24 2,521 1 2,430 1 3 10 2,40	1 1 5 163 685 5 1 6 197 870	7 13 24 1,777 9 19 149 6,428		+ 6	3 177
orough of	Mhooping Cough.		17	55	::	•	
13	Chicken-pox.	326 8 8 317 317	92 128	130	::	: :	: : :
	Measles.	1,492 11 4 2 1,475 1,467	207	1,074	::	: :	× ::
	Scarlet Fever.	286 12 12 274 219 10 10	95	215	::	::	50 1 4
	Diphtheria.	342 330 256 18 56	57 96	259 920	:::	::	55
		Cases reported during year 1909. Cases found to be "no case". Duplicates. Cases never found. Corrected totals of cases reported Cases quarantined at home. Cases treated in contagious disease hospitals. Cases isolated in other hospitals or institutions.	Diagnosticians—(1) Cases. Visits to cases.	Medical Inspectors—(4) Cases. Visits to cases.	District Nurses—(9) Cases Visits to Cases.	Inspections— Institutions Day nurseries	Cases removed to hospital Cases forced to hospital Cases walked into hospital

Contagious Diseases.

Vaccinations.*

	New York, 1908.	New York, 1909.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Vaccinations in districts	31,679 30,266 20,475 13,004	17,939 33,191 14,091 15,191	17,828 17,404 14.091 10,496	27 10,052 3,302	4,835 1,393	3 601 	73 299
Total vaccinations	95,424	80,412	59,819	13 381	6,236	604	372
Total vaccination certificates issued	42.973°	18.384	8,895	6,085	2,820	383	201

^{*} For vaccinations performed in scho ls see Division of Child Hygiene.
• Includes certificates issued for vaccinations performed in schools.

Disinfection of Premises.

	2101	njection					
	New York, 1908.	New York, 1909.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Number of Disinfectors on duty Houses Visited— Disinfection performed Disinfection postponed Rooms disinfected	45 63,219 3,483 106,147	37 45,910 2,049 74,693	23,641 762 43,160	13,802 677 18,742	5 4,810 174 7,279	3 2,413 374 3,466	1,244 62 2,046
Disinfections Performed— Diphtheria. Scarlet fever. Measles. Small-pox Tuberculosis Cerebro-spinal meningitis. Glanders (horses). Miscellaneous.	13,075 19,174 25,304 16 3,415 276 984 975	12.279 9.430 17,882 7 4,269 210 856 977	5.966 4,473 8,586 4 3,128 103 493 888	4,232 3,218 5,577 2 469 54 229 21	1,231 919 2,233 271 38 98 20	587 593 860 316 7 24 26	263 227 626 1 85 8
Total	63,219	45,910	23,641	13,802	4,810	2,413	1,244
By attending physician	710	835	116	285	17	266	151

Goods Disinfected or Destroyed.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
* Lots of goods			••••		• • • •	
By order from Divisions of Contagious)	11,821	5.472	4,103	1,359	720	167
From hospitals	10,293	1,070 102	9,222			
Total	22,217	6,644	13,325	1,359	721	168
Lots of goods disinfected Lots of goods destroyed Lots of goods returned Number of articles disinfected Number of articles destroyed Number of articles returned.	55,728 1838 21,280 119,550 15,505 114,356	15,001 850 6,228 30,190 9,013 30,297	35,716 676 12,947 79,346 5,419 74,068	3,226 168 1,293 5,815 665 5,818	1,316 128 653 2,667 302 2,642	469 16 159 1,532 106 1,531

^{*}A "lot of goods" consists of all articles removed for disinfection or destruction at the close of a case.

Note—The items "Lots of goods disinfected" and "Lots of goods destroyed" show the figures for the full year. All other items show the "Third" and "Fourth" Quarters only.

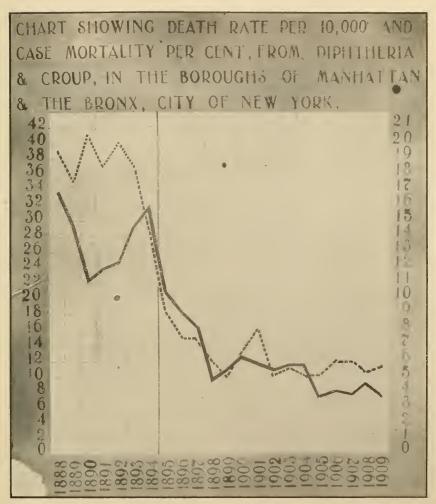
Contagious Diseases.

Department Stables.

	New York, 1908.	New York,	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Ambulance Drivers— Cases removed to hospitals Bodies removed to morgue Other visits made	8,008 92 3,851	8,158 60 4,335	4,031 46 1,003	3,603 9 3,057	433	••••	121
Total visits	11,951	12,583	5,080	6,669	606		228
Number of times ambulances } or other vehicles disinfected }	5,633	4,982	1,910	2.158	699		115
Goods Wagon Drivers— Visits, infected goods removed. Visits, disinfected goods re- turned	37,049 33,207 3.755	29.363 27,014 2,908	13,378 12,616 1,351	10,649 9,276 343	3,345 3,312 351	1,503 1,335 171	488 475 692
Total visits	74,011	59.285	27,345	20,268	7,008	3,009	1,655
Stable Service— Average number of horses) cared for	59	59	15	19	10	10	5
wagons	53 6	54 5	14 1		1	7	

Animal Inspection.

	New York, 1908.	New York,	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Number of Veterinarians on duty	9	10	4	2	1	1	2
Horses— Examinations of horses Blood specimens taken Horses tested with mallein Glandered horses condemned and destroyed Post-mortem examinations of horses Inspections of stables Disinfection of stables ordered	37,555 1,429 1,284 1,198 72 7,296 1,118	33.598 836 616 941 23 5,686 904	23,419 783 427 449 14 2,911	2,842 8 138 335 552 267	1,647 29 33 113 1 387 99	708 15 6 30 1 151 24	4,982 I I2 I4 7 I,685
Dogs— Examination of dogs Animals referred to Research) Laboratory for diagnosis of >	4,622	5,168	2,692	866	3 29	235 30	1,046
rabies	250 1 0 4	57	54 5	59 23	8	14	7
Cows— Examinations of cows Cows tested with tuberculin Cows condemned	2,652 58 4	10,262 6 9	334	378	16 2	793 3 3	8,741 I I
Miscellaneous— Examinations of other animals Post-mortem on other animals.	66	1,896 43	1,744	36	6		102



SOLID LINE-CASE FATALITY PER CENT. (SEE FIGURES AT LEFT SIDE). BROKEN LINE-PEATH RATE PER 10,000 OF POPULATION (SEE FIGURES AT RIGHT SIDE).



Chart No. 2, Showing the Number of Cases and Deaths from Typhoid Fever in the Borough of Manhattan, City of New York, During 1909.

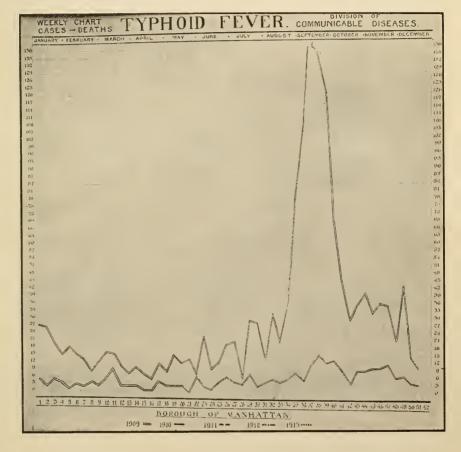
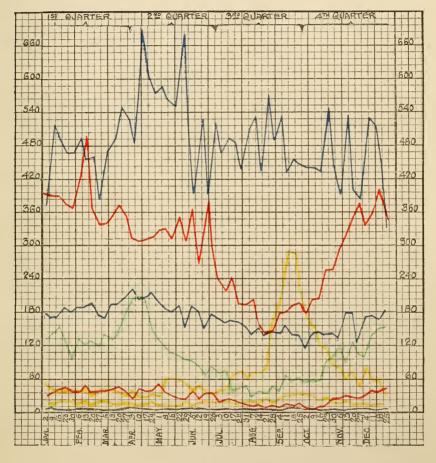




Chart No. 1 (Weekly) Cases and Deaths—Communicable Diseases—Greater New York, 1999.



KEY.

UPPER LINES—CASES. LOWER LINES—DEATHS.

BLUE—TUBERCULOSIS. RED—DIPHTHERIA. VELLOW—TYPHOID FEVER.

Deaths Only.

GREEN-PNEUMONIA. BLACK-CEREBRO-SPINAL MENINGITIS.



DIVISION OF COMMUNICABLE DISEASES.

EXECUTIVE OFFICE AND GENERAL ROUTINE.

The most important work of the year has been the preparation for an extended campaign against tuberculosis during the coming year, made possible by the increased appropriation in the 1910 budget for the Division of Communicable Diseases.

Although there has been no actual reduction of the working force of clerks during the year, yet the loss of experienced clerks to other city departments on account of superior salary inducements continued to hamper the work of the Division.

The salaries of the thirty-one medical inspectors of the Division were increased from \$1,200 to \$1.500 per annum, because of the special

services rendered and continuous duty.

SUMMARY OF INSPECTIONS, Etc., 1908-1909.

In Table 1, is given a summary of the inspections made by the inspectors and nurses of the Division of Communicable Diseases in Greater New York for the years 1908 and 1909. Almost two thousand more inspections were made during 1909, the increase being entirely in the visits made by medical inspectors; owing to the marked reduction in the staff of nurses, seven thousand fewer visits were made during 1909 than during 1908. More premises were ordered fumigated, more bedding and goods disinfected and more cases were removed to hospital during 1909 than during the previous year.

The number of cases and deaths from tuberculosis, diphtheria, typhoid fever, cerebro-spinal meningitis and pneumonia, occurring weekly in Greater New York during 1909, are shown in Chart No. 1. The various diseases will be discussed under their proper headings

later in the report.

Table 1.

Summary of Inspections, Visits, Etc., Division of Communicable Diseases.

	Cases V	isited.	3-	Visit to	Cases.		Disinfe Orde		Removals to Hospitals.	
	. 0		Inspe	ctors.	Nurses.		1909.		1103pitais.	
	1908.	1909.	1908.	1909.	1908.	1909.	Premises.	Goods.	1908.	1909.
Tuberculosis Diphtheria Typhoid Cerebro-spinal a meningitis shalarial fever Other	16,618 5,475 3,058 380 20 34 25,585	18,377 6,028 3.442 346 24 55 28,272	21,427 15,921 6,668 1,089 20 53	23,583 16,825 7,316 802 55	33,954	26,109	4.365 	5,362 	446	452

Communicable Discases.

Table 2.

Tuberculosis—General Figures.

Year.	* New Cases Reported, Phthisis.	Duplicates.	Deaths, Phthisis, Cases not Previ- ously Reported.	Total New Cases, Phthisis.	New Cases, Phthisis, per 1,000 of Population.	Total Deaths, Phthisis.	Deaths, Other Tuberculosis.	Total Tuber- culosis Deaths.	Deaths, Phthisis, per 1,000 of Population.	Deaths, All Tuberculosis, per 1,000 of Popula- tion.
New York— 1905 1906 1907 1908 1909	19,117 18,106 17,775 21,365 23,570	11,642 10.741 13,005 13,457 16,223	1,714 1,979 1,950 1,960 2,097	20,831 20,785 19,725 23,325 25,667	5.17 4.84 4.60 5.27 5.62	8,535 8,955 9,008 8,870 8,643	1.123 1,239 1,264 1,277 1,267	9,658 10.194 10,272 10,147 9,910	2.12 2.16 2.10 2.01 1.89	2.40 2.45 2.39 2.29 2.17
Manhattan— 1905 1906 1907 1908 1909	13,214 11,471 11 252 13,357 15,399	9,106 7,537 10,055 10,721 11,960	\$67 1,222 11,60 1,377 1,478	14,081 12,693 12,412 14,734 16,877	6.65 5.83 5.56 6.42 7.17	4,237 4,450 4,570 4,423 4,205	597 710 684 741 738	4,834 5,160 5,254 5,164 4,943	2.00 2.05 2.05 1.93 1.78	2.28 2.37 2.35 2.25 2.10
Brooklyn— 1905 1906 1907 1908 1909	4,283 4,847 4,680 5,824 6,057	2,026 2,202 1,943 1,553 1,358	614 477 477 409 350	4,897 5,324 5,157 6,233 6,407	3.59 3.79 3.56 4.17 4.16	2,420 2,557 2,515 2,484 2,347	389 389 412 382 381	2,809 2,946 2,927 2,866 2,728	1.78 1.82 1.74 1.66	2.06 2.10 2.02 1.92 1.77
The Bronx— 1905 1906 1907 1908 1909	\$37 1,045 1,153 1,393 1,437	358 664 691 809 2,437	118 153 174 93 164	955 1,198 1,327 1,486 1,601	3.50 4.13 4.31 4.54 4.60	1,441 1,450 1,460 1,508 1,623	73 86 97 95 88	1,514 1.536 1,557 1,603 1,711	5.28 5.00 4.74 4.61 4.66	5.54 5.29 5.05 4.90 4.92
Queens— 1905 1906 1907 1908 1909	430 504 530 561 549	19 206 195 353 468	74 99 115 37 76	504 603 645 598 625	2.53 2.88 2.93 2.57 2.56	278 308 307 283 309	43 41 49 38 43	321 349 356 321 352	1.40 1.47 1.39 1.22 1.26	1.61 1.66 1.61 1.38
Richmond— 1905 1906 1907 1908	353 239 160 230 128	133 132 121 21	41 28 24 44 29	394 267 184 274 157	5.47 3.60 2.45 3.60 2.04	159 190 156 172 159	21 13 22 21 17	180 203 178 193 176	2.20 2.56 2.08 2.26 2.04	2.50 2.74 2.37 2.54 2.26

^{*} Excluding duplicates.

Sanitary Supervision of Pulmonary Tuberculosis—General Figures, 1905-1909.

An entirely new system of registration and sanitary supervision has been devised of pulmonary tuberculosis, and will be put into effect

shortly after the first of January.

In Table 2, are given the general figures for tuberculosis for 1909 for Greater New York and the Boroughs, together with the corresponding figures for 1908. Over 41,000 cases of pulmonary tuberculosis were reported during 1909; of these, 16,000 were duplicates and 2,000 were deaths from tuberculosis in which the cases had not previously been reported during life. The number of new living cases of

pulmonary tuberculosis reported was 23.500, an increase of 2,200 over 1908. This increase in new reported cases was confined almost entirely to the Borough of Manhattan, and is to be ascribed to the steadily increasing activity of the Association of Tuberculosis Clinics, in which Association the Clinics of the Department of Health play a leading part. Because of this increase in new cases the prevalence rate per thousand of pulmonary tuberculosis increased from 5.27 in 1908 to 5.62 in 1909. The deaths from pulmonary tuberculosis (8,643) were lower than they have been since 1905, giving a pulmonary tuberculosis death rate per thousand of population of only 1.89, the lowest figure on record in this city.

Table 3.

Deaths from Pulmonary Tuberculosis and Tuberculous Meningitis, 0-15 Years.

	0 -	- 5	5 -	10	10 -	- 15	Total U	nder 15.	Total. Both	Deaths, Both per
	Pul. Tub.	Tub. Men.	Pul. Tub.	Tub. Men.	Pul. Tub.	Tub. Men.	Pul. Tub.	Tub. Men.	Under	Popula- tion.
New York										
1904 1905 1906 1907 1908	165 182 182 180 166 216	553 473 556 541 544 595	55 54 48 57 54 52	92 77 77 93 103 89	96 120 108 107 98	18 18 32 30 44 32	328 332 350 345 327 366	663 568 665 664 691 716	991 900 1,015 1,009 1,018 1,082	. 254 . 224 . 244 . 235 . 230 237
Manhattan					60					
1905 1905 1906 1907 1908	105 123 125 126 130 154	309 288 339 330 318 367	29 33 29 34 22 27	51 46 48 51 61 64	39 50 43 40 45	7 17 15 26 23	194 195 204 203 192 226	372 341 404 396 435 454	566 536 608 599 627 680	.275 .253 .280 .268 .273 289
Brooklyn		Ĩ								
1904 1905 1906 1907 1908	24	168 127 146 147 135 151	13 10 9 10 18 13	34 21 23 31 28 15	32 26 43 31 30 24	5 8 11 7 14 5	82 79 84 80 72 62	207 156 180 185 177 171	289 235 264 265 249 233	.219 .172 .188 .183 .167
The Bronx-	1									
1904 1905 1906 1907 1908	15 15	44 31 46 33 38 55	9 7 5 11 12 9	4 6 3 9 9	16 29 21 28 32 26	3 4 1	42 51 41 45 52 58	48 38 52 46 48 61	90 89 93 91 100 119	.351 .326 .321 .295 .305 .342
Queens										
1904 1905 1906 1907 1908	4 2 1	20 19 20 20 14 14	3 1 4 2 2 2	1 2 3 2 3 2	5 2 4 4 2 3	1 1 2 3 2	9 3 12 8 5	22 22 23 24 20 18	31 25 35 32 25 29	.164 .126 .167 .146 .107
Richmond-	1									
1904 1905 1906 1907 1908	6 7 3	12 8 5 11	3 1 	2 2 2 3	2 2 3	1 1 2 	1 4 9 9 6	14 11 6 13 11	15 15 15 22 17 21	.211 .208 .202 .293 .223 .269

Communicable Diseases.

As shown in Table 3, from 1904 to 1908, there was a steady diminution in the number of deaths among children under the age of fifteen, together with a corresponding fall in the death rate per thousand of population. But during 1909 a sudden rise in the number of such occurred; there were thirty-nine more deaths from pulmonary tuberculosis and twenty-five more deaths from tuberculous meningitis in such children than during 1908, and the death rate per thousand was .237, as compared with .230 for 1908.

Tuberculosis Register.

As is shown in Table 4, there was a marked increase in the number of cases of pulmonary tuberculosis enrolled in the tuberculosis files of the Department during 1909. In Manhattan the increase took place principally among the cases under care of tuberculosis clinics and the 'at home" cases under supervision of the Department of Health.

The total number of living cases enrolled during 1909 was about the same as during the previous year, namely, 54,000, and only 17,000 cases were removed from the register, as compared with 25,000 in

TABLE 4. Tuberculosis Register-Living Cases.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Cases enrolled January 1, 1909	29.736 6,093 2,189 8,748	20,674 3,527 2,189 5,749	6,406 1,585 2,163	1,714 601 587	670 301 	272 79
partment	3.401 534 8,771 23,570 3,806 4,309 15,365	2,408 356 6,445 15,399 1,852 2,354 11,193	676 135 1,847 6,037 1,408 1,450 3,199	171 32 323 1,437 279 381 777	50 6 137 549 233 168 148	96 5 19 128 34 46 48
Old cases resumed Total living cases enrolled in 1909	54.009	36,465	12,712	3,205	1,224	403
Cases removed from register in 1909	17,357 7,722 1,688 7,421 526	10,920 4,287 942 5,380 311	4,731 2,570 190 1,847 124	992 449 460 48 35	559 328 81 106	155 88 40 15
Cases enrolled December 31, 1900	36.652 5,843 5,476 11,863	25.545 3,255 5,000 8,020	7,9 ⁸ 1 1,732 3,290	2,213 530 476 280	665 25S 207	248 68
In institutions in city	3,980 802 8,688 36,652	3,086 553 5,631 25,545	597 169 2,193 7,981	167 65 695 	150	248

^{*}Other than the Department clinics. †Held in current register 2 years; after that time, removed to files.

1908. The number of removals from the city was slightly increased, while the number of cases in the "Not found" register was decreased over half, namely, from 15.450 to 7.421. This last fact is the most encouraging and means that patients are becoming more and more reconciled to furnishing their true address and that the inspectors and nurses of the Department of Health with increasing experience are able to locate a much larger percentage of these patients.

The number of deaths was slightly less during 1900 than during the

previous year.

TABLE 5. Tuberculosis—District Inspection.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Inspectors— Premises visited on account of: * Deaths † Cases removing to hospitals † Cases removing from city † Cases changing address. Cases "at home" visited on complaint. Suspected cases.	6.296 8.816 793 800 868 804	3,301 ° 6,260 ° 467 323 618 629	1,957 1,823 508 262 134 103	457 435 86 161 82 26	414 191 20 37 20 33	167 107 15 11 14 13
Total crises inspected	23,583	11,598	4,490 5,300	1,247 2,473	955	327 399
Nurses— Nur	23,583	14,446	5,300	2,473	965	399
Total months all "at home" cases under observation by district nurses Visits to cases "at home" under obser-	1,074	268	299	405	• • • • • •	102
vation	2,596	1,073	684	778		61
home "under observation	2.4	4.908	2.3	1.9		.6
	9,401		3.739	447	274	43
Total visits by District Nurses	26,109	15,571	6,810	2.442	1,008	278
Disposition of Cases— Forcible removal to hospital	25 427	13 200	161	6 50	1 14	2
zations	179	121	37	17	I	3
complaints	2,011	828	626	435	91	31
Renovations made voluntarily Disinfections of premises ordered Disinfections of goods ordered	3,715 4,365 5,362	1,545 3,164 2,102	1,731 481 2,261	141 292 594	255 350 331	43 78 74

^{*} From any one of several files, or not previously reported. † From any one of several files.

DISTRICT INSPECTION.

As shown in Table 5, during 1909, there was a distinct increase in the number of cases of tuberculosis inspected by the Department of Health, and in the number of visits paid to such cases. The number of cases forcibly removed to hospital was about the same for the two vears. The number of renovations ordered was greater during 1908; the number of renovations made voluntarily by the owners was greater during 1909. 1,000 more fumigations of premises were ordered dur-

Communicable Diseases.

ing 1909, and 1,000 more disinfections of goods. Whenever possible, renovation was ordered rather than fumigation.

DISTRICT AND CLINIC INSPECTION.

As shown in Table 6, the number of cases of pulmonary tuberculosis at their homes and not under the care of private physicians, stated in terms of months, was 107,000 during 1909, as compared with 104,000 during 1908.

Owing to the decrease in the staff of Tuberculosis District Nurses, the percentage of cases kept under observation by the Department of Health was decreased, being .9 per cent. during 1909, as compared with

1.2 per cent. in 1908.

The percentage of the total "at home" cases kept under observation by the Tuberculosis Clinics of the Department of Health showed an increase, 20.5 per cent. in 1909, as compared with 12.2 per cent. in 1908.

Table 6.

Summary of District Inspection of Tuberculosis and of Treatment by the Department Clinics.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Total months all "at home" cases during year	107,506	68,951	32,521	5,202	163	669
Total months all "at home" cases under observation by district nurses	1,074	268	299	4C5		102
Percentage of total months all "at home" cases	1.0	•4	•9	7.8		15.2
treatment or observation by Depart-	12,193	4,743	6,009	1,441		
ment clinics	11.3	6.9	18.5	27.7		
Total months all "at home" cases under observation or treatment by both dis-	13,267	5,011	6,308	1,846		102
trict nurses and clinics) Percentage of total months all at home "cases	12.3	7.3	19.4	35 • 4		15.2

CORRECTED TUBERCULOSIS DEATH RATE.

Most of the large general tuberculosis hospitals (with the exception of the Metropolitan Hospital) are located in the Borough of The Bronx. In computing the official tuberculosis death rates for the various boroughs, each is charged with all the deaths occurring in its hospitals. This is manifestly incorrect, as is shown in Table 7, where the deaths in a given borough of residents of other boroughs are deducted from the total deaths of the Borough to which they rightfully belong. The true corrected tuberculosis death rate per 1,000 for Manhattan is therefore 2.12 instead of 1.79, a reduction of .1 from 1908. In the same way the corrected tuberculosis death rate in Brooklyn is 1.60, as compared with a corrected rate of 1.74 in 1908. The apparently enor-

TABLE 7.

Table Showing Deaths from Pulmonary Tuberculosis in All Boroughs and Death Rate per 1,000 (horizontally), also Deaths and Corrected Death Rate of Residents of each Borough (vertically), 1907-1908-1909.

mous death rate of 4.06 in The Bronx shrinks to 2.12, and that of Richmond from 2.04 to 1.50.

CASES OF PULMONARY TUBERCULOSIS UNDER THE CARE OF PRIVATE Physicians.

There has been a great falling off in the number of cases of pulmonary tuberculosis reported as under the care of private physicians, there being only 3,934 such cases in Greater New York in 1909, as compared with 7,512 in 1906. This shrinkage has occurred entirely in the Borough of Manhattan, and is to be ascribed to the increasing activities of the Association of Tuberculosis Clinics and to more and more cases being sent to sanatoria.

Exclusions from School.

Beginning in the Autumn of 1909, all children suffering from active pulmonary tuberculosis were excluded from school. Such exclusions are ordered either by the Inspectors of the Division of Child Hygiene or by the Chiefs of the Tuberculosis Clinics. All children desiring readmission to school are required to visit one of the tuberculosis clinics of the Department of Health for examination. Special attention is paid to these tuberculous children. When the parent's consent can be gained they are sent to Otisville or other sanatorium. Where parents wish children to remain at home, arrangements are made for their admission to one of the tuberculosis boat camps.

Work of Tuberculosis Clinics.

As shown in Table 9, the number of cases of pulmonary tuberculosis under observation for diagnosis at the tuberculosis clinics of the Department of Health on January 1, 1909, was 857, as compared with 681 for the corresponding date of 1908. An even greater increase took place in the number of patients examined, almost 12,000 in 1909, as compared with 9,000 in 1908. Of these, 5.400 were found to be tuberculous in 1909, as compared with 4,400 in 1908.

There was a marked increase in the number of cases under treatment during the year, 15,800, as compared with 11,800 for 1908, while the number of deaths of clinic patients (134) was less than half the

number for 1908 (302).

The following map of the Borough of Manhattan gives the arrangement of clinic districts in Manhattan:

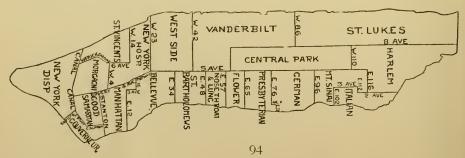




Table 8.

Results of Annual Investigation of Cases of Pulmonary Tuberculosis Under Care of Private Physicians, 1906, 1907, 1908, 1909.

		Manh	attan.			Brook	klyn.			The I	Bronx.			Que	ens.			Rich	nond.			New	York.	
•	1906.	1977.	1908.	1909.	1906.	1907.	1908.	1909.	1906.	1907.	1908.	1909.	1906.	1907.	1908.	1909.	1906.	1907.	1908.	1909.	1906.	1907.	1908.	1909.
Total number of letters sent out Replies received. Failed to reply to notices. Notice returned – Doctor not found. Cases Recoved. Cases Improved. Cases Ibled. Cases Worse. No Change. Out of Town Out of Borough. Cases under observation by private physicians and in file. Cases no longer under doctor's care.	4,126 1,445 165 266 231 835 29 52 444 29 4,037	1,800 601 35 84 226 290 38 49 259 13 1,675	1,968 1,450 496 22 108 181 266 20 60 222 30 249 563		1,261 822 362 77 39 156 198 36 30 975 363	1,511 903 608 34 115 409 50 62 35 4 1,312 199	1,375 983 405 108 293 320 80 107 75	1,255 649 606 78 171 166 38 50 23 	300 203 97 22 31 46 5 6 32 257 61	288 211 77 14 49 34 15 15 30 1 235 53	474 374 100 16 60 19	476 383 84 9 28 97 85 64 16 	234 205 29 43 69 12 67 67	169 135 34 45 37 14 11 5 3 141 20	208 128 80 44 32 5 6	223 179 44 61 34 14 6	81 79 7 34 9 8 10	83 83 26 7 3 6 10 1 64	75 45 30 2 23 7 3 		7,612 5.435 1,933 244 334 495 1,157 90 155 486 2,0 2,689	3,132		

Communicable Diseases.

Table 9.

Tuberculosis Clinics.

	New York.	Manhattan.	Brooklyn.	The Bronx.
Diagnosis— Under observation for diagnosis January 1, } 1909	857 10,068 915	488 6,181 577	\$6 3,018 188	283 869
Total	11,840	7,246	3,292	1,302
Found not tubercular and transferred or dis- charged	1,337 5,444 4,297 762	1,089 2,875 2,881 401	86 2,077 1,038	162 492 378 270
Total	11,840	7,246	3.292	1,302
Cases Under Treatment— Under treatment January 1, 1909 New cases coming under treatment in 1909 Old cases coming under treatment in 1909	2,257 10,068 3,534	1,054 6,181 965	531 3,018 2,089	672 869 480
Total	15,859	8,200	5,638	2,021
Found not tuberculous and discharged Deaths	1,337 134 2,953 336 3°5 672 7,882 2,240	1,089 30 2,652 118 190 137 3,366 618	86 47 277 146 68 391 3,912	162 57 24 72 47 144 604 911
Total	15,859	8,200	3,292	1,302
Total months all patients under treatment by clinics	2,2479 ¹ / ₄ 53,631 2.38 414 23	4,743 21,9\$2 4.63 163	6.0083/4 25,164 4.19 215 12	11,727 ¹ / ₂ 6.48 ⁵ .55 36 2
Visits to cases— Total months all patients under observation by clinic nurses	1,789¾	369	9083/4	512
Visits to patients under observation	7,338 4.10	1,640 4·44 955	3,635 4.00	2,063 4.03
Total visits by clinic nurses	8,412	2,595	3.754	2,063
Aiscellaneous— Prescriptions filled for clinic patients Referred for hospital treatment Referred for charitable aid	70,983 674 225	23,363 401 87	33,949 231 114	13,671 42 24

THE WOMAN'S AUXILIARY TO THE TUBERCULOSIS CLINICS.

Tuberculosis Boat Camps.

Early in 1909 the Woman's Auxiliary to the Presbyterian Hospital Tuberculosis Clinic, severed its connection with that clinic for reasons not concerning the Department of Health in any way. Shortly thereafter, the Auxiliary offered its services and the use of its Day Camp, the ferryboat "Middletown," to the Manhattan Tuberculosis Clinic of the Department of Health. This offer was accepted by the Board of Health, taking effect from May 1st, 1909.

At the suggestion of the President of the Auxiliary, Mrs. J. Borden Harriman, the ownership of the ferryboat was transferred to the De-

partment of Health through the Sinking Fund Commission.

The help thus far rendered to clinic patients has been of great benefit, as it has been mainly directed to the prompt assistance of urgent cases, thus avoiding the delay and uncertain results of routine investigations by charitable organizations.

GENERAL TUBERCULOSIS HOSPITALS IN NEW YORK CITY.

On January 1st, 1909, there were 3,401 cases of pulmonary tuberculosis in city institutions. During the summer a total of 4,500 was reached at one time. At the close of the year there were about 3,800

cases in hospitals.

The census of cases of pulmonary tuberculosis in New York City institutions, which is taken March 1st and August 1st of each year, showed that in March, 1909, there were 3,317 beds available for such cases, an increase of more than 700 beds over March of the previous year. In August, 1909, the census had fallen to 2,774, which is accountable for by the fact that the patients leave the hospitals during the warm weather. The census figures for each of the Boroughs for 1907, 1908 and 1909 are given in Table 10.

AFTER HISTORY OF CASES DISCHARGED FROM OTISVILLE.

The cases discharged from Otisville Sanatorium in 1909 have been followed up as far as possible, histories obtained, and the important facts tabulated. The results are given in Table 11. It is gratifying to note that of the 121 cases not found at the address given, 106 were discharged as improved, and of 101 cases who are not living in the city but have taken up their residence in the country, 81 were markedly benefited by the sanatorium treatment. It has been impossible to follow these cases further.

Of the 321 cases who have been found at home, 266 (83 per cent.) were much improved while in the sanatorium, and 225 (70 per cent.) of these have remained in good health after a residence of several months in New York City, often in the midst of unfavorable surroundings. A very large number of the patients are between the ages of

15 and 30.

Cases of Pulmonary Tuberculosis in New York City Institutions, 1907-1908-1909.

				2	New.	0	Old.				Boroughs.		
		Date.	l otal.	Male.	Females.	Male.	Females.	Town.	Queens.	Richmond. Brooklyn	Brooklyn	The	Monhott
				1				I				lironx.	mannantan.
	1007	March	2,001	53	19	1,379	org	07	18	×	113	00.	
) Orbi	March	2,130	102	31	1,179	219	32	7	9	133	00 I	: :
Manhattan	1008	August	2,440	177	28.	1.245	2500	243	17	23	811	131	
	2	March	2,695	. S	38	1,570	577	7.2	13	22	187	146	:
	6061	March	2,230	36	55	1,202	495	22.5	200	2.4	†0Z	240	:
	-	August	3/2	no	:	3	43	:	::	:	6	1,50	:
	1001	March	241		4 •	130	67	:	I	:		: -	: '
Brooklyn	1008	August	214		4 0	123	500	-	4/	:	:	' <u>:</u>	٠, ١
	20061	March	475	17	OI	260	242		٥٠	:	:	:	.00
	roco	August	382	11	IO	226	140	٧	~ (_	:	:	~
	1 6262	March	:	:	:		` :	:	6	Н	:	:	, 4
	1007	August	111	II	ı	47	43		:	:	:	:	:
		March	177	25	12	200	5.45	. CI	: `		: '	:	33
The Bronx	8061	August	137	:	:	89	20	?	4	2	₁₃	:	9
		Amarch	143	II	O	72	0,5			:	:	:	::
	6061	Morek	557	21	16	65	28	-		:	:	:	:
		Angret	204	61	12	160	52	:	IO		:	:	:
	1907	March	٠, ٢٠	-	ı	:	_	-			:	:	-
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Queens	\$ 8061	March	~	-	:	_	-	:	:			:	:
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	1909 }	March	7 7		:	- ;	. ,	:	:	:			:
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	1 /061	March	23	 r	:	, ;	: 0	:	:	:	:	:	
Richmond	Loos (August	22	-		1.2	ν ς	:	:	:	:	:	
	2006-	March	4	2		2	·	:	:	::	::	:	
	I OOO I	Vugust	:	-:	:			:	:	:	:	:	:
	``	March	2,442	7.0	31	1,584	736	40	200	:×	- (:
	1907	March	2,155	41	~	698,1	218	33	···	-	1122	001	
New York	0	Anonst	205.20	130	240	1,411	627	75	25	26	161	1 2	ı.
	1905	March	2,217	1100	0.70	1,400	678	09	<u>~</u>	25	187	146	2.0
5	1909	August	2,774	130	% N	304	772	75	10	20	204	148	~
		-		-	_	-		31	3/	25	119	138	•

OUT-OF-TOWN SANATORIA.

In Table 12 is given the census of cases of pulmonary tuberculosis from New York City in out-of-town sanatoria on December 31 of the

years 1907, 1908 and 1909.

It shows that the capacity of the various out-of-town sanatoria has been increased in all except Raybrook during 1909, there being 190 beds in all on January 1, 1910, as compared with 188 on the same date of 1909.

TYPHOID FEVER.

General Figures.—As shown in Table 13, the prevalence rate of typhoid fever in New York City per thousand of population during 1909 was very low, .77. The death rate per thousand of population was the same as for 1908, .12, the lowest death rate from this disease for years.

Figures for Boroughs.—As shown in Table 14, there was a well-marked reduction in the number of cases of typhoid fever occurring in the Boroughs of The Bronx and Brooklyn during 1909, and a sharp increase in Manhattan. Typhoid fever was most fatal in the Borough of Brooklyn, where the case fatality was 16.9 per cent., and least so in the Borough of Richmond, where it was only 9.2 per cent.; the lowest death rate, however, occurred in the Borough of Manhattan, and the highest in the Borough of The Bronx.

The weekly course of the cases and deaths of typhoid fever in Greater New York for 1909 is shown in vellow in Chart 1.

In Chart 2 is given the weekly course of cases and deaths from typhoid fever in the Borough of Manhattan during 1909.

Deaths and Case Fatality by Months: Manhattan.—In Table 15, the cases, deaths and case fatality by months and the annual death rate and case incidence for the Borough of Manhattan for the years 1904 to 1909, inclusive, are given. It will be noted that in December, 1909, when the smallest number of cases for any December in five years was reported (59), the case fatality was very high (35.6). During the month of September, 1909, when more cases were reported than ever before (570), the case fatality for that month was the lowest for the year (7.9).

Manhattan and The Broux.—As stated above, the prevalence of the disease in New York City has been remarkably slight with the exception of a sharply limited and localized outbreak in the Boroughs of Manhattan and The Broux.

This outbreak began about August 21, and lasted about eight weeks, reaching its height the week ending September 11, when 192 cases were reported in the Borough of Manhattan, as compared with 90 cases in the corresponding week of 1908. In Manhattan the outbreak was limited to two localities, from East 82nd Street to East 86th Street, between Second and Park Avenues, and from East 59th Street to East

= :										
	S. Cha	r. of use.				S	putum			
	Private.	Tenement.	Children in Family.	Other Cases in Family.	Under Medical Care.	Positive.	Negative.	Not Stated.	Expect. Pres.	Precautions Observed.
Stayed in Hospital under 1 month.	6	44	86	10	34	9	5	36	24	40
Stayed in Hospital I to 3 months, 229) 11	110	226	6	73	17	17	87	64	96
Stayed in Hospital 3 to 6 months, 207	7	98	190	10	42	9	16	So	51	78
Stayed in Hospital over 6 months, 79.	7	38	75	3	22	7	4	34	16	32
Total, 630.*	31	290	477	29	17	42	42	237	155	246

^{*} The number of for tabulation for that year.



TABLE 12.

		1909.	132 44 44 12 1	061
	Total.	1908.	133.1	188
bereulosis in Out of Town Sanatoria December 31, 1907-1908-1909.		1907.	120 28 11 3	165
961-706	ottage.	1969.	27 5	32
r 31, 1	Adirondack Cottage.	1908.	72 CE : 1	20
ecembe	Adiro	1907.	0 7- ::	25
toria D	k.	1905. 1908. 1907. 1908. 1909. 1909. 1909. 1909.	& E	• 60
n Sana	Ray Brook.	1908.	69 112 10 110 110 110 110 110 110 110 110	92
of Tow	<u>~</u>	1907.	15 10 11 11 11 11 11 11 11 11 11 11 11 11	65
out 6		1909.	1882-	61
dosis in	Gabriels.	1908.	89==:	91
"uberer		1907.	∞ 44 w :	17
onary 1	ld.	1909.	22.2	7.9
f Pulm	Stony Wold.	1907. 1908.	39 : 1	69
ascs o	St	1907.	11012:2	58
New York City Cases of Pulmonary Tub	Divisione of	Residents of	Manhattan Brooklyn The Bronx Queens Richmond	New York City

Note—In 1997 and 1908, Dr. Herbert Maxon King, Resident Physician, Loomis Sanatorium, Liberty, New York, although repeatedly requested to furnish information as above, declined to do so and only forwarded the figures for New York City. In 1999 he declined to furnish any information whatsoever.

67th Street, between Second Avenue and the East River. At the same time, a localized outbreak in the neighborhood of Trinity Avenue, in the Borough of The Bronx, took place. Investigation showed that the majority of cases of typhoid fever in these neighborhoods had used milk furnished by one milk company. Further investigations showed that this milk was obtained from an out-of-town dairy where the milk was handled by a typhoid "carrier." Milk supply from this source was cut off and full instructions were given to every family in the above-mentioned neighborhoods as to the precaution to be observed and the outbreak soon came to an end.

TABLE 13.

Typhoid and Cerebro-spinal Meningitis; General Figures, New York City—Cases Reported, Case Rate, and Death Rate.

	Cases Reported.	Cases per 1,000 of Population	Deaths.	Deaths per 1,000 of Population
Typhoid—	3,412 4,326 3,467 4,426 3,058 3,499	.87 1.07 .84 1.03 .69	661 649 639 740 536 561	.17 .16 .15 .17 .12
Cerebro-spinal meningitis— Vear of: 1905. Vear of: 1906. Vear of: 1907. Vear of: 1908. Vear of: 1909.	2,755 1,032 828 380 346	.68 .24 .19 .08	2,025 812 642 316 326	.50 .19 .15 .07

Table 14.

Typhoid Fever—General Figures and Inspection,

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond
Cases reported Cases per 1,000 of population Deaths from typhoid Cases fatality, per cent Deaths per 1,000 of population.	3,499 .76 564 16.1	1,556 .66 262 16.8	1,131 •73 191 16.9 .124	459 1.31 63 13.7 .181	234 .95 37 15.8	119 1.52 112 9.1
Cases not inspected on account of de- tailed report by attending physician Cases inspected	57 3,44 ²	16	30	10 449	234	118
Total	3,499	1.556	1,131	459	234	119
Visit to cases	7,316 607 85	2,875 114 56	2,376 158 9	1,077 165 13	629	359 19 7

Table 15.

Typhoid Fever—Borough of Manhattan.

		minimicable Diseases.			
	% Case	28.5 27.7.7 27.7.7 27.7.8 23.7.6 28.3.7.6 28.3.6 3.5.6	16.8		I. I
1909.	Deaths.	15 17 17 17 17 16 16 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	262	:	:
	Cases.	4444 444 444 444 444 444 444 444 444 4	1,556	9.9	:
	% Case Fatality.	17.53 193.56 193.56 193.66 193.66 193.66 193.66 193.66 193.66	17.6	:	1.12
1908.	Deaths.	1 6 0 1 1 1 1 8 8 9 1 0 9 1 1 1 1 8 8 9 1 1 1 1 1 1 1 1 1 1 1 1	250	:	:
	Cases.	6 22 4 4 22 22 22 22 22 24 24 24 24 24 24	1,455	6.3	:
İ	% Case Fatality.	8 5 1 5 2 4 2 5 6 5 1 5 5 6 5 6 5 6 5 6 5 6 5 6 6 6 6	15.0	:	1.66
1907.	Deaths.	87 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3/2	:	:
	Cases.	100 100 100 100 100 100 100 100 100 100	7001	10.6	:
	% Case Fatality.	2.4.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2		:	1.43
1906.	Deaths.	0 1 2 7 2 2 3 2 5 6 5 7 5 6 9 5 8 5 7 5 6 9 5 8 8 5 7 5 9 9 9 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9	000	:	:
	Cases.	74 74 74 74 63 63 63 75 1,068 1,068 269 269 269 269 269 269 269 269 269 269		7.9	:
	% Case Fatality.	61.2.8.2.2.2.6.6.6.2.2.2.2.2.2.2.2.2.2.2.2		:	1.38
1905.	Deaths.	7.47.45 21.0 52.8 8.4 4.1 9 8.7 4.7 4.1 9 8.7 4.2 9 8.2		:	:
	Cases.	255 255 255 255 255 1,339 1,339 1,339 1,343 1,34		6.6	:
		January. February March. April May. June. July August September. October. November. December.		per 10,000	то,000,01

Table 16.

Typhoid Feejer—Tabulation of Cases, 1909—All Boroughs.

		Manhattan.	attan.	The Bronx.	ronx.	Brooklyn.	lyn.	Queens.	ns.	Richmond.	nond.	Greater New York.	r New rk.	Case Fatality
		Total.	Dead.	Total.	Dead.	Total.	Dead.	Total. Dead.	Dead.	Total.	Dead.	Total.	Dead.	Nationalities.
United States .	o- 6 yearsMale 6-16 yearsMale 16-35 yearsMale 16-35 yearsMale Over 50 yearsMale Total	24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	6 : 8 4 9 8 ED H H 4 7	11 22 22 22 24 41 42 42 42 42 42 42 42 42 42 42 42 42 42	:= ~ = ∞ ~ ~ ~ ~ ~ 4	21	: 42 20 4 4 4 2 4 2 6	01 01 10 10 10 10 10 10 10 10 10 10 10 1	: 424 2222 : 2	1 : 2 40 4 2 1 2 2	::::=:::= ‹›	25.25.25.25.25.25.25.25.25.25.25.25.25.2	218	13
Ireland			::::wHWN::	11 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10 I	2 1 2 2 2 2 2 2 3 3 4 3 4 3 4 5 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6			:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::	1	23 122 77 74 111 111 114 179		15.1%

	60.6	\$.5.4. \$7.74
-::u40wu::	∞	V
7 ~ £ £ £ £ 5 € 6 € 7 € 7 € 7 € 7 € 7 € 7 € 7 € 7 € 7	8 8 8 756 622 255 255 255 255 255 255 255 255 2	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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5 4 Q Q 1 4 N C H :	07 1 :- 420 0 0 = 2 00	827
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o- 6 yearsMale 6-16 yearsMale 16-35 yearsNale 35-50 yearsNale Over 50 yearsNale	o- 6 years	o- 6 years
Jewish	Germany	Italy

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Case Fatality	Nationalities.					25.0%						11.4%	13.5%	0		Per Cent.	12.9
	. 1	::	::	: -	::	: :	-	:::	103	6 4	·	31	361	13.5%		Deaths.	208
Greater New York.	Total. Dead	::	-: •	- 2	::	: :	4	0 7 5	100 100	73		273	2,680	:	Case Fatality by Sex.	Cases.	1,609,1
ond.	Dead.	::	::	::	::	::		:::	:::	::	::	: :	(C)	10.7%	tality		
Richmond.	Total.	::	::	::	::	: :	:	:::	": :	. : :	::	: "	282	:	use Fa		
ns.	Dead.	::	::	::	::	::	:	::	::"	:	- :	: "	1 18	14.9%	C	All Ages.	
Queens.	Total.	::	- :	::	: :	::		::	::1	\o_=	· ":	1	235	:		All	
dyn.	Dead.	::	:::	: "	::	::	-	::	: 6 (2 1		1	154	18.0%			Males Females
Brooklyn.	Total.	:	: : :	: -	: :	::	-	. 0	4 4 ;	¥2:	24-	-	857	:			
Bronx	Dead.	:	:::	: : :	: : :	:::		::	: -	::	• :	: :	59	13.9%		Per Cent.	10.8 7.2 13.3 21.7 25.4
The Bronx	Total.	:	::	::	: :	: : :	:	. 10	- 83	20 o	0 0	: :	30	:			
							1 1								1 11	- <u>2</u> 2	
tan.	Dead.	:	::	::	: :	:::		::	::	9 1	п 3	::	110	9.1%		Deaths.	21 477 175 90 28
Manhattan.	Fotal. Dead.	1	::	::	: : 	:::	2	2 :	47	39		4=	1,137		Ages.		
Manhattan	Total. Dead.	1	Fenale Male	FemaleMale	Female 1Male	sNale	2	Male 2	47	39	35-50 years Nale Female	4=	-	ality	Case Fatality by Ages.	Both Sexes. Cases. Deat	0 - 6 years. 194 21 656 6-16 years. 1,318 175 76-16 years. 175 175 76-16 years. 175 9 676 474 968 175 9 676 175 175 175 175 175 175 175 175 175 175

Tabulation of Cascs.—As in 1908, all cases of typhoid fever occurring in Greater New York during 1909, were tabulated for each borough according to age, groups, sex, nationality, and recovered or died, together with the case fatality for each group. The results of this tabulation are given in Table 16. The highest case fatality (18 per cent.) occurred in Brooklyn, and the lowest in Manhattan (9.7 per cent.).

The disease was most fatal in persons over 50 years of age (28.4) and least so in those between 6 and 16 years (7.2 per cent.), and slightly more fatal in women than in men. Turning now to the various nationalities, we find the largest proportion of deaths (15.1 per cent.) among those of Irish descent. (Only four cases were reported among negroes during the whole of 1909. Of these, one proved fatal, giving a case fatality of 25 per cent. But because of the small number of cases, these figures are thrown out.) The lowest case fatality from typhoid fever occurred among those of Jewish descent. In 1908 the Irish and Hebrews also occupied the top and bottom of the scale.

CEREBRO-SPINAL MENINGITIS.

General Figures.—The number of cases and deaths from cerebrospinal meningitis in New York City has continued to decrease. It was noted in the annual report for 1908 that the outbreak of epidemic cerebro-spinal meningitis, which reached its height in 1905—2.705 cases and 2,025 deaths having been reported—had come to an end at the close of 1907. As shown in Table 13, during 1909 the disease continued to be merely endemic, the death rate per thousand of population remaining at .07, and cases per thousand of population at about the same figure.

Table 17.

Cerebro-Spinal Meningitis—General Figures and Inspection.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Cases reported	346 .c ₇ 326 942 .o ₇ 1 346 802 196	192 .08 184 95.8 .078 192 341 98	*93 .06 *95 * .062 93 195 53 53	44 .12 .34 .77.3 .097 .44 101 .34 .32	9 .04 S SS.9 .032 9 57	8 .10 4 .50 .052 8 108 5

^{*}In a few cases, the history obtained from the attending physician, subsequent to death, showed the case to be not one of cerebro-spinal meningitis. These cases have been deducted from the number of cases reported but not from the deaths.

Borough Figures and Inspections.—As shown in Table 17, the highest percentage of cases of cerebro-spinal meningitis per 1,000 of population during 1909 occurred in the Borough of The Bronx, .10 as compared with .14 for Richmond for 1908. The number of deaths was slightly increased in the Borough of The Bronx and Brooklyn during 1909.

The disease was also more fatal, as is apt to be the case in endemic years, for the reason that doubtful cases, which usually recover, are not so apt to be included.

Administration of Diphtheria Antitoxin.

General Figures.—As shown in Table 18, fewer cases of diphtheria were reported in Greater New York during 1909 than during either of the previous years.

Taking the increase of population into consideration the case prevalence (3.31) was lower than at any time during the past seven

years.

The death rate fell from .40 to .38, but the case fatality was in-

creased, same being 11.4.

The proportion of cases of diphtheria injected by antitoxin inspectors of the Department of Health continued to steadily increase, having risen from 14.9 per cent. in 1904 to 39.9 per cent. in 1909. The increase has been greatest in the Borough of Manhattan, where during 1909 over half the cases were injected by Department inspectors. The lowest proportion of cases injected by diphtheria inspectors was in the Borough of Oueens, 16.5.

Diphtheria was distinctly more prevalent in the Borough of Richmond, the case prevalence rising from 3.73 per thousand in 1908 to 4.20 per thousand in 1909. The cases were all mild, however, the death rate being the lowest of all the Boroughs (.26) per thousand, and the case fatality only 6.7 per cent. The death rate was also very low in the

Borough of The Bronx, .29 per thousand.

Table 18.

Diphtheria—General Figures.

Year.	Cases Reported.	Cases per 1,000 of Population.	Deaths.	Deaths per 1,000 of Population.	Cases Fatality Per Cent.	Per Cent. of Cases Re- ported In- jected at Home by Department of Health.
New York 1904	18,158 13,686 14,757 15,276 16,431 15,097	4 65 3.40 3.555 3.56 3.71 3.31	2,084 1,544 1,898 1,740 1,758 1,714	.53 .38 .46 .41 .40	11.4 11.2 12.8 11.3 10.7	* 14 9 16.1 33.7 34.3 39.9
Manhattan— 1904 1905 1906 1907 1908 1909	11,016 7,553 7,444 7,285 8,263 7,933	5·34 3·56 3·42 3·26 3·60 3·37	1,123 660 731 841 939 963	•54 •31 •34 •38 •41	10 I 8.7 9.8 II.5 II.3	17.6 22.9 21.3 47.6 45.7 53.5
Brooklyn— 1904	5,026 4,307 5,211 5,398 5,451 4,735	3.80 3.16 3.71 3.72 3.65 3.08	7 06 594 793 603 549 556	-53 -44 -56 -42 -41 -36	14.0 13.7 15.2 11.1 10.0	* 4.2 8.1 17.5 20.0 22.1

^{*}No record.

Table 18-Continued.

Year.	Cases Reported.	Cases per 1,000 of Population,	Deaths.	Deaths per 1,000 of Population.	Cases Fatality Per Cent.	Per Cent. of Cases Re- ported In- jected at Home by Department of Health.
The Bronx 1904	1,167 992 1,251 1,478 1,648 1,335	4.56 3.63 4.31 4.79 5.04 3.84	149 200 252 174 158 102		12.7 20.1 20.1 11.7 9 6 7.7	33.3 18.3 21 3 37.9 35.0 38.1
Queens— 1904	517 577 627 821 785 764	2 73 2.90 3.00 3.73 3.38 3.13	71 72 94 96 91 73	.38 .36 .45 .43 .39	13.7 12.4 14.9 11.6 11.6 9.6	9.6 12.7 20.3 16.7
Richmond 1004 1905 1906 1907 1908 1909	432 257 224 294 284 330	6.08 3.57 3.02 3.92 3.73 4.29	35 18 28 31 26 20	.49 .25 .38 .41 .34	8.1 7.0 12.5 10.5 10.2 6.1	* 3.0 4.0 10 9 22.5 31.5

^{*}No record.

INJECTION OF DIPHTHERIA ANTITOXIN, INTUBATION, IMMUNIZATION:

As shown in Table 19, although the number of cases of diphtheria in Greater New York during 1909 was less than in 1908, yet the number of cases injected by inspectors of the Department of Health was over 300 more than in 1908, the percentage of the total cases injected by Department inspectors rising from 34.3 per cent. to 40.1 per cent.

This increased demand by physicians for the services of the antitoxin inspectors is shown by the decrease in the number of cases injected by private physicians with the antitoxin furnished free by the Department of Health, the percentage of such cases falling from 12.5

per cent. to 10.8 per cent.

The highest percentage of cases injected by Department inspectors occurred in the Borough of Manhattan (53.3 per cent.), and the lowest

in Queens (16.5 per cent.).

The percentage of cases injected by physicians with antitoxin furnished by the Department of Health was about 10 per cent. in all Boroughs, except The Bronx, where it was high (21.6 per cent.), showing a commendable desire on the part of physicians of that Borough to look after their own cases.

The number of actual cases of diphtheria injected by Department inspectors was slightly less than in 1908, and the number of deaths quite markedly increased, so that the case fatality of these cases rose from 3.6 per cent. in 1908 to 5.0 per cent. in 1909. The lowest case fatality among the inspectors' cases occurred in the Borough of Manhattan (3.3 per cent.); the highest in the Borough of Queens (20 per cent.).

The number of cases injected by private physicians with antitoxin by the Department of Health was about the same as in 1908, the case fatality (9.7 per cent.) being slightly increased during 1909. Taking the population of the Boroughs into consideration the largest number of physicians' cases occurred in The Bronx, where the case fatality (2.8 per cent.) was lower.

TABLE 19. * Diphtheria: Injection, Intubation and Immunization.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Injection of Antitoxin—						
Cases of diphtheria reported	15,097	7,933	4,735	1,335	764	330
Cases injected by Department Inspectors. Percentage injected by Depart-(6,028	4,241	1,048	509	126	104
ment Inspectors	39.9	53.3	22. I	38.1	16.5	31.5
† Cases injected by private physicians Percentage injected by private (1,638	723	512	288	82	33
physicians	10.8	9.1	10.8	21.6	10.7	10.0
By Department Inspectors, cases in-	2,830	1,749	534	350	95	102
jected considered as diphtheria (Deaths	142	58	30		10	12
Case fatality, per cent	5.0	3.3	.6	23 6.6	20.0	11.7
‡ Deaths, moribund deducted ‡ Case fatality, per cent., mori-)	99	38	521	18	13	9
bund deducted	3.5	2.2	3.9	5.1	13.6	9.0
† By private physicians, cases injected, considered as diphtheria	1,259	566	346	249	68	30
Deaths	121	69	38	2.8	6	I
Case fatality, per cent	9.6	12.2	10.9		8.8	3.3
‡ Deaths, moribund deducted ‡ Case fatality, per cent., mori	84	49	24	5	5	1
bund deducted	6.7	8.7	6.9	2.0	7 - 4	3.3
Intubation of Laryngeal cases -						
By Department Inspectors						
Total laryngeal cases	524	254	122	107	20	8
DeathsFatality, per cent	76	26 10,2	21 17.2	14	35.0	38.1
Cases intubated	140	36	41	43	10	10
Deaths	47	12	14	9	4	8
Fatality per cent	33.6	33.3	34.1 81	20.9	10.0	80.0
Cases not intubated Deaths	384	14	01	64	3	
Fatality per cent	7.6	6.4	8.6	7.8	30.0	
Immunization—						
By Department Inspectors	10, 51	5,425	2,915	1,620	548	343
Number contracting disease between)	27	8	5	I	8	5
visits -	,					
Total visits to diphtheria cases	16,825	9,375	4,489	1,798	719	444
Average visits per case	2.8	2.2	4.3	3.5	5.7	4.3
Total injections	6,486	4,557	1,111	558	139	121
•	/	1	, ,	35-	-57	

^{*} Quarantine is maintained and disinfections are ordered by the Division of Contagious Diseases.
† With antitoxin furnished free by the Department of Health.
‡ Cases dying within 24 hours after injection.

Turning to the laryngeal cases, we find that while the number of such cases was about the same during 1909 as 1908, more deaths occurred during 1909, the case fatality rising from 10.2 to 14.5.

Fewer cases were intubated during 1909 (140) as compared with 1908 (223), yet the number of deaths was increased, the case fatality

rising from 14.3 to 33.6.

Table 20.

Diagnosis Laboratory—Specimens Examined and Results of Examination.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Diphtheria—						
Bacteriological examinations for diag-	36,155	21,532	8,682	3,938	1,292	711
nosis	11,369	6,630	2,856	1,082	551	250 461
Not showing Klebs-Loeffler bacilli Indecisive	. 24,750 36	14,875	5,822	2,854	737	
Later cultures	30,136	12,777	13,846	1,820	1,206	487
Other cultures	1,392	634	648	38	13	59
Total cultures	67,683	34,943	23,176	5.796	2,511	1,257
Tuberculosis Sputum—						
Specimens examined	36,031	23,836	8,396	2,848 645	669	282
Showing tubercle bacilli	8,125 27,906	5,066 18,770	2,142 6,254	2,203	471	7 1 208
	-,,,		1	, ,		
Typhoid— Widal reaction:						
Specimens of blood examined Showing reaction	8,815	4,497	2,427 783	1,208	419	264
Showing reaction	2,519 5,754	3.051	783	369 782	147 247	78 164
Indecisive	542	304	134	57	25	22
Diazo reaction :						
Specimens examined	2,099	S97	732	314	148	8
Showing diazo reaction	680	277	236	100	63 85	4
Showing no diazo reaction	1,400	612	491	6	05	4
	- /					
Malaria— Specimens examined	1,802	077	470	231	89	35
Specimens examined	158	977 89 888	37	24	6	2
Showing no malaria plas	1,644	888	433	207	- 83	33
Cerebro-spinal Meningitis—			0			
Specimens examined Positive		15	8	4		4
Negative	31	15	8	4		4
Glanders—						
Specimens examined	- 78	74	2		2	
Specimens examined very suspicious	7	7				
Specimens examined suspicious Specimens examined negative	37 34	35 32	2		2	
	"					
Pus. (gonococcus)— Specimens examined	49	27	18	4		
Specimens examined	11	5	4	2		
Specimens examined showing no gonococci Specimens examined indecisive	35	21 1	13	I		
	3					
Miscellaneous— *A verage number of culture stations	338	194		45	35	10
*Average number of culture stations Visits to collect specimens	37,154	10,102	14,693	5,189	4,622	2,545
Culture tubes prepared	116,275					*****
Swabs madeLaboratory preparations made	116,588					*****
Widal outfits prepared	13,323	*				
Diazo outfits prepared	3,488					
C. S. M. outfits prepared	350					
Sputum jars prepared	63,148					
	A. C.		1			•

^{*} Average of those in operation on the first of each month.

Notwithstanding the relatively small population more cases were intubated in The Bronx than in any other Borough, with a lower case fatality (20.9). This speaks well for the work of the antitoxin inspectors in that Borough. The highest case fatality occurred in the Borough of Richmond, where 8 out of the 10 cases died.

Only two-thirds as many immunizations were performed during 1909 as during the previous year, and the number of children contracting the disease after such immunization was reduced to 50 per cent.

The total number of visits paid by inspectors to diphtheria cases was increased over 1908, also the total number of injections. The average number of visits per case was the same as 1908 (2.8).

DIAGNOSIS LABORATORY.

(See Table 20.)

Tuberculosis.

The steady increase in the number of specimens of sputum submitted to the Diagnosis Laboratory for examination continued during 1909, 6,000 more specimens being sent in during that year. The number showing tubercle bacilli was about the same both during 1909 and 1908 (8,000), so that the increased number of specimens was not due to any increase in the prevalence of the disease, but entirely to more physicians availing themselves of the services of the laboratory.

Typhoid.

About 8,000 specimens of blood were examined for the presence of the Widal, with a corresponding increase in the number of specimens showing positive reaction. The number of doubtful results showed a decided decrease. A similar increase took place in the number of specimens of urine submitted for examination for the Diazo reaction.

Malaria.

About 200 more specimens of blood were examined for the presence of malarial organisms but the relative increase in the number of positive results was much greater, due to improved methods and greater experience on the part of the examiners for cerebro-spinal meningitis. Although this disease was much less prevalent during 1909, yet almost twice as many specimens of spinal fluid was submitted for examination for the presence of the meningococcus.

Miscellaneous.

Twenty-four additional culture stations were established during

1909 and 8,000 more visits made to collect specimens.

Corresponding to the decreased prevalence of diphtheria, there was a decrease in the number of culture tubes and swabs prepared. Three thousand more Widal outfits were prepared and distributed and there was a moderate increase in the number of the various other outfits distributed.

The number of laboratory preparations made was about the same during 1909 as 1908, 116,000.

Specimens Submitted by Inspectors and Private Physicians.

As shown in Table 21, the percentage of specimens submitted for diagnosis by private physicians was about 47 per cent., as compared with 53 per cent. of specimens submitted by inspectors of the Department of Health.

The inspectors gain their advantage only because of the great number of "later" diphtheria cultures taken and submitted by them.

The relative number of specimens submitted by each was about the same as during 1908; there was, of course, a marked increase in the number of specimens of sputum submitted by each.

• Table 21.

Diagnosis Laboratory: Specimens Submitted for Examination.

	Number of S	pecimens Sub	mens Submitted for Diagnosis by								
	Department	of Health.	Private Ph	ysicians.							
Diphtheria	1908.	1909.	909. 190S. 43,113 29,467 16,343 17,403 2,454 7 239 2,388 5,702 66 1,477 136 1,197 7 13 75 244 47								
Diphtheria Tuberculosis Typhoid. Widal reaction Diazo reaction Malaria Cerebro-spinal meningitis Glanders Pus. (gonococcus)	44,528 12,689 2,571 2,182 389 408 4 245	16,343 2,454 2,388 66 136 7 75	17,403 7 239 5,762 1,477 1,197 13	24,570 19,688 8,460 6,427 2,033 1,666 24							
Total	60,445	62,175	55,563	54,413							
Percentage	52.1	53.3	47.9	46.7							

Of the total number of specimens of sputum submitted, 19,000 were

submitted by physicians, and 16,000 by inspectors.

Four-fifths of the typhoid specimens were submitted by private physicians, while of the malarial specimens only 136 were submitted by inspectors. The marked diminution in the number of specimens of glanders submitted during 1909 is accounted for by the fact that the routine examination for the glanders agglutination reaction were carried out at the Research Laboratory during almost the whole of 1909.

DIVISION OF LABORATORIES.

RESEARCH LABORATORY.

A brief summary of the work accomplished by the Research Laboratory during the past year may be found in the following report:

The bacterial products which it has been customary for the Department of Health to prepare have continued to be produced as in previous

years,

The most important of these products, diphtheria antitoxin, has been produced to the extent of 546,000,000 units. This amount combined with what remained at the end of the past year was the stock on hand for 1909. Of this amount 575,000,000 units have been used in the refining process, yielding 388,000,000 units. Of this amount 331,000,000 units have been distributed throughout the city to stations and hospitals to be used in the treatment of cases of diphtheria. The latter quantity expressed is equivalent to approximately 110,000 average doses of antitoxin.

The laboratory has continued its regular production of tetanus antitoxin, 16,000,000 units of which were used for refining and 11,000,000 units for therapeutic purposes. 6,000,000 units have been bottled for distribution. The latter has been used largely for immunizing in order to prevent the development of tetanus, although a very considerable quantity has also been used in cases in which the disease has clearly declared itself, in which cases very successful results have been obtained.

Large amounts of diphtheria and tetanus toxins have been produced (463 and 55 liters, respectively) in order to inject horses to produce antitoxins.

Practically, the usual amounts of tuberculin and mallein have been produced. There has been distributed 1.700 c. c. of tuberculin, which represents approximately 3,700 doses, and 2,800 c. c. of mallein, representing 950 doses.

The first of these substances has been largely used in cattle as well as in man, and the second, of course, in horses suspected for glanders.

Numerous patients have been received for the Pasteur treatment on account of the rather large number of people having been bitten by rabid dogs. 746 new cases have been reported during the year, of which 14 lived in New York, who received treatment free of charge. Of the total number indicated 65 were bitten in the head and 477 at some other point on the body; the remainder were endangered by having had wounds come in contact with the virus. Most of those who lived out of the city received treatment by mail. There were reported

Laboratories.

only two deaths from hydrophobia of these 746 cases. Both of these were bitten about the head in several places and did not begin treatment for three to nine days, respectively, after having received the wounds. One of these cases occurred so shortly after finishing the treatment that there was no time for the immunizing process to become effective, while the other developed the disease before the treatment was finished. The number of animals received for suspected rabies was 248, 97 of which were found to have rabies upon examination.

Division of Laboratorics—Research Laboratory; Production of Antitoxic Serums and Diagnostic Toxins.

	1909.	1908.
Units of diphtheria antitoxin produced Units of diphtheria antitoxin bottled for distribution. Cubic centimeters of diphtheria toxin produced. Units of tetanus antitoxin produced. Units of tetanus antitoxin bottled for distribution. Cubic centimeters of tetanus toxin produced. Cubic centimeters of mallein produced. Cubic centimeters of mallein bottled for distribution. Cubic centimeters of tuberculin produced. Cubic centimeters of tuberculin produced. Cubic centimeters of tuberculin bottled for distribution. Samples of toxins tested. Samples of antitoxin serum tested.	388,651,125 331,144,147 463,300 11,128,750 6,399,550 2,655 2,882 450 1,700 532 1,296	170,546,250 206,048,550 120,300 1,840,000 8,945,500 80,004 9,750 5,652 1,000 1,566 292

Research Laboratory: Bacteriological Examination of Specimens.

	1909.	1908.
Bacteriological examinations of water	637 10,602 152 12	157 10,630 262 2

Research Laboratory: Pasteur Treatment.

	1909.	1908.
New patients treated during year †Living in New York City ‡Living outside New York City Attending laboratory for treatment Receiving vaccine by mail Number of injections in patients. Animals diagnosed for rabies Cases. Not cases Doubtful cases.	744 174 570 171 573 16,663 247 97 27 123	834 256 578 235 599 18,285 303 139 46

[†] Free. ‡ Paying.

Laboratories.

VACCINE PREPARATION.

During the past year vaccine has been produced in a quantity sufficient to vaccinate 375,000 persons. Until the beginning of the second half of this year vaccine had always been prepared and collected in the Vaccine Stable on the grounds of the Research Laboratory. At the time indicated, however, the Vaccine Stable was transferred to Otisville, where vaccine is now prepared in a temporary structure. A suitable stone building to properly accommodate calves and facilitate the preparation of the vaccine is in the course of construction.

Vaccine Laboratory: Virus Produced, Tested, and Issued.

	1909.	1908.
Production of vaccine virus— Gram collected	2,695,95 11,752 1,622	3,016.47 13,729 3,585
Experimental testing of virus— Primary vaccination Secondary vaccination Visits.	2,535 47 2,805	2,114 14 2,358
Miscellaneous— Specimens of virus te ted bacteriologically. Inspections of virus previously sold. Animals vaccinated Animals collected from Autopsies on animals Guinea Pigs injected	1,812 1,096 104 103 80 228	1,241 1,171 119 118 119 233
Other animals experimented upon	229 71,563	129 121,074

	To Chief Clerk.	To Hospitals.	To Miscel- laneous.	In Exchange for Old Virus.	Total,	Total, 1908.
Vaccine Virus Issued— Capillary tubes Small vials Large vials	116.714 2.907 4,841	60 1,899 2	170 98 191	6,637	123.601 4,904 5,034	97,371 4,777 6,777

Antistreptococcus serum has been prepared to be used in severe cases of scarlet fever and sepsis. In a few cases this serum has been

employed with apparently beneficial results.

Besides the preparation of bacterial products the Laboratory has continued to perform the regular examinations of samples of milk and of water as well as to examine the serum of animals suspected to have glanders. The latter test has proved to be of importance as a preliminary diagnostic measure. 605 serum specimens have been examined. Those horses, the serum of which shows above 1/1,000 dilution, are then tested with mallein before the final decision is rendered.

Fifty samples of Croton water, 319 of other waters, and 2 of ice have been examined bacteriologically. Of milk, 10,602 samples have been tested. These comprise:

(1) Regular specimens taken by the inspector from receiving and

distributing stations, wagons, etc.

(2) Samples taken from the supplies received at the various hos-

pitals throughout the city.

(3) Samples of certified and guaranteed as well as of inspected and selected milk sent in by farms and collected from their distributing stores.

A number of special specimens have also been obtained from pasteurizing plants in order to test the efficiency of the particular process

employed.

Routine examinations are regularly made of any suspected vaginal discharges in Department hospitals so as to avoid any possibility of unsuspected cases causing infection.

Disinfection tests to the number of 24,473 have been collected from the various rooms in which disinfection was carried out in order to

determine its efficiency.

The above covers the most important regular routine work of the Laboratory.

CHEMICAL LABORATORY.

The character of the work done by the Chemical Laboratory during the year 1909, has been essentially the same as that of previous years, covering the examination of foods and drugs, including water of the general City supply and private wells, and water from farms, dairies

and creameries in and outside of the City.

The Laboratory has examined samples sent by the Chief Clerk's Office of the Department of Health, to determine whether or not they equalled the standard submitted as samples sent in by various other City Departments for the same purpose. The Laboratory has also done a great deal of medical and legal work for the District Attorney, as well as for the Coroner and Police Department. From June 15 to August 2, work for the Police Department was discontinued. The number of analyses made was consequently less, but the number of days spent in Court by the Chemist testifying for the Police Department considerably outnumbers the corresponding amount of days for 1908. The accompanying tables will give a very thorough idea of the amount and increase of work done by this Laboratory during the year 1909. Attention is called to the decided increase which will be noted.

The number of reports forwarded from the Chemical Laboratory is greater by 1,342 than for 1908. The number of half days spent in Court is 564, as compared with 503 for 1908, an increase of 61. For the year 1909, 388 half days is to be credited to the Department of Health, which is 20 days more than for 1908. In 1909, members of this Laboratory spent 176 half days in Court for the Police Department,

representing 145 analyses made.

Laboratories.

January 4, 1910.

To the Sanitary Superintendent:

SIR—I herewith forward report of the work performed Chemical Laboratory for the year 1909:	in the
Total number of specimens analyzed	10,890
(Thermometers 72) (Babcock Flasks 144) total	347
Total number of reports forwarded and filed	11,237
Total number of creams, adulterated	175
Total number of creams, unadulterated	761
Total number of milks, adulterated	1,744
Total number of milks, unadulterated	4,405
Total number of milks, unsweetened condensed (loose) adul-	
terated	16
Total number of milks, unsweetened condensed (loose) un-	
adulterated	15
Total number of samples of water analyzed (Sanitary analy-	
ses)	804
Total number of samples of water analyzed, Cellar Waters	
(Department of Health 8) (Tenement House Department	
3), total	ΙΙ
Total number of half days at court	570
Number of half days at court for Department of Health	393
Number of half days at court for other Departments (Police).	177

DIVISION OF HOSPITALS.

OTISVILLE SANATORIUM.

During the year this Sanatorium has grown appreciably, its activi-

ties extending along all lines.

The grounds have been extensively improved during the year, additional roadways having been constructed and seven acres graded and seeded. Under-drains have been laid over this rear. Owing to the nature of the soil, which is of shale substratum, together with much irregularity of surface, having large sloping ground areas, considerable grading becomes necessary before the drainage can be made thoroughly satisfactory.

A new dwelling near the dairy is nearing completion and will be occupied by the dairymen in charge of the cow barn. The buildings of the dairy being somewhat isolated, the fact of having accommodations close at hand will result in having a person near the cow barn at all times, and it will also be possible to thus give the cattle more attention without additional help.

About 500 quarts of milk are produced daily. In addition to this quantity 100 quarts of milk are purchased a day. When the cows go

dry they are killed and used for meat.

An ice-house has been erected adjoining the cow barns, giving ample facilities for the storage of ice, to be used for the milk refrigerator.

The section of the property used for antitoxin and vaccine purposes has been extensively improved by reconstruction and adding to the barn and stable building used for housing rabbits and guinea pigs, and the stables used for the antitoxin horses. A small building has

been erected for the housing of calves for vaccine purposes.

A considerable amount of work has been done in laying out and providing a water supply for the various buildings mentioned. A small stone pump house has been erected and a receiving well constructed. Approximately 2,500 feet of excavation has been made for laying pipes, 2,000 feet of water pipe has been laid, and a large stone cistern is being constructed to hold approximately 40,000 gallons of water. The latter will be used as a storage reservoir for the buildings in this end of the property and will also supply water to the cow barns. The following improvements have also been made: Isolation stalls for calves, improved ventilation in the Evans barn, provision of a new roof for the carriage barn, reconstruction of the Sayer barn, overhauling of the second Otis barn, and repairs to the Beebe house, Bull house, Otis house and stable.

With the constantly increasing number of patients a proportional

increase of supplies naturally follows.

In this connection during the year additional land was placed under cultivation for garden purposes. At the beginning of 1909 approximately seven acres were under production. This has been increased so that during the year a total of about twenty-two acres has been finally put in use. The land is of a poor quality from an agricultural point of view, but it is being constantly improved and brought to a higher state of cultivation. It has been necessary to lay underdrains of stone and tile over a large proportion of this land.

In addition to supplying flowers and small vegetables of all kinds,

the garden has produced the following:

Carrots, bushels	1,000
Parsnips, bushels	300
Onions, bushels	125
Turnips, bushels	400
Mangels, bushels	550
Table beets, bushels	350
Potatoes, bushels	1,100
Cabbage	5,000
Cauliflower	200
Celery, heads	5,000
White beans, bushels	ΙI
Hay, tons	300
Ensilage, tons	150
Oats, bushels	368
Rye, bushels	58
Pumpkins	300
Hubbard Squash	700
Strawberries, quarts	700
Good apples, bushels	90
Cider for vinegar, gallons	160

Five acres sweet corn, ears sent to Dining Halls, fodder to cow barn. There is on hand at the end of the year, roots and vegetables as follows:

Carrots, bushels	400
Table beets, bushels	300
Mangels, bushels	550
Parsnips, bushels	250
Sorted potatoes, bushels	350
Seed potatoes, bushels	100
Turnips, bushels	200
0	2,000
	1,000
Pumpkins	40
Hubbard Squash	100

About 600 shade trees and 400 fruit trees were set out during the

spring of 1909.

As a result of a visit by representatives of the State Agricultural Experiment Station some of the soil at the sanatorium was seeded with alfalfa. Inoculating soil was sent from the Experiment Station at Geneva, N. Y.

The plans for all of the construction at the sanatorium have been made on the premises. All of the work except a few contracts was done by mechanics employed directly at the institution; thus considerable latitude has been obtainable while the buildings have been in

progress should any desired change be found necessary.

The most serious problem which has faced this institution during the past year, especially between the months of May and October, has been that of procuring an ample supply of water for use in the various buildings. The original plan for a water supply was found to be entirely inadequate for a season of protracted drought. The most available method and that which seemed the most practicable was the boring of wells and the clearing of the bear swamp, converting it into a storage reservoir. One well 247 feet deep, which was bored during the past year, was kept in constant use and for a time supplied nearly all of the water used on the premises. The supply, however, was not adequate. A second well is partly bored at the present writing, but owing to the subsoil formation being of rock, work has been delayed. A survey was made of the drainage area in what is known as the bear swamp. It was found that there was a watershed of 210 acres and that a reservoir could be constructed having an area of 40 acres. Originally there was constructed a small dam which stored water to operate a water motor. The swamp having contained a large amount of timber and underbrush, this was all cleared away during the fall and the dam raised five feet. An emptying device was constructed and controlled by a gate valve and other piping improvements made. The work of clearing out stumps and refuse over this area is still in proggress; but it may be safely said that the construction of this reservoir will result in a large increase in the water supply of this institution.

Report for Year 1910 Showing Cost of Maintenance for Riverside. Kingston Avenue and Willard Parker.

	Riverside.	Kingston Ave.	Willard Parker
Superintendence. Storehouse Wards Wards Pharmacy Morgue Doctors' Kitchen and Dining Room. Nurses' Kitchen and Dining Room. Help's Kitchen and Dining Room. Help's Kitchen and Dining Room. Housekeeping. Laundry. House and Property Operation House and Property Maintenance.	\$1,383 69 140 09 16,990 44 53 45 373 37 3,401 21 6,824 30 12,309 08 49,276 74 4,730 69 2,556 61 27,665 99 4,883 06	\$1,883 94 100 52 8,690 22 69 06 40 73 4,985 20 9,687 17 12,218 36 15,226 77 3,129 75 1,228 87 19,266 28 4,571 66	\$2,827 65 15 18 10.305 79 239 35 552 50 16,080 25 ************************************
Steamboat Operation	9,510 71 2,158 08 937 95 99,040 19	910 00 8,820 00 110,852 19	11,910 00
	\$212,235 60	\$191,956 72	\$208,801 15

^{*}In Willard Parker the Doctors' and Nurses' Kitchen and Dining Room are not given separately, but show under "Doctors' Kitchen and Dining Room."

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			Number N	177	11.0	705	. : <u>.</u>	106	: 8	-	-	::'	77	 	10	61 61	-	1,004	39	3)
Patients.	Transferred to		Hospital.	Willard Parker Scarlet Fever Kingston Avenue	Scarlet Fever	Scarlet Fever	Kinoston Avenue.	Riverside	Scarlet Fever	Willard Parker	Willard Parker	V 200	Scarlet Fever	Kingston Avenue.	Kingston Avenue.	Kingston Avenue.	Kingston Avenue.		Scarlet Fever	Kingston Avenue Kingston Avenue.
			Died.	40	6	50	- :	::	7 0	33	20	::'	7 :	-	7	: :	:	125	∞	4
		ged.	Dischar	汞	12	17	25.0	:	: -	-	- 1	\ - (7 1	٠ :	:	::	:	104	46	31
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Patients.	Admitted.	Transferred from	Hospital.	Riverside	Riverside			Otisville		Willard Parker	Riverside.	Conflot Fortor	Riverside	Scarlet Fever		Scarlet Fever	Scarlet Fever		Riverside	Riverside
			New.	85	29	751	17	.55	, 9	76	9	+- (2 C	, ro	12	٧ :	:	1,109	62	46
	.8091	ainin er 31,	Бесеть Песеть	7	4	2	: :	:	: :	-	: "	- :	: "	:	:	: :	:	17	6	6
				Diphtheria.	Scarlet fever	Measles	Small-pox. Varicella.	Tuberculosis.	Diphtheria and scarlet fever.	Diphtheria and measles	Diphtheria and varicella	Diphthera and German measles.	Scarlet fever and varicella	Scarlet fever and pertussis	Measles and pertussis	Diphtheria, scarlet fever and measles	Scarlet fever, measles and varicella	Total	For observation	Accompanying

Willard Parker Hospital-General Statement.

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			Num- ber.		20 - 5	59.1	80
Patients.	Transferred to		Hospital.		Scarlet Fever	incoping	
			Died.		472		472
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Diseases	se sted.	sessi sərT	Total D		1,980	-	1,980
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Patients.	Admitted.	Transferred from	Hospital.		Riverside		
			New.		1,448	1 448	1
	gn .8061 ,1	nainii ber 3	Бесет		113	112	
					Diphtheria	Total	

Scarlet Ferer Hospital-General Statement.

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Patients.	Transf		Hospital	Willard Parker Kingston Ave	Reception Willard P	
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		rged,	Discha	1,182	355	1,237
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Diseases.	es ated.	esesiC serT	Total I	1,557	62	1,636
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	ts ted.	atien. Tres	I fstoT	1,557	~ <u>~</u>	1,636
		я	Num- ber.	421 I		484
Patients.	Admitted.	Transferred from	Hospital.	(Riverside Willard Parker	Willard Parker Kiverside	
			New.	966	40	1,036
	.8061	aining er 31,	Rem Decemp	115	н	116
				Scarlet fever	Diphtheria and scarlet fever.	Total

Riverside Hospital-General Statement.

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Patients.	Transferred to		Hospital.	Willard Parker		Willard Parker	Willard Parker	Willard Parker	Kingston Avenue.		Willard Parker
			Died.	30	295	11	Io	-		355	H :
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	ts.	nəits ^o SərT	Total I	451	121	56	453	15	- 6 -	2,332	10.60
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Patients.	d fre			Willard Parker					Willard Parker		
			New.	448	118	28	453	15	- 7 -	2,016	410
	.3061	ninini 18 190	Бесет! Песет!	3	253	н	:	:	::	260	:
				Diphtheria	Measles	Diphtheria and measles	Scarlet fever	Diphtheria and scarlet fever	Diphtheria and varicenta. Diphtheria and pertussis.	Total	For observation Accompanying.

Kingston Avenue Hospital-General Statement.

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Patients.	Transferred to.		Hospital,			Randall's Island												Randall's Island	
			Died.	142	310	-:	::	10,1	6 %	23	I 61 .	2 7	10	٠ I	: -	٠:	н	969	: "
		ged.	Dischar	447 652	1,381	76	ω ₁	2 7	57	200	57.	∞ n	17	Q :	~ -	• :	:	2,766	312
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Diseases.	es ted.	esseic seiT	Total I	631 890	1,820	104 I	ω =	70	170	∞ ·	4 6%	5∞	27	; =	4 4	, =	н	3,860	323
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Patients.	Admitted.	Transferred from.	Hospital.	Riverside	Riverside	Reception			Reception	Rivareido	Reception	Reception	Reception		Reception			Reception	Reception
1			New.	582	890	16		782	22	+ +	6	21 KJ	14	- ,	- H	н	: {	2,432	300
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				Diphtheria. Scarlet fever.	Measles	Vancella.	Mumps	Cerebro-spinal meningitis Diphtheria and scarlet fever	Diphtheria and measles	Diphtheria and varicella	Scarlet fever and measles	Scarlet fever and pertussis	Measles and pertussis. Measles and varicella.	Varicella and pertussis	Scarlet fever, measles and diphtheria	Scarlet fever, varicella and pertussis	measies, diplinieria and pertussis	Total	For observation Accompanying

Reception Hospital—Service Rendered.

	Patients.	Patient Days.	Average Days per Patient.	Largest Number of Patients at One Time.	Patients at	Average Patients per Day.
Diphtheria Scarlet fever Measles Small-pox Varicella Tuberculosis Cerebro-spinal meningitis Diphtheria and scarlet fever Diphtheria and waricella Diphtheria and varicella Diphtheria and pertussis Diphtheria and pertussis Scarlet fever and measles Scarlet fever and measles Scarlet fever and pertussis Measles and pertussis Measles and varicella Diphtheria, scarlet fever and measles Scarlet fever measles Scarlet fever and pertussis Measles and varicella Diphtheria, scarlet fever and measles Scarlet fever, measles and varicella	105 30 753 177 13 106 1 6 147 7 7 1 12 12 12 2 2	1,341 427 1,410 233 1000 109 1 20 238 32 193 12 128 337 75 20 2	12.77 11.86 1.87 13.70 7.69 1.02 1.00 4.83 1.61 4.57 27.57 12.00 10.66 28.08 18.75 1.67 1.00	7 4 13 5 5 3 5 1 1 3 2 2 3 3 3 2 2 4 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.95 1.08 2.23 .035 .234 .0025 .0025 .0625 .0525 .0914 .514 .0425 .705 .116 .0187 .0055
Total	1,244	4,696	3.69	25	3	10.81
For observation	73 50	782 475	10.71	9 8	1 I	1.88 1.41

Willard Parker Hospital—Service Rendered.

	Patients.	Patient Days.	Average Days per patient.	Largest Number of Patients at One Time.	Smallest Number of Patients at One Time.	Average Patients per Day.
Diphtheria	1,980	31,566	15.94	125	39	84.42

Scarlet Fever Hospital-Service Rendered.

	Patients.	Patient Days.	Average Days per Patient.	Largest Number of Patients at One Time.	Smallest Number of Patients at One Time.	Average Patients per Day.
Scarlet fever Diphtheria and scarlet fever Total	1,557 79 1,636	54.063 2,631	34·7² 33·30 34·65	224 22 246	45 1 46	139.58 7.17

Riverside Hospital-Service Rendered.

	Patients.	Patient Days.	Average Days per Patient.	Largest Number of Patients at One Time.	Smallest Number of Patients at One Time.	Average Patients per Day.
Diphtheria Measles Tuberculosis Diphtheria and measles. Scarlet fever Diphtheria and scarlet fever. Diphtheria and varicella. Diphtheria and pertussis. Scarlet fever and varicella.	451 121 1,259 29 453 15 1 2 1	635 402 107,438 105 479 17 1 2 1	1.40 3.32 85.33 3.62 1.05 1.13 1.00 2.00 1.00	5 4 322 2 8 2 1 1 1	1 1 241 1 1 1 1 1	1.73 1.10 294.35 .28 1.31 .04 .002 .005 .002
For observation	5 3	370	74.00	2 T	I	1.01

Kingston Avenue Hospital—Service Rendered.

	Patients.	Patient Days.	Average Days per Patient.	Largest Number of Patients at One Time.	Smallest Number of Patients at One Time.	Average Patients per Day.
Diphtheria. Scarlet fever. Measles. Varicella Pertussis. German measles. Mumps. Cerebro-spinal meningitis. Diphtheria and scarlet fever. Diphtheria and measles.	627 855 1,789 101 1 3 1 7 34 148	10,96e _ 28,135	17.48 32.90 20.77 14.41 3 11 19 25.42 28.70 19.01	46 127 249 13 1 2 1 3 9	16 21 28 1 1 1 1	21.62 70.02 98.10 3.41 .07 .05 .21 2.37 7.18
Diphtheria and varicella. Diphtheria and pertussis. Scarlet fever and measles. Scarlet fever and varicella. Scarlet fever and pertussis. Measles and pertussis Measles and varicella Measles, scarlet fever and vari-	7 4 28 7 7 7 7 17 3 2	65 17 1,076 281 186 255 52	9.28 4 25 38.42 40.14 26.57 15 17.33	3 1 22 3 3 5 5	1 1 1 1 1 1	.17 .03 6.07 .61 .21 3.87 .79
cella	4 I	175 39 3	43·75 39 3	2 I	I I	· 47
Total	3,647	83,944	23.01	381	80	219.52
For observation	17 322	425 6,066	25.00 18.83	3 70	I 2	·43 14.74

Reception Hospital—Case Fatality Per Cent.—Those Dying within 48 Hours Deducted, by Diseases, Age Periods, and Time Elapsed
Previous to Admission.

Death Those Dying Under Death Those Dying	-												•
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3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Elapsed Previous nission.		2-5 Days.	Over 5 Days.	Total.	Under 2 Days.		Over 5 Days.	1	Under 2 Days.	2-5 Dave	Over	Total.
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Reception Hospital—Case Fatality Per Cent.—Those Dying Within 48 Hours Deducted, by Diseases, Age Periods, and Time Elapsed Precious to Admission—Continued.

	Cases T	Terminated	Cases Terminated *-Those Dying Under 48 Hours Deducted.	Dying ed.	Deat	hs—Those 48 Hours 1	Deaths—Those Dying Under 48 Hours Deducted.	ıder		Case Fatality Per Cent.	atality Sent.	
Days of Disease Elapsed Previous to Admission.	Under 2 Days.	2-5 Days,	Over 5 Days.	Total.	Under 2 Days.	2-5 Days.	Over 5 Days.	Total.	Under 2 Days.	2-5 Days.	Over 5 Days.	Total.
Diphtheria and Measles— Under 2 years. 2-4 years. 5-14 years. Over 15 years.	H H	÷00.	т нн :	0.4%	300 Mel	Э Н 7	444	0000	100.00	100.00 50.00 100.00	100.00 100.00 100.00	100.00 75.00 100.co
Diphtheria and Varicella— Under 2 years. 2-4 years. 5-14 years. Över 15 years.		H : : : : : : : : : : : : : : : : : : :	:::=	lock 0 lock		T : : :		H : : :		100.00		100.00
Diphtheria and Pertussis— Under 2 years. 2-4 years. 5-14 years. Över 15 years.	: H. : :	- : : :	. 3.6	₩ W W :								
Diphtheria and German Measles— Under 2 years. 2-4 years. 5-14 years.		::-:										: : : :
Scarlet Fever and Measles— Under 2 years. 2-4 years, 5-14 years.			⊨ 01 · ·			: : : :	. н	. just	* * * * * * * * * * * * * * * * * * * *			
Scarlet Fever and Varicella— Under 2 years 5-4 years. 5-14 years. Over 15 years.	: " : :			 			# : : : : : : : : : : : : : : : : : : :	# : : : :			33.33	20.00

			:::::::::::::::::::::::::::::::::::::::	100.00		55.55	:	: : : : : : : : : : : : : : : : : : : :	:		44.44			:	
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_	:	:	:	:		-	-	7	7		6	7	:	61	
Scarlet Fever and Pertussis—	Under 2 years	2-4 years	5-14 years	Over 15 years	For observation-	Under 2 years	z-4 years	5-14 years	Over 15 years	Accompanying—	Under 2 years	z-4 years	5-14 years	Over 15 years	

*Cases dying or discharged.

Willard Parker Hospital—Case Fatality Per Cenf.—Those Dying Within 48 Hours Deducted, by Diseases, Age Periods, and Time Elapsed Previous to Admission.

	Total.	39.84 20.96 6.58 2.81		
tality.	Over 5 Days.	37.50 20.66 7.69 7.24		
Case Fatality. Per Cent.	2-5 Days.	42.03 21.42 5.86 .099		: : : :
	Under 2 Days.	34.78 19.11 8.51 6.67		
nder	Total.	153 122 33 8		
Deaths—Those Dying Under 48 Hours Deducted.	Over 5 Days.	31 10 5		
hs—Those 48 Hours l	2-5 Days.	95 78 86 20 20		
Deat	Under 2 Days.	16 13 4		
Dying ed.	Total.	384 582 501 285		
1*—Those	Over 5 Days.	112 150 130 69		
Cases Terminated *-Those Dying Under 48 Hours Deducted.	2-5 Days.	226 364 324 201		<u> </u>
Cases	Under 2 Days.	- 46 68 68 15		: : : :
	Days of Disease Elapsed Previous to Admission.	Diphtheria— Under 2 years. 2-4 years. 5-4 years. Over 15 years.	Under Observation— 2-4 years. 5-4 years 6-4 years Over 15 years	Accompanying— 2-4 years. 5-4 years. Over 15 years.

· Cases dying or discharged.

Scarlet Feerer Hospital-Case Fatality Per Cent.-Those Dying Within 48 Hours Deducted, by Diseases, Age Periods, and Time Elapsed Previous to Admission.

	Total.	38.46 19.80 4.93 5.23 30.00 19.23 112.12
Case Fatality Per Cent.	Over 5 Days.	32.25 21.00 4.01 3.44 28.57 17.64 11.11
Case I Per (2-5 Days.	43.13 19.14 3.69 5.97 33.33
	Under 2 Days.	33.33 16.00 8.57 5.55 5.55 1.00 25.00
nder	Total.	200 200 111 200 200 200 200 200 200 200
Deaths—Those Dying Under 48 Hours Deducted.	Over 5 Days.	010000000000000000000000000000000000000
ths—Those Dying U	2-5 Days.	377 877 11 11 11 11 11 11 11 11 11 11 11 11 1
Dea	Under 2 Days.	0.401 .21
Dying ed.	Total.	91 213 719 719 719 719 719 719 719 719 719 719
Cases Terminated *-Those Dying Under 48 Hours Deducted.	Over 5 Days.	31 100 224 58 7 7 17 18
Ferminated Ider 48 Ho	Days.	1588 1888 1960 134 177 3
Cases Un	Under 2 Days.	9.000 2.0000 4.44
	Days of Disease Elapsed Previous to Admission.	Scarlet Fever— Under 2 years. 2-4 years. 5-14 years. Over 15 years. Under 2 years. 2-4 years. 5-14 years. 5-14 years. 5-14 years.

* Cases dying or discharged.

Riverside Hospital—Case Fatality Per Cent.—Those Dying Within 48 Hours Deducted, by Diseases, Age Periods, and Time Elapsed Previous to Admission.

	Total.	25.00	33.33	42.85	31.01		66.66	100.00
atality ent.	Over 5 Days.			20.00	31.01		100.00	100.00
Case Fatality Per Cent.	2-5 Days.	33.33	33.33	40.00			\$0.00 100.00 33.33	
	Under 2 Days.					: : : :		
ıder	Total.	5 : 3 =	: : :		762		. I 5 5	
Deaths—Those Dying Under 48 Hours Deducted.	Over 5 Days.				†6z			:::=
hs—Those	2-5 Days.		: : : :	2				
Deat	Under 2 Days.				: : : :			
Dying	Total.	41/141/	= 12.4 H	17 NW 4	948	: H : :		: : H
Cases Terminated *-Those Dying Under 48 Hours Deducted.	Over 5 Days.			4 4 4 F	948		H - : :	:::=
erminated	Days.	0 n N n 0	н : Э н	ww= w			3 1 2	
Cases 7	Under 2 Days.		: : -			. H		
	Days of Disease Elapsed Previous to Admission.	Diphtheria— 2-4 years. 2-4 years. Over 15 years.	Scarlet Fever— Under 2 years. 2-4 years. 5-14 years. Over 15 years.	Measles— Under 2 years 2 4 years 5-14 years Over 15 years	Tuberculosis— Under 2 years. 2-4 years. 5-14 years. Over 15 years	Diphtheria and Scarlet Fever— Under 2 years	Diphtheria and Measles— Under 2 years. 2-4 years. 5-14 years. Över 15 years.	For observation— Under 2 years. 2-4 years. 5-14 years. Over 15 years.

* Cases dying or discharged.

Kingston Avenue Hospital-Case Fatality, Per Cent.-Those Dying Within 48 Hours Deducted, by Diseases, Age Periods, and Time Elapsed Previous to Admission.

	Cases	Terminate der 48 Ho	Cases Terminated*—Those Dying Under 48 Hours Deducted.	Dying ed.	Deat	ths—Thos 48 Hours	Deaths—Those Dying Under 48 Hours Deducted.	nder		Case	Case Fatality Per Cent.	
Days of Disease Elapsed Previous to Admission.	Under 2 Days.	2-5 Days	Over 5 Days.	Total.	Under 2 Days.	^{2–5} 5 Days.	Over 5 Days.	Total.	Under 2 Days.	2-5 Days.	Over 5 Days.	Total.
Diphtheria— Under 2 years, 2-4 years, 5-4 years, Over 15 years	26 34 14	65 145 122 59	20.0	84 191 180 81	400	31.	000	38 39 12	40.00	47.69 17.24 4.91	33.33 30.00 25.00	45.23 20.41 6.66
	10 54 94	21 106 227 56	220 80 90	28.1 28.1 28.2 28.2	4 V W	6 0 1 0	41010	14 22 20 4	40.00 12.96 5.31	28.57	33.33 19.23 6.25	22 11 28 28 28 28 28
Measles— Under 2 years 2-4 years 5-4 years Over 15 years	25824	276 320 229 193	, 9528 4	253 399°	33.		4:: 42	63. 14.	45.45 12.31 5.95 4.16	48.18 10.93 2.18	35.41 II.57 4.65	44.98 11.39 3.50
Varicella— Under 2 years 2-4 years 5-14 years Over 15 years	407.0	15 21 16	41·W=	25,33,2		. pes				4.76		2.70
		` ::::		:-::								
German Measles— Under 2 years. 2-4 years. 5-14 years Over 15 years.		PH		H 2	: : : :							
Mumps— Under 2 years. 2-4 years. 5-14 years. Över 15 years.		:::-		: : : =								

* Cases dying or discharged.

Kingston Avenue Hospital—Case Fatality, Per Cent.—Those Dying Within 48 Hours Deducted, by Discases, Age Periods, and Time Elapsed Previous to Admission—Continued.

	Cases 7	Ferminated der 48 Hou	Cases Terminated *—Those Dying Under 48 Hours Deducted.	Dying ed.	Deat	hs—Those Dying U 48 Hours Deducted.	Deaths—Those Dying Under 48 Hours Deducted.	nder		Case Fatality Per Cent.	atality ent.	
Days of Disease Elapsed Previous to Admission.	Under 2 Days.	pays.	Over 5 Days.	Total.	Under 2 Days.	2-5 Days.	Over 5 Days.	Total.	Under 2 Days.	$\frac{2-5}{\text{Days.}}$	Over 5 Days.	Total.
Cerebro-spinal Meningitis— Under 2 years. 2-4 years 5-4 years Over 15 years.				4:::		:::			: : : : 0			71.42
Diphtheria and Scarlet Fever— Under 2 years. 5-4 years. 5-4 years. Over 15 years.	: wa:	. no	₩ 1/00 N	13 - 2	. pri 0	: 6		2 0 0	33.33	00.00	100.00	100.00 46.15 25.00
Diphtheria and Measles— Under 2 years. 2-4 years. 5-14 years		7 0 0 0	32 + + ::	883	100	17 12 2	8 17 1	3,3%	55.55	85.00 40.00 33.33	80.00	85.71 48.75 25.00
Diphtheria and Varicella— Under 2 years. 2 years. 5-14 years Over 15 years.		. 0	: : : :	: W H		: " : :		. H		\$0.00		
Diphtheria and Pertussis— Under 2 years. 2-4 years 5-14 years Over 15 years	::":	::":	: " : :						14			: : : :
Diphtheria, Scarlet Fever and Varicella— Under 2 years. 2-4 years. 5-14 years.	::::		. ин	. O H				: : : :	: : : :			::::
Scarlet Fever and Measles— Under 2 years. 2-4 years. 5-14 years Over 15 years.	1 9 1 2 2	4 7 % u	6 6	330	00.1	HINHH	H M : :	40I 12	66.66 16.66 100.00	25.00 29.41 12.50 50.00	30.00	44.44 25.04 4.34 66.66

33.33	100,00	18.18	00.00	100.00	100.00		10.00
		66.66		00.00	100.00		
50.00	100.00	50.00	50.00				
33.33		50.00	100.00				
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Scarlet Fever and Varicella— Under 2 years. 2-4 years. 5-11 years	Scarlet Fever and Pertussis— Under 2 years. 5-14 years Over 15 years.	Measles and Pertussis— Under 2 years. 2-4 years. 5-14 years Over 15 years.	Measles and Varicella— Under 2 years. 5-4 years. 5-14 years. Over 15 years.	Diphtheria, Scarlet Fever and Measles— Under 2 years. 2-4 years. 5-14 years. Over 15 years.	Measles, Diphtheria and Pertussis— Under 2 years. Under 2 years. 5-4 years. 5-4 years.	For observation— Under 2 years. Under 4 years. 5-14 years. Over 15 years.	Accompanying— Under 2 years. 2-4 years. 5-14 years. Over 15 years.

*Cases dying or discharged.

Number of Cases of Contagious Diseases Received at the Department Hospitals from Quarantine for Treatment.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Diphtheria	2 40 111 22	8 42 258 19	9 18 91 22	10 23 51 16	29 123 511 79 7
Total	175	333	141	100	749
Observation	63	133	44	33	5 273

Cases of Infection Within Hospitals.

	Reception.	Willard Parker.	Scarlet Fever.	Riverside.	Kingston Avenue.
Cases of measles developing more than tourteen days after admission Cases of scarlet fever developing more than ten days after admission		41	5		22

Otisville Sanatorium—General Statement.

	1908.		Admitted.				·	Transferr	1909.	
	Remaining Dec. 31,	New.	Transferre Hospital.	Transferred from Hospital. Number.		Discharged.	Died.	Hospital.	Num- ber.	Remaining. Dec. 31,
Tuberculosis	178	779	Riverside	4	961	612	2	Riverside	44	303

Otisville Sanatorium—Service Rendered.

	Patients.	Patient Days.	Average Days per Patient.	Largest Number at One Time.	Smallest Number at One Time.	Average Patients per Day.
Tuberculosis	961	85,201	88.66	330	170	239.33-

Otisville Sanatorium-Patients Treated and Condition When Discharged.*

	Ťotal		Discha	arged.			Under	
`	Cases Treated in Year 1909.	Apparently Cured. Arrested. Improved. Progressive. Transferred.	Deaths.	Treat- ment Dec. 31, 1909.				
Number— Incipient Moderately advanced Far advanced Percentage— Incipient Moderately advanced Far advanced	100.00	5.55 1.38	66 127 13 33.33 19.72 10.92	67 221 30 33.84 31.31 25.21	9 41 18 4.55 6.36 15.12	.50 2.64 21.85	₂	22.23 35.56 25.21

^{*}The classification as to stage of disease, etc., is that adopted by the National Association for the Study and Prevention of Tuberculosis.

Otisville Sanatorium-Duration of Patients' Stay.

	Dis- charged.	Died.	Trans- ferred.	Number.	Per Cent.
Total patients discharged, Length of stay Under I month. Over I month and under 3 months Over 3 months and under 6 months Over 6 months	105 203 210	2 2 	 9 16 11 8	658 114 221 221 102	100.00 17.59 33.59 33.13 15.69

Otisville Sanatorium-Places to Which Patients Discharged.

	Dis- charged.	Died.	Trans- ferred.	Number.	Per Cent.
Total patients discharged	612	2 2	44 , 44	658 612 2 44	100.00 93.02 .30 6.68

Riverside Sanatorium-General Statement.

	Remaining Dec. 31, 1908.				Total Treated.	Dis- charged.	Died.	Transferred to		Re- maining Dec. 31,
		Hospi- tal.	Num- ber.		Hospi- tal.			Num- ber.	1909.	
Tuberculosis	253	950 {	Willard Par∤er	} 56	1,259	654	296			309

Riverside Sanatorium—Service Rendered.

			1			
	Patients.	Patient Days.	Average Days per Patient.	Largest Number at One Time.	Smallest Number at One Time.	Average Patients per Day.
Tuberculosis	1,259	107,438	85.33	322	241	294 - 35

Riverside Sanatorium-Patients Treated and Condition When Discharged.*

	Total		Disch		Under Treat-		
	Cases Treated in Year 1909.	Appar- ently Cured.	Arrested.	Im- proved.	Pro- gressive.	Deaths.	ment, Dec. 31, 1909.
Number— Incipient	375 884			 42 123	123 366	74 222	136 173
Percentage— Incipient. Moderately advanced Far advanced	100.00 100.00	•••••		11.20 13.91	32.80 41.40	19.73 25.11	36.27 19.57

^{*} The classification as to stage of disease, etc., is that adopted by the National Association for the Study and Prevention of Tuberculosis.

Riverside Sanatorium-Duration of Patients' Stay.

·	Discharged.	Died.	Number.	Per Cent.
Total patients discharged Length of stay. Under 1 month Over 1 month and under 3 months. Over 3 months and under 6 months. Over 6 months.	74 323 156	296 22 138 81 55	950 96 461 237 156	100.00 10.10 48.52 24.94 16.42

Riverside Sanatorium-Places to Which Patients Discharged.

	Discharged.	Died.	Number.	Per Cent.
Total patients discharged. Patients discharged to their homes Patients discharged to other sanitaria. Patients discharged to work at Otisville. Patients discharged on account of death.	633	296 296	950 633 6 15 296	105.00 66.63 .63 1.58 31.16

DIVISION OF FOOD INSPECTION.

The Division of Food Inspection is one of the branches of the Department of Health that supervises and maintains the purity of foods and drugs as well as all articles consumed by the general public.

Its object is to require all foods entering the city to be fresh, sound and wholesome, and to make such inspections as may be necessary to arrive at this end; and to supervise the manufacture and sale of foods and drugs in this city in order to determine that they are properly branded and not adulterated.

The employees of this division consist of thirty-two men doing duty as inspectors, one of whom is designated as Chief who is in charge, also one stenographer and typewriter, one typewriting copyist

and one office clerk.

In order to give better opportunity for this division to be in touch with that part of New York's commerce dedicated to the handling of foods, the office of this division has been located at No. 204 Franklin street, a site which is in the heart of the food district.

The territory covered by inspectors embraces the entire City of New York. The latter has been divided into inspection districts and during the year men are detailed to alternate districts to the end that they

become familiar with the system as a whole.

These men are required to visit every place in the entire city where food products of any kind, character or description are sold, and make careful inspection of perishable foods in their natural state; also all foods manufactured or in the process of manufacture. They are also required to observe the sanitary conditions under which the foods are manufactured or sold and to obtain samples when instructed to do so.

An inspector's hours of duty practically include all hours of the day and night. Calculations on the daily reports of inspectors are

made at the office every twenty-four hours.

As regards the general outline of the work performed by this division it may be mentioned that from every point of the compass food products of all kinds enter this city, requiring a constant and continuous vigilance by the Department of Health. This not only applies to the finished product but also to the bulk food stuffs which are imported for manufacturing purposes. Necessarily a most continuous vigilance of steamship and railroad wharves as well as terminal stations must be constantly kept up. Inspectors are required to carefully look after all perishable foods such as fruits, vegetables and meat, after distribution from the wharves which happens in the early hours of the morning. The remainder of the day is devoted to visiting shops, commission houses, stores of all kinds and licensed yenders.

Decided activity is constantly to be exercised, especially during the warm weather when goods that were sound early in the morning be-

come bad toward the middle of the day by being transported over

uneven pavements and handling.

Again, all slaughter houses, meat shops and ice houses are carefully inspected to see that the conditions existing in them, not only for the quality of the food which exists there, but to see that the sanitary conditions at these points are such as to guarantee the best product possible for public consumption. A careful observation is made of anything offered for sale or kept in storage.

The New York Mercantile Exchange allows representation on its floor from this division, thus enabling the Department to come in contact with the dairy interests, which privilege is considered very im-

portant.

It may be mentioned that the work of this division has been greatly furthered by the aid of the Police Magistrate and Judges of the Courts of Special and General Sessions who have demonstrated their hearty co-operation in the war which is being waged against the adulteration of foods.

FIRE AND MARINE LOSSES.

One of the most important features of this division is the supervision of fire and marine losses. By courtesy of the New York Board of Fire Underwriters, Fire Patrol Reports are sent to this office daily, and thus within twenty-four it is possible to get in touch with every place in the city where fire has occurred involving foods. A fair idea may be formed by observing the accompanying table of the amount of foods which have been condemned after having been damaged by fire, much of which would have undoubtedly escaped the notice of the Department otherwise, on account of the limited number of inspectors covering the city.

ICE CREAM.

All stores where ice cream is manufactured have had their utensils used in the manufacture of said article carefully inspected, and where conditions warranted orders have been served to either purchase new or repair the old vessels.

One of the great achievements of this division during the past year has been the elimination from the market of substitutes for lemon

inice.

A complete file has been concluded during the past year of every place in the city where food products of any kind are sold. This file not only shows the class and conditions of the food sold but also the

sanitary conditions surrounding these places.

A most decided victory may be indicated as having been obtained by the Health Department as regards the production of "jobbers" who had been in the habit of selling candy containing sulphurous acid. The final decision of the Appellate Division of the Supreme Court of the Second Department affirms the decision of the lower court in favor of the Department of Health. (See Corporation Counsel's Report.) In respect to the sale of prohibited candy it might be added that in the beginning of the year nearly all of the "jobbers" throughout the

entire city for economical reasons were using sulphurous acid as a dryer and bleacher. They contributed ignorance as to its deleterious effects upon the human system and subsequently claimed that the sulphurous acid was in the glucose manufactured by the Corn Products Company. A careful inspection of the latter's plant, and samples obtained from them, showed that this was not true but that it was actually put into the candy by the manufacturers knowingly, most of whom admitted this fact finally.

A correction of the evils existing in bakeshops and confectionery stores has been made. During the summer months the doors of these stores are generally open and dust entering settles upon the cakes and candies. An entire canvass of the city by inspectors has resulted in making all owners of such stores either put a netting over their goods or else put them in glass cases; thus avoiding the possibilities of insects coming in contact with these products, and dust accumulating upon food stuffs of this kind.

The sale of eggs in an improper condition for consumption has been actively prosecuted with the result that during the past year the evil has practically been stamped out entirely. Favorable comment has been the result of this activity, especially by the members of the Mercantile

Exchange who compose the wholesale egg dealers of the city.

During 1909 the Department required the elimination of preservatives in chopped meats. Regularly, during the year samples of chopped meats have been obtained from butchers and restaurants. More particularly was this evil the hardest to contend with at the summer resorts. Many arrests were made and the amount of fines increased for violations of the ordinance regarding this offense. The result has been very favorable as regards the stamping out of these harmful products.

This division makes it a point to inspect regularly, cheap restaurants and hotels in order to ascertain the condition of the foods fed to both

guests and servants.

FALSE LABELING.

This division has been actively engaged during the past year in enforcing that portion of section 68 of the Sanitary Code regarding the misbranding of foods. Upon numerous occasions where samples have been obtained stating on the labels that the contents were of a certain quality it has been proven that the labels have been false. Where the moral hazard has been good and the people selling goods of this kind have been responsible, they have been notified to call at the office of this division and have been properly instructed. It may be mentioned that the first case is yet to be recorded where a warning has not sufficed.

Where wilful misrepresentations have been made, such as the misbranding of olive oil, syrups and other products, the offenders have been arrested and fined. Second offenses have not been recorded up to

date.

Drug Stores.

The drug stores of New York have been very carefully inspected and samples of products that are frequently used, such as coal tar

products, carbolic acid, and those drugs that would be naturally easiest

to adulterate have been under continuous vigilance.

As regards the selling of cocaine it may be said that this drug has been greatly eliminated from the general sale to the public. Many drug stores that have traded in catarrhal powders containing cocaine have had samples on their shelves for long lengths of time and have been trying to dispose of same in order to get rid of old stock, claiming absolute ignorance of the fact that it was in violation of the law. It is possible that this is the truth inasmuch as at one time every drug store in the city kept powders in stock. At the present time, it is very hard to get a sample of these products except in the outlying districts. Thorough tests have been made by false prescriptions to obtain this drug, by inspectors of this division, and it may be recorded that it is doubtful at the present time if this drug could be obtained in any store in the entire city without a bona fide prescription.

There have been many instances where arrests have been made of pedlers who frequent certain parts of this city and have a regular trade. There has been a tendency for every individual and organization interested in the suppression of the use of cocaine to lean upon the Department of Health for help which has been lent freely, with the result that the number of arrests made throughout the city has been large and has resulted in fifty convictions during the past year of dispensors of this drug. The law has dealt heavily with persons found

selling this drug without proper licenses to do so.

LARD.

Many grocers and butchers have attempted during the past year to deceive the public by selling a compound for pure lard. The difference in price is five cents per pound in favor of the pure lard. Careful vigilance has been kept over this traffic and many arrests made which has had the result of reducing this abuse to a minimum. Publicity through various trade papers has served as a warning to those in this kind of work. It will be seen from the following table that the condemnations have been very heavy during the past year. This is due in so far as vegetables and fruits are concerned to excessive moisture in southern countries which has resulted in rapid decay.

* Comparative Statistics.

Number of live stock received at the Union Stock Yards, Sixtieth street and North River, during 1909:

Cattle	 140,219
Sheep	 376,405
	 229,392
Hogs	 801,180

^{*}Figures represent pounds in relation to condemnations.

Number of live stock slaughtered in the City of New York during the year 1909:

Cattle																509,533
Sheep									 							1.567,099
																399,480
Hogs																734,957
Goats																31
																J.

MISCELLANEOUS.

MIISCELLANEOUS.	
Fertilizer manufactured, tons	7,293
Fat rendered, pounds	1.633,101
Grease rendered, pounds	
Lard rendered, pounds	17,402,896

Inspection and Condemnation of Meat.

		Year 1909		Year 1908.				
NEW YORK.	Inspections.	Condemnations.	Pounds Con- demned.	Inspections.	Condem- nations.	Pounds Con- demned		
Butcher shops Stores Packing houses Ice houses Stands Vessels Markets. Railroad depots Stock yards Slaughter houses. Commission houses Fat houses Licensed venders Cown sale stables	57,142 21,090 2,823 15,220 26,927 126 2,200 546 2,173 14,672 10,395 751 12,284 144	269 69 31 180 211 4 468 6 303 6,017 421	12,711 2,147 9,805 40,484 24,006 39,548 142,479 8,447 219,450 1,540,029 56,368	54,153 8,504 10,358 18,976 7,120 439 1,066 571 10,821 51,071 10,933 2,568 2,576 2,715	615 129 45 167 497 1,054 165 6,175 583	42.00 9,62 33,25 29,56 74,92 160,31 21,81 276,10 2,230,12 49,41 14,00 3,16		
Total	166,493	7,991	2,098,139	182,431	9,455	2,940.3		

		Year 1909.		Year 1908.					
BOROUGH OF MANHATTAN.	Inspec- tions.	Condemnations.	Pounds Con- demned.	Inspections.	Condem- nations.	Pounds Con- demned.			
Butcher shop. Stores. Packing houses Ice houses Stands Vessels Markets. Railroad depots. Stock yards Staughter houses Commission houses Fat houses Licensed venders Cow sale stables	37,220 10,467 740 10,345 15,128 500 296 482 7,107 7,699 107 3,300	155 57 4 103 208 4 458 5 302 2,365 250	6,689 1,785 4,012 27,986 23,959 39,548 141,440 8,417 218,650 1,067,500 41,358	34,458 3,005 1,390 5,605 5,133 430 631 24 1,763 13,788 3,802 1,743 1,071	303 28 5 76 480 1,048 2 164 3.194 126	22,564 2,198 5,192 17,259 73,052 160,191 2,800 276,090 1,849,734 32,420 14,000 2,827			
Total	93,510	3,922	1,582,839	72.903	5,442	2,458,327			

Inspection and Condemnation of Meat-Continued.

		Year 1909.				
BOROUGH OF BROOKLYN:	Inspections.	Condem- nations.	Pounds Con- demned.	Inspec- tions.	Condem- nations.	Pounds Con- demned.
Butcher shops tores Packing houses ee houses tands Pessels Iarkets Railroad depots tock yards laughter houses commission houses fat houses Licensed venders Low sale stables	17,568 6,760 1,908 4,107 11,509 6 1.658 7,91 1,689 7,396 1,915 637 8,771	76 12 27 60 2 9 1 3,555 169	4,547 362 5,793 9,376 22 1,019 800 468,609 13,275	15,284 1,661 8,879 11,398 1,843 9 914 191 9,044 36,959 6,049 719 1,376 2,715	214 6 39 82 14 5 3 1 2,821 439	12,923 420 27,388 10,575 1,800 26 19,016 12 372,173 14,823

		Year 1909.			Year 1908.	
BOROUGH OF THE BROXX.	Inspections.	Condemnations.	Pounds Con- demned.	Inspec-	Condem- nations.	Pounds Con- demned.
Butcher shops. Stores Packing houses Ice houses Stands. Vessels Markets. Railroad depots. Stock yards. Slaughter houses. Commission houses Fat houses. Licensed venders Cow sale stables.	411 28 1 534 1 31 171 2 162 644	3 2 I 97 I	30 3,920 1,000	611 22 1 1,761 51 355 8 320 906 8	22 I 2 160 I 13	1,765 100 285 8,225 1,669
Total	1,985	104	5,083	4,043	201	12,076

Inspection and Condemnation of Meat-Continued.

		Year 1903.			* Year 1908.					
BOROUGH OF QUEENS.	Inspec-	Condem- nations.	Pounds Con- demned.	Inspec-	Condem- nations.	Pounds Con- demned				
autcher shops tores acking houses ze houses tands essels larkets tailroad depots tock yards laughter houses commission houses at houses decensed venders ow sale stables	3,856 174 234 290 11 7 137	34 15 15 1	3.942 25 20 735	2.620 3.585 76 138 109 5 1 6 2 196 106 66	69 91 1 6 6 3	4,180 6,778 675 1,300 75				

		Year 1909			Year 1908.	
BOROUGH OF RICHMOND.	Inspec-	Condem- nations.	Pounds Con- demned.	Inspec-	Condem- nations.	Pounds Con- demned.
Butcher shops. Stores. Packing houses Ice houses. Stands. Vessels Markets Railroad depots. Stock yards. Slaughter houses Commission houses. Fat houses Licensed venders. Cow sale stables.				1,180 231 12 14 35 5 2	7 3 1 1	585 125 150
Total	303	1	100	1,534	12	960

Pounds of Meat Condemned and Destroyed.

	Total.	6.689 1.785 27,486 23,959 23,954 141,40 141,40 150,10 1,585 1,058 1,1,582 1,1,582
	Сате.	50 20 3,620 1,355 715 715 715 715 715 715 715 715 715 7
an.	Poultry.	1,940 64 19,315 19,315 126,175 12,176 300 300 162,384
Borough of Manhattan	Assorted Meats.	2,653 8,76 17,007 14,00 31,112 5,55 7,018 8,56 8,56 1
ough of	Hogs.	1,085 5,05 5,05 1,70 5,00 5,00 5,00 1,522 1,522 1,523 1,523 1,523
Borc	Sheep.	25.5 50.5 20.0 18.95.0 22.370 61.9 61.9 61.9 61.9
	Veal.	483 269 269 339 2777 22,725 23,220 11,536 11,536 111,215
	Beef.	404 177 18,450 5,440 1,533 4,553 118,300 4,300 4,300 4,300 64,900 646,955
	Total.	12,711 9.805 40,484 24,006 139,518 142,479 11,44,79 219,450 1,540,308 56,368 7,665 1,5008,139
	Сате,	92 20 20 20 20 20 20 20 20 20 20 20 20 20
•	Poultry.	2.975 172 696 19,325 126,934 634,261 10,938 300 300
York.	Assorted Meats.	5,864 1,065 1,765 25,670 31,112 5,810 7,018 422,826 9,331
New York	Hogs.	1,644 3,875 6,142 1,702 8,675 294,204 1,702 1,702 1,703 1,703 1,703 1,703
	.Sheep.	159 13 625 625 625 625 18,656 609 609 609
	Veal.	590 269 856 359 1000 2,777 72,723 177,581 11,536 11,536
	Beef.	1,387 17 17 14,225 6,495 1,995 1,000 1,000 5,055 5,055 5,055 1,000
		Butcher shops. Stores. Stores. Lee houses. Lee houses. Vessels. Markets. Markets. Markets. Stock yards. Stock yards. Commission houses. Licensed venders. Cow sale stables. Total.

Pounds of Meat Condemned and Destroyed-Continued.

The second control of	Total.	53	: :	80	: :	:	ò : ;	3,920	:	: :	5.083
	Сате.		: :	:	: :	:		I,000	:	: :	000,1
onx.	Poultry.	13	: :	:	: :	: :		3,920	:	: :	3,933
Borough of The Bronx.	Assorted Meats.	:		0+	: :	: :	:	: :	:		9
Jo ugno.	Hogs.	:	: :	:	: :	: :	:	: :	:	: :	:
Bor	Sheep.	: :	:	40		: :	:		:		0+
	/eal.	04 :	:	: :		30			:		70
	Beef.	::	:			: :	: :	:	: :	:	:
	.Letol'	4,547	5,793	22		610,1	800 468,609	13,275	: :	:	503,803
	Свте.	::	:	: :	:	: :	: :	128	: :	:	128
yn.	Poultry.	759	241	01	1.	667	47,066	3,922	: :	:	52,865
Borough of Brooklyn.	Assorted Meats.	2,816	5,705	12		3 :	198,325	8,475	: :	:	217,192
rough of	Hogs.	327	3,313	:	:	: :	: :	180	: :	:	6,445
Bo	Sheep.	50	: :	:	: :	:	3,195	20	: :	:	3,305
	Veal.	12:	110	:		:	154,361	: :		:	154,526
	Beef.	540	1,045	:			65,662	520	:	:	69,342 154,526
		Butcher shops Stores Packing houses	Ice houses	Stands	Markets	Kailroad depots	Slaughter houses	Fat houses	Licensed venders	cow sale stables	Total

Pounds of Meat Condemned and Destroyed-Continued.

	Total	100	:	:	:	:	:	ri T	:	:	:	:	:	:		100
	Сате.	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
and.	Poultry.	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Richmo	Assorted Meats.	:	:	:	:	:	:	:	:	:	:	:	:	:		:
Borough of Richmond.	.egoH	:	:	:	:	:	:	:	:	:	:	:	:	:		:
Воп	Sheep.	:	:	:	:	:	:	:	:	:	:	:	:	:		:
	/ˈeal.	:		:	:	:	:	:	:	:	:	:	:	:		:
	Beef.	100	::	:	:	:	:	:	:	:	:	:	:	:	:	000
	Total.	1,322	:	:	3,042	25	::	20	:	:	1.	(7)		0/1		6,314
	Сате.	42	:	:	:	:	:	:	:	:	:	:		0/2		312
° oô	Poultry.	263	:	:	:	:	:	:	:	:	:	:	:	:		263
Borough of Queens.	Assorted Meats.	395	:	:	3,208	22	:	:	:	:	:		:			3,628
rough o	.sgoH	232	:	::	524	:	:	20	:	:	:		:		j	922
ě	Sheep.	35	:	:	:	:	:	:	:	:	:					35
	/ˈeal,	12	:	:	:	:	:	:	:	:	:		:			13
	Beef.	343	:		210	:	:	:	:	:	1.	2			-	1,288
		Butcher shops	Dealing banes	Les honese	Tee nonses	Stands.	Vessels	Railroad denote	Stock vards	Slaughter houses	Commission houses	Fat houses	Licensed venders	Cow sale stables		Total

Inspection and Condemnation of Fruit, Fish and Other Foods.

	1	Year 1909.			Year 1908.	
	Inspections.	Condem- nations.	Pounds Con- demned.	Inspections.	Condem- nations.	Pounds Con- demned.
CITY OF NEW YORK Commission houses Retail stores Licensed venders Vessels and wharves Railroad depots Stands Markets Ice houses Pushcarts	64.779 60,686 104,257 12,261 456 88,357 1.823 430 137,018	1,888 1,052 1,380 1,208 211 3,090 463 37 8,936	1,166,793 2-9,129 219,753 17,847,255 384,215 136,913 703,390 161.857 186,707	73.587 100,829 103,959 6,733 975 128.440 5.880 508 164,687	1,180 3.256 978 858 761 10,956 123 21	1,935,251 392,603 226,925 15,168,735 287,520 218,155 25,857 37,491 334,959
Total BOROUGH OF MAX-	470,067	18,265	21,076,012	584,797	35,671	18,626,596
HATTAN. Commission houses Retail stores Licensed venders Vessels and wharves. Railroad depots. Stands Markets Ice houses Pushcarts	52,713 32,125 96,152 11,816 150 77,049 1,461 311 116,470	1,420 336 388 1,178 83 7,644 341 6	881,209 101,204 152,733 17,782,207 314,-15 95,463 625,300 158,725 97,643	59,365 65,588 90,199 6,542 437 109,275 1,201 324 133,153	705 1,991 477 841 41 10,785 25 3 14.314	1,611,010 203,578 160,635 15,156,535 103.745 203,985 11,065 33.550 214,220
Total	388,247	13,259	20,209,199	466,084	29,212	17,698 362
BOROUGH OF BROOKLYN. Commission houses. Retail stores Licensed venders. Vessels and wharves. Railroad depots Stands	9.254 16.556 5,947 426 12 7.997	259 469 936 29 2	179 395 141.714 57.805 45,048 3-350	10,108 14,941 9,541 184 60	393 291 349 17 433	216.875 \$1.17\$ 43.365 12.200 14.850
Markets	18,114	232 9 1 2,034	29 5×5 2.115 200 87.9.79	15,301 4.386 85 30,801	33	4,090 •••• 119.605
Total	58,463	3,971	547,191	80.407	4.806	492,163

Inspection and Condemnation of Fruit, Fish and Other Foods-Continued.

		Year 1909.			Year 1908.	
	Inspections.	Condem- nations.	Pounds Con- demned.	Inspections.	Condem- nations.	Pounds Con- demned.
BOROUGH OF THE BRONX.						
Commission houses. Retail stores. Licensed venders. Vessels and wharves. Railroad depots. Stands. Markets Jice houses. Pushcarts	2.551 4,600 193 15 294 1,246 199 118 1,859	209 195 12 1 126 212 112 30 35	106,189 14,546 130 20,000 66,150 - 11,690 75,935 2,932 935	4,057 4.720 260 475 916 288 68	81 124 2 287 130 98 18 2	73,846 39,903 70 168,925 9,695 14,792 3,941 70
Total	11,075	932	298,507	11,017	742	311,242
BOROUGH OF QUEENS.						
Commission houses	88 4 3 1	7 I	485 25 40	52 6,767 244 3 2 330 5 31 7	346	33,520 15,814 175 85
Total	96	9	550	7,441	354	49,594
BOROUGH OF RICH- MOND.						
Commission houses	261 7,317 1,961 4 2,062 6	45 44	11,200 9,065	8,013 3,715 4 2,518	404 147	52,130 22,680
Pushcarts	575	4	150	593	2	125
Total	12,186	94	20,565	14,848	557	75.235

Pounds of Fruit, Fish and Other Foods Condemned and Destroyed.

	Total.	881,209 101,204 152,733 17,782,207 314,715 95,463 625,300 158,725 97,643	99.554 20,209,199
	Miscellaneous.	11,594 2,013 85,752 65	99.554
<u>.</u>	Fish.	391,309 4,136 150,016 70,320 58,960 151,825	826,566
nhatta	Eggs.	1,900 66,931 39 5,916 1,612 1,430 60 15 5,365 450 7 7 32 5 95	65,085
Borough of Manhattan	Groceries.	1,900 55,916 1,430 363,365	422,706
orough	Confectioner y.	9,970	10,170
B	Canned Goods.	3,790 14,918 13,499 13,499 55 75	32,215
	Vegetables.	258,540 7,315 75 6,379,504 240,765 24,280 592,400 6,900 4,590	7,514,359
	Fruit.	151,145 5.324 5.324 5.324 73,950 12,059 32,825	11,237,534
	.fstoT	1,166,793 269,129 219,753 17,847,255 384,215 136,913 703,390 161,857 186,707	21,075,012
	Miscellaneous.	11,794 1 3,986 28,286 86,152 17	102,316
	Fish.	393,384 8,418 150,701 70,320 59,095 2,400 151,825	836,358
بر	Eggs.	70,270 2,019 60 450 32 3,132	76,028
New York	Groceries.	2,050 1,32,511 1,430 363,365	199.451
Ż	Confectionery.	11,035	11,310
	Canned Goods.	3,790 32,102 432 13,499 75 75	50,683
	Vegetables.	437,170 43,085 43,085 6,402,352 50,315 51,810 662,000 6,500	7,969,552
	Fruit.	248,260 35,979 39,342 10,910,942 75,900 25,844 38,915	11,530,314 7,969,552 50,683 11,310 499,451 76,028 836,358 102,316 21,075,012 11,237,534 7,514,369 32,215 10,170 422,706 65,085 826,566
	,	Commission houses Ketai stores Licensed venders Vessels and wharves Kailroad depots Stands Markets Tee houses	Total

Food Inspection.

Pounds of Fruit, Fish and Other Foods Condemned and Destroyed-Continued.

Borough of The Bronx.	Miscellaneous. Total. Vegetables. Confectionery. Confectionery. Fish. Piscellaneous.	20 179,395 11,055 87,070 6,890 45 1,069 125 7,339 575 1106,189 100 57,507 111,714 30 5.215 6,889 45 1,069 125 31 100,189 100 57,505 20,000 3,330 400 65,750 65,150 66,150 66,150 20,553 4,555 7,045 7,045 7,895 7,895 7,593 20 87,979 4/5 4/5 10,290 45 1,219 10,396 2,673 1,593 20,432 20,471 20,873 45 1,219 10,396 2,673 1,593
Borough of Brooklyn.	Groceries. Eggs.	70,026 82 4,099 450 450 75 75 75 75 75 75 75 75 75 75 75 75 75
Borough	Confectionery.	284 9995
	/egetables.	91,560 27,300 9 20,220 20,220 20,485 1,800 20,485 1,200 25,350 190,763
	Fruit.	86,060 27,335 37,005 41,800 1,550 9,025 450 62,070
		Commission houses Retail stores Licensed venders Resels and wharves. Railroad depots Stands Id markets Ice houses Pushcarts

Food Inspection.

'snoə

Borough of Richmond. Pounds of Fruit, Fish and Other Foods Condenned and Destroyed-Continued. onery. spoog. snoəue Borough of Queens. .səiri ctionery. ed Goods. tables.

Total.	300	9,065	130	150	,
nslləseila	150		:::	25	
Fish	50	175	: : :	250	
Eggs	200	:::	:::	200	
Grocerie	4,700		: : :	4,700	
Confecti				: 00	
Canned	929		: : :	059	
l'egetal	3.200			10,415	
Fruit.	2,150	: : : : : :		4,075	
Total.			40 : :	550	
Siste	:::		:::		
Eish.			9 : :	9	
Eggs.	:::			:	
Groces	2000			200	
Сопе				:	
Сапп				:	
9g9'/	¥:::	: : :		73	
1 '		: 52:	: :	215	
Commission houses	Licensed venders Vessels and wharves	Stands. Markets. Ce houses	Pushcarts	TOTAL	
.//					

Actions on Complaints.

	New	New York.	Manh	Manhattan.	Broc	Brooklyn.	The 1	The Bronx.	Oue	Queens.	Rich	Richmond.
	Meat.	Food.		Food.	Meat.	Meat. Food. Meat. Food.		Meat. Food.	Meat.	Meat. Food.	Meat.	Food
Complaints pending December 31, 1908	323	216 566	244	168	57 91	16		322	19		<u> </u>	
Total complaints	800	782	573	695	148	18	9	69	73			
Duplicates No cause for action. Complaints referred to other divisions. Complaints returned for notice or order. Complaints pending at end of year.	304 446 446 3	191	227 329 14 3	147 520 28	1 54 63 30	123	:	32 30 32	53		:::::	
Total complaints disposed of	800	782	573	695	148	201	9	69	73	:	:	:

Summary of Food Samples Obtained and Results of Analyses.

			Samples	Samples Procured.				NuN	nber Foun	Number Found Adulterated.	ted.	
	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.	New Vork.
	-											
Apple Juice	-	:	:	:	:	-	:	:	:	:	:	
Asparagus	-	:	:	:	:	ı			: :			: :
Bacon	:	-	:	:	:	-	:	:			: :	
Baking Powder	-	:	:	:	:	-						: :
Beer.	:			:	:	-	: :		: :			: :
Beer (Root)	"	:	:	:	2	v	:	:		: :		: :
Beets.	·:	:	:	:	-	-	: :		: :		. :	: :
Bologna	∞	_	:	2	:	=	:	:		:		: :
Bologna (Wurst)	_	:	:	2	:	ξ.	:	:	:	:	:	:
Brandy	2	;	:	:	:	7		:	:	:		
Bread	64	2	:	:	:	7	:	:	:			: :
lautter	4	4	6	:	:	17	:	:	:			
Butter (Apple)	:	-	:	:	_	. 2	:	:	:			: :
Butter (Peanut)	-	:	:	:	:	1	:	:	:			: :
Cake (Mixture)	-	:	:		:	-	: :					: :
Cand y		238	89		2,4	502	10	33	9			×
Canned Goods		800	12			247		3:		:		0
Carbolic Acid			:		. :	30						
Catsup	14	·:			12	26					:	: -
Celery Comp	:	-				1	:	:		: :		
Cheese	-	3	:	:	:	7	:	:	: :			: :
Chili Sauce	2	:	:	:	-	٠,	:			:		: :
Chocolate (Milk)	-	:	:	:	:	-	:	:	:	:		
Chocolate (Paste)	:	_	:	:	:	-	:	:	:	:		:
Chop suey	-	:	:	:	:	-	:		:	:	:	:
Claer	7	:	:	:	:	2	:	:	:	:	:	:
Cinnamon	:	-	:	:	:	_	:-	:	:	:	:	:
Coating		:	:	:	:	-	:	:	:	:	:	:
Cocaime	'n	:	:	:	:	3	:	:	:	:		:
Cocoa	2	2	:	:	:	7	:	:	:	:	:	:
Cocoa (Beans)	100	:	:	:	:	_	:	:	:	:	:	:
Coffee	2	:	:	:	-	3	:	:	:	:	:	:
Coloring		:	:	:	:	-	:	:	:	:	:	:
Condiments	Q ,	:	:	:	:	46	:	:	:	:	:	:
Cream	-	:	:	:	:	I	:	:	:	:	:	:
Cream (Ice)	-	:	:	:	:		:	:	:	:	:	:
	_					_						

			Samples Procured.	Procured.				Num	nber Foun	Number Found Adulterated.	ted.	
	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.	New Vork.
	H 1	* 1.	: :	: -	: 5	18.	: 1	٠ !	: -	:	• .	. ;
L. C.	22	22	65	-	13	105	,	7.	-	:	:	25
	:	N +	:	:	:	7 -	:	:	:	:	:	:
Fore (Albumon)	: "	-	:	:	;	- 0	:	:	:	:		
Eggs (Anguinell)	۷ -	: ;	: :	: :	: :	٧ ~	: :		: :	: :	: :	
Eggs (Liquid)	60	: :	:	:	: :	"	: :	:	:	:	: :	
Eggs (Mixture)) ~		:	:	:) 	:	:	:	:	:	
Extracts	38	11	6	:	-1	9	S	:	:	:		10
Flavor	:0	:	co	:	:	s)	:	:		:	:	
Flour	o	:	:	:	:	×	S	:	:	:		S
Llour (Gluten)	15	::	:`	:	:	12	:	:	:	:	:	
Frankfurter	23	22	0	7	:	ic. (:	:	: ,		:	:
Gelatine	61	:	:	:	:	0	:		:	:		:
Gertrank	м .	:	:	:	:		:	:	:	:	:	:
GB		:	:	:	:		:	:	:	:	:	:
Calossine	- (: 1	:	:	:	1 42	: '	:	:		:	: '
Charle Tuice	ָר ב <u>י</u>	- (:0	:	: 1	96	N	:	:		:	7
Grouding	-	٧		:	0	Q -	:	:	:			:
Honey	10	. ~	9	: :	000	26	: :					: :
Horse Radish.	r na		:	:	2	າທ	: :			: :		: :
Icing	2	:	:	:	1	03	:		:	:	:	
Jam	3	:	1-	:	0	20			:	:		
jelly	09	7	m.	:	2.5	25	:	:	:	:	:	
Lard	35	: "	7	:	:	42	:	:	:	:	:	:
Lemon (Inica)	2	٧	:	:	: •	71	:	:	:	:	:	:
Limo (Inica)		:	•	:	•			:	:	:	:	:
Macaroni (L'ornole)	- ^	:	:	:	:		:	:	:	:	:	:
Manaline		:	:	:	:		:		:			:
Marmalado	- 0	:	:	:	: "		:	:	:	:	:	:
Most	1 2		-	:	1	+ °C	:	:				•
Meat (Chopped).	27.1	82	17	12	: :	428	104	: "	· ur	. 8	: :	17.1
Meat (Corned Beef)	: :	:		:	1	-	:	:	•	:	:	:
Meat (Hamburger Steak)	12	:	-	:	:	13	:	:	:	:	:	:
Milk (Butter)	I,	:	:	• (: 0		:	:	:	:	:	:
Milk (Condensed)	09	9	6	×	20	IOI	:	:	:	:	:	:
Milk (Evaporated)	15	:	:	:	:	15	:	:	:	:	:	:

:	:	:	:	:		:	:	:		:		:		:						:		:	:			:	:					:	:		220
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:		:	:	:	:	:	:			:	:				- -
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:	:	:	:	:	:	:	:	:	:	:	:	1	:	:	:	:	:	:	:	:	:			:	:	:	:	:	:	:	:	:	:	:	63
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:		:	:	:	:	:	:	:	:	:	:	:	:	143
55	-	-	25	· (1)	4	n	2	=	n	-	-	2	=	T		-	-	1	2	'n	7	2	S	=	F	80	18	10	22	15	13	11	9	I	2,355
:	:	:	- 51	:	2	:	:	:	C1	-	:		:	:	:	:	:	:	=	:	:	:	:	:	:	I	13	:	च	×	4	:	:	:	270
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4	:	:	33
:	:	:	-	:	-	:	-	:	:	:	:	:	:	:	:	:	:	:	-	:	:	:	:	:	:	:	7	:	:	:	:	:	2	:	270
~	:	:	9	~	- 1	:	:	:	:	:	-	:	:	:	:	-	:	:	:	3	7	2	2	:	-	:	:	:	2	2	-	-	:	:	524
-	-	-	7	-:		'n	-	I	ı	:	:	3	-	-	-	:	-	-	:	2	:	:	ς,	-	:	-	-	01	91	LC:	~ ~	9	4	I	1,258
Moxie	Muchrooms		Olive Oil	Peaches	Pepper	Pickles	0	Powder (White)	Preservaline	Preserves	es (Straw	Relish	Relish (India)	Sap	Sauce	Sauce (English)	Sauce (Courtenay)				Sausage (Meat)	Shortening	Soda Water	Spices (Sour)	Sugar	Sugar (Maple)	Syrups	Syrups (Astd.)	Syrups (Fruit)	Syrups (Maple)	Vinegar	Whiskey	Wine	Veast	Total

Criminal Actions.

	New York.	York.	Manh	Manhattan.	Brool	Brooklyn.	The Bronx.	Bronx.	Queens.	ens.	Richn	Richmond.
	Meat.	Food.	Meat.	Food.	Meat.	Food.	Meat. Food. Meat.	Food.		Meat. Food.	Meat.	Food.
Cases pending at beginning of year	15 209	*14 268	166	*12 190	S 25	63	: ,	13	4 11	,::	ω:	: 8
Total	224	282	991	202	33	65	7	Ϊ́Ι	15	:	2	5
Convicted and sent to prison Discharged Number fined Sentence suspended Cases pending at end of year	20 164 17 22	16 37 172 9 48	1 12 130 9 9	13 148 148 12	.5 20 6:	10 10 16 6 31	::"	:: ~ = 20	: 11 7 7 7 7	:::::	:::::::	int : :
Total.	†22	282	166	202	33	65	7	13	15	:	0	2
Amount of fines imposed	\$2,808.50	\$2,894.25	\$1,753.50	\$2,063.25	\$520.00	\$690.00	\$1.40.00	\$131.00	\$395.00	:	:	\$0.10

*Three cases disposed of in August, 1908, were not recorded until first quarter of 1909. Disposition: 2 fined, 1 sentence suspended; amount of fines \$10.00.

DIVISION OF CHILD HYGIENE.

The end of the year 1909 marks the completion of the first full year's work performed by the Division of Child Hygiene. Since its establishment on August 26, 1908, its scope has been gradually broadened until on March 1, 1909, it completely included those functions of the Department of Health which relate to the preservation of health and the prevention of disease among children from birth to puberty, with the exception of the actual control of the exanthemata in homes and hospitals.

The division consists of a chief, who is responsible to the Sanitary Superintendent. The staff of the division also includes 160 medical inspectors, 142 nurses, and 17 clerks. The nursing staff is directed by a superintendent of nurses, who is responsible to the chief of the division. In each borough one or more, supervising nurses are in charge of

the work of the nurses detailed to that borough.

The functions of the division are educational and administrative. Its educational functions consist, in educating parents, particularly mothers, in the care of infants and children, and in the need of timely prevention and treatment of physical defects.

Its administrative functions include:

1. The enforcement of such laws of the State, such provisions of the Sanitary Code, and such other regulations of the Board of Health as bear directly on the protection of the health of the children of the community.

2. The supervision and regulation of the practice of midwives in

the City of New York.

3. The regulation of the conditions under which children are boarded out, by issuing permits, and of the supervision of women engaged in the care of children.

4. The supervision of institutions harboring children, and of day

nurseries.

5. The issuance of employment certificates to children who have complied with the provisions of the Child Labor Law, for the purpose of preventing the employment in factories or in mercantile establishments of children who have not reached the age of fourteen, or who are physically unfit to be so employed.

6. The medical inspection of school children to detect the presence of contagious diseases, and the examination of the children to determine

the presence of physical defects.

SUPERVISION OF MIDWIVES.

There are at present 3,131 midwives holding permits to practice midwifery. These permits are issued by the Department of Health after written application has been made by the midwives, and the

Child Hygiene.

rules and regulations of the department pertaining thereto have been complied with.

APPLICATION TO PRACTICE MIDWIFERY.

To the Board of Health of the Department of Health of the City of New York:

The undersigned hereby applies for a permit to practice midwifery in the City of New York, and makes the following statement in accordance with the law, rules and regulations of the Board of Health of the Department of Health of the City of New York:

(This application must be made in the handwriting of the applicant. Write legibly and with ink. Vouchers on other side must be filled by two registered physicians and one layman, preferably a clergyman, priest or rabbi.)

Child Hygiene.

attended
Address
2. I have known. for
Address
3. I have known
Address
Investigation by the Department of Health. Name
Address
Character of house. Number of rooms. Condition of home.
Personal habits
Report from District Attorney.
Report from County Medical Society.
Report from Coroner.
Accompanying this the midwife is given a copy of the department's regulations for midwives.

RULES FOR MIDWIVES.

- 1. No person other than a duly authorized physician shall engage in the practice of midwifery without a permit from the Board of Health. No permit will be granted unless an application, made on the printed blank form issued by the Board, has been filed with the Department of Health.
- 2. This application must be certified to by two regularly licensed and registered physicians, and by one reputable and responsible layman (preferably a clergyman, priest or rabbi).
- 3. The applicant must be twenty-one years of age or over, and of moral character. She must be able to read and write. She must be

clean and constantly show evidences, in general appearance, of habits of cleanliness. She must have attended, under the instruction of a licensed and registered physician, at least twenty cases of labor and have had the care of at least twenty mothers and new-born infants during the lying-in period (10 days).

4. The Board of Health may issue a permit to practice midwifery, within thirty days after an application for such permit has been filed, provided the applicant is considered competent to care for women in

normal labor.

5. This permit will allow the holder to act as a midwife for one year from the date of issuance and must be renewed at the end of that time. The Board of Health may at any time revoke this permit.

6. No permit will be granted to an applicant who has been convicted of criminal practice, and any such conviction will be sufficient cause

for the revocation of a permit.

7. Before a permit is given to an applicant she must appear in person at the Department of Health (Fifty-sixth street and Sixth avenue) and register her name and address. She will also receive and receipt for a copy of the rules and regulations governing the practice of midwifery which have been adopted by the Board of Health. These rules and regulations must be explicitly followed.

8. Any midwife changing her name or address must at once report

such changes to the Department of Health.

- 9. A midwife can attend only cases of labor in which there is an uncomplicated vertex (head) presentation. In all other cases a physician must be called.
- 10. The home of a midwife, her equipment, record of cases and registry of births shall at all times be open to inspection by the authorized officers, inspectors and agents of the Department of Health.
- 11. If during pregnancy any of the following conditions develop, or are suspected, a midwife shall not engage to attend the case, but must refer it to a physician:
 - a. A contracted pelvis and other deformity that will interfere with labor.

b. Bleeding from the uterus.

- c. Swelling of the face and hands.
- d. Excessive vomiting.
- e. Persistent headache.
- f. Dimness of vision.
- g. Convulsions.
- 12. If, during labor, any of the following conditions exist or develop, a physician must be summoned:
 - a. Presenting part is other than an uncomplicated vertex (head).
 - b. Convulsions.
 - c. Excessive bleeding.
 - d. Prolapse of the cord.
 - e. A swelling or tumor that obstructs the birth of the child.
 - f. Signs of exhaustion or collapse.

13. Under no circumstances shall a midwife introduce her hand into the vagina or uterus to remove either the placenta or membranes. If, after an hour from the birth of the child (the mother being in otherwise good condition), the afterbirth (placenta and membranes) are not expelled or cannot be expressed by manipulation of the uterus through the abdominal walls, a physician must be called to extract them.

14. If, after the birth of the child, the mother develops convulsions or has excessive bleeding or has been lacerated, a physician must be

called in attendance.

- 15. In her attendance on a case of labor, a midwife must be scrupulously clean in every way. She should wear a clean dress of washable material and over this a clean washable apron. (Note: The sleeves of the dress should be such that they can be rolled up above the elbow.)
 - 16. She shall take to each case the following equipment:

Nail brush.

Wooden or bone nail cleaner.

Jar of green or castile soap.

Tube of vaseline.

Clinical thermometer.

Agate or glass douche reservoir.

Two rounded vaginal douche nozzles.

Two rectal nozzles, large and small.

One soft rubber catheter.

Blunt seissors for cutting cord.

Either: Lysol, carbolic acid, bichlor, of mercury tablets.

Boric acid powder.

One per cent. solution of nitrate of silver.

Medicine dropper.

Narrow tape or soft twine for tying cord.

Absorbent cotton (preferably in one-quarter pound packages).

No other instruments are to be used, owned or possessed by a midwife.

17. This equipment should be carried either in a metal case that can be easily boiled or in a bag fitted with an inner lining of washable

material that can be easily removed and washed and boiled.

18. At every case before using the nail brush, nail cleaner, douche reservoir and tubing, vaginal nozzle, catheter, scissors and tape or twine, they must be boiled for five minutes; when the labor is terminated, the douche reservoir and tubing, vaginal nozzles, catheter, scissors, nail brush, nail cleaner must be washed with soap and boiled before replacing them in the bag or case.

19. Before examining a woman in labor the midwife must roll her dress sleeves above the elbow and scrub the hands and forearms in warm water with the nail brush and castile or green soap for at least five minutes; during this washing the skin under and around the nails

must be cleaned with the nail cleaner.

20. The woman's external genitals, skin over the lower part of the abdomen and the inner side of the thighs must then be washed with

soap and water and afterward sponged with absorbent cotton soaked in either:

Sol. of lysol two per cent. Sol. of carbolic two per cent.

Sol. of bichloride of mercury 1-5,000.

Note: To make a 2 per cent. solution, take 3 teaspoonfuls of either lysol or carbolic acid and add 1 pint of boiling water. Directions for bichloride solution are found on bottle containing tablets.

A pad of cotton wet with the solution should be left over the vulva.

No vaginal douche shall be given before labor.

- 21. The hands of the midwife must then be scrubbed with the nail brush for five minutes in either the lysol, carbolic or bichloride of mercury solution before making an internal examination. Before every subsequent internal examination or before passing the catheter, the midwife must wash and scrub her hands with soap and warm water and afterward in the antiseptic solution and the woman's external genitals must be washed with the antiseptic solution. As few vaginal examinations as possible should be made.
- 22. As soon as the child is born, and if possible before the expulsion of the afterbirth, the eyes should be washed with boric acid solution. The eyelids must then be separated and one or two drops of a (1 per cent.) one per cent. solution of silver nitrate dropped in the eye and the lids brought together. The silver nitrate solution will be furnished by Department of Health.

23. Should the child not breathe after birth the fact must be reported at once by telephone or messenger to the Department of Health, when an inspector will visit the case and issue a still-birth certificate.

- 24. In caring for a woman after labor and throughout the lying-in period the midwife must exercise the same care in washing her hands when dressing or catheterizing the patient as is called for in Rule No. 21.
- 25. If, during the lying-in period, any of the following conditions develop, a physician must be summoned:

a. Convulsions.

b. Excessive bleeding.

c. Foul smelling discharge (lochia).

d. Persistent rise of temperature to 101 degrees F. for 24 hours.

e. Swelling and redness of the breasts.

f. Severe chill (rigor) with rise of temperature.

g. Inability to nurse the child.

- 26. Every child should be thoroughly examined after birth, and if the child has or develops any of the following conditions a physician must be summoned:
 - a. Deformities or malformations or injuries.

b. Inability to suckle or nurse.

c. Inflammation around or discharge from the navel.

d. Swelling and redness of the eyelids with a discharge of matter from the eyes.

e. Bleeding from the mouth, navel or bowels.

27. Within ten days of the birth of a child a midwife must send a report of the birth to the Department of Health on one of the blanks issued for that purpose. She must also keep on the stubs of her birth certificate book a record of every birth she attends.

28. In every case after labor the temperature must be taken morning and night for five days (preferably by the mouth). If, during this time or at any later period of the lying-in the temperature reaches or exceeds 101 degrees F., and continues at this for twenty-four hours, the case must be reported to the Department of Health. The midwife must not go from such a case to other cases that are free from fever or to a woman in labor, until she has made an entire change of clothing, thoroughly washed her arms, hands, face and hair with soap and warm water, and washed and boiled her instruments.

When the rules and regulations of the department have been complied with a permit is issued.

Constant and repeated inspections are made to determine infractions of the regulations. Each birth certificate returned by a midwife is compared with this record, and a daily list of all unregistered midwives has been sent to this division.

Women applying for permits to wet-nurse are required to state the name and address of the midwife who attended them in their last confinement, and the nurses of this division report all unregistered cases observed. In this way information regarding hundreds of midwives hitherto unregistered has been obtained.

In connection with the nurses' visits to homes it was deemed advisable to include a comprehensive plan of investigation and control of the practice of midwifery. The name and address of each baby whose birth was reported by a midwife during the period from April 15 to September 1, with the name and address of the midwife, was noted on a special history card. Each case was visited and a careful inquiry was made into all the conditions present at the time of confinement, such as abnormal delivery, lack of asepsis, septicæmia or other diseases of the mother. The presence of any symptoms of ophthalmia neonatorum was noted, and a full report of the case made to the chief of the division. Ophthalmologists were sent to all reported cases of ophthalmia, smears were prepared to confirm the clinical diagnosis, and investigations made as to the use of silver nitrate solution in the eyes at the time of birth. During this period the 18,165 births reported by midwives were visited, and 22 cases of ophthalmia neonatorum were discovered. The enforced use of a 1 per cent. solution of silver nitrate was the result of this inquiry. This solution, in one dram vials, is dispensed free of charge by the department, and its use for prophylactic purposes is obligatory.

Every reported death of a puerperal septicæmia is investigated by this division. Of 84 deaths reported during the year, it was found that 22 occurred in women attended by midwives, 60 in women attended by physicians; two women had no attendants.

The permits issued to midwives expire in one year from the time of issue. They are renewed only upon a new application and reinves-

tigation. This work at present is only in the early stages of its development. Since March first, 9,810 inspections and 2,883 reinspections of midwives have been made. It has been very difficult to obtain legal evidence in cases of malpractice, but the moral effect of constant supervision has been of great value as a deterrent influence. During the year 36 applications have been denied, and 33 revoked. Many midwives have been summoned to appear before the Chief of the Division for slight infractions of the rules, and warned that a repetition of the offense would lead to the revocation of their permits. .122,976 births were reported in the city during the year 1909. When one considers that of this number 49,615 were reported by midwives, the importance of the proper safeguarding of this practice may be readily appreciated. To make it still more effective, the question of a required preliminary education in midwives must be met with in the near future.

THE EDUCATION OF MOTHERS IN THE CARE OF BABIES.

On invitation of the Commissioner of Health, a second annual convention of the care of babies was held at the Department of Health on April 5, 1909. Sixty-eight agencies, whose work related to child care, were represented. The co-operation of various institutions was more effective than ever before, and during the summer fourteen (14) classes, asigned from the Association for Improving the Condition of the Poor, the Delineator, the New York Milk Committee, St. George's Deaconess' Home, and Greenwich House Settlement, were detailed to different districts of the city, under the supervision of this division. In order to render the work more purely preventive, it was instituted on April 15, two and half months earlier than in any previous year. This year, for the first time, with the co-operation of the City Superintendent of Schools and the authorities of the parochial and industrial schools, lectures were given by the inspectors of this division, in each school, on the subject of the care of babies.

Realizing that many babies were often left entirely in the care of the older children of the family, it was judged proper to formulate a method by which these so-called "Little Mothers" might receive adequate and practical instruction in this subject. All girls over 12 years of age in the schools were required to attend the lectures, which were given during the months of May and June. The points covered were those relating to elementary infant hygiene and feeding. These subjects were brought out in clear and simple language. The interest and eagerness for information aroused in the girls who attended the lectures was one of the most encouraging features of the year's campaign.

In several schools, under the leadership of the inspector and nurses, there were formed clubs of girls, known as "Little Mothers' League," which contributed much toward maintaining the interest for their work. These leagues have regular meetings during the summer. Each child is given a badge and is made to understand that its possession carries with it the responsibility of aiding in the saving of babies' lives. Considering that these children are often forced to assume the care of babies, at an age when they have no adequate conception of proper

Child Hygiene.

infant care, it can readily be seen that their education in this direction is an essential feature in the reduction of infant mortality.

CLINICS

Fifty-four (54) educational centers were established throughout the city by the division of child hygiene. An inspector and nurse were assigned to each center, and clinics for babies and mothers were held once or twice weekly. In this connection the co-operation of the agencies of the conference was of much value, for they generally offered the use of their offices and stations for this purpose. Altogether 357 clinics were held.

An inspector was assigned to duty on each recreation pier of the city, for the purpose of offering advice to mothers and treating sick babies. Eight hundred and fifty-six (856) sick babies were treated at the piers. Each center was provided with a full set of utensils, to show the proper method of milk preparation and albumen and barley water; and a scale for weighing the babies. It has been the aim of this division to make these clinics as practically helpful as possible, therefore no didactic lectures were given during 1909, but individual advice was given to each mother.

Home Visits to Mothers.

Daily nurses received cards filled out with the name and address of an infant whose birth had been recorded by a midwife on the preceding day. The nurses were instructed to visit not only the newly born, but to canvass each house visited, and instruct every mother regarding the necessary care of an infant under two years of age.

Actual demonstration of methods were made whenever necessary, and revisits in all instances where it was evident that the instructions given were not thoroughly understood or carelessly disregarded.

Posters and pamphlets regarding care of babies were given to each mother visited. These were compiled under direction of the conference, and were also distributed under other agencies interested in this work.

During the visits as practiced by the nurses for the past years, detailed instructions and suggestions relative to the hygiene and sanitation of the home were given in each instance, and circulars regarding the care of the head and scalp were distributed; particular care being given in advising and demonstrating the proper preservation of the milk used in infant feeding, and printed slips containing directions for proper modifications of milk for indicated ages were left with the mother whenever there was any doubt as to the proper methods of performing same.

During the period covered by the work of this subdivision (April 15 to September 1), the nurses visited 57,059 mothers, and made 50,343 revisits. As it has been the effort of the Division to make this work purely educational and preventive, sick babies were cared for only in cases of emergency. Owing to the co-operation of other agencies of this city, cases of sickness or destitution were referred to them for aid or relief. Infants actually ill were cared for by inspectors of this

division, the nurses in such instances working under their direction; 836 sick babies were treated, and 1,924 visits made to them; 4,896 were referred to other agencies for care or aid.

The generosity of one of our citizens, who refused to allow his name to be used, enabled this division to freely distribute in all needy instances, books each containing thirty coupons, each coupon entitling the person presenting it at any wagon of the American Ice Company, to ten pounds of ice. The use of this ice in the preservation of milk in the homes of needy and deserving people, was of inestimable benefit.

The record of the kind of feeding used in the cases visited is valuable in indicating the need of more continuous observation; 35,591 infants were breast fed; 1,662 cases used pasteurized milk; milk boiled at home, 2,306; condensed milk, 1,124; raw milk, 664; mixed feeding, that is, breast and bottle, 6,958; proprietary foods, 669, and bottle fed, 8,805.

It is the custom of most mothers to nurse their infants during the first few weeks of life. That this beneficient function is not continued is due to either ignorance, neglect or economic conditions, which makes it necessary for the mother to take her place as a wage earner at as early a date after confinement as possible. Continued oversight and supervision could practically eliminate the first two factors. The third is more difficult of adjustment, but even that might be remedied to a great extent, if a proper appreciation of the vital importance of breast feeding at this critical period be instilled into the mother's mind.

The death of infants from diarrhoeal diseases has been, and is, one of the greatest contributing causes to the high general mortality rate of this city. Even with the decline in the death rate of 60 per cent. in the past twenty years, from the gastro intestinal diseases in children under two years of age, the rate still remains abnormally high.

Nursery, Midwifery and Institutional Work.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Midwives— Inspections Reinspections	981	666 1,362	215 1,272	73 88	27 135	··· 26
Foundlings Inspections Reinspections	3,586 12,899	1,709 4,327	1,110 6,290	473 1,407	288 797	6 78
Institutions Inspections Reinspections	10 678	300	8 263	49	1 54	 I2
Day Nurseries Inspections Reinspections	19 710	14 535	5 155	4		14
Still Birth— Investigations Special Inspection	428 500	295 500	98	28	6	1

Deaths from Diarrhocal Diseases of Infants Under Two Years of Age, With Rates per 1,000 Living at Those Ages.

VEAR	Deaths, Diarrhæal Diseases Under Two Years.	Rate Per 1,000 Under Two Years.	Lives Saved on Basis of 1902 Death Rate.	Lives Lost on Basis of 1902 Death Rate.
1902	4,938 4,440 5,647 5,877	28.2 24.3 30.3 30.5	705	39.2 44.2
1906 1907 1908 1909	5,783 5,346 5,977 5,126	29.1 31.0 28.3 23.5	1,025	178 57+ 21

It has been the habit of previous years to confine the work of combating infant mortality to the summer months. By the time the work was fully organized each year, the high summer mortality from diarrhoeal diseases had already commenced. The experiment of beginning the work before the period when the disease is generally manifested was instituted for the first time this year. The whole effort has been to prevent disease among infants in this city, rather than to treat cases of illness after disease has once made itself manifest. During the months of June, July, August and September of this year 3,383 babies under two years of age died from diarrhoeal diseases. During the same period of 1908, 4,180 infants died from the same cause, which indicates a direct reduction of 20 per cent., or an actual saving of 707 lives. That work of the Division, together with that of the allied agencies, appreciably influenced this result may be justly claimed. The meteorological conditions existing during the summer of 1909, in comparison with those existing during previous summers, do not bear out the time-honored idea that heat and humidity play any considerable part in the prevalence of these diseases. Their relation at best is indirect in its influence.

The solution of the problem of this phase of infant mortality is undoubtedly to be found in the education of the mothers. In order that this may be effective, it has been found that imperative, inclusive and continuous effort on the part of the Department is necessary.

As in past years, children sent to the country, or given other short vacation trips by various charitable organizations, were examined by inspectors of this Division. During the year 32.535 children were so examined, for the purpose of discovering cases of contagious diseases.

BOARDING OF CHILDREN.

By localizing, on maps, the greatest centres of infant mortality in New York, the theory that 50 per cent. of foundling babies harbored in institutions die during their first year is graphically illustrated. The work of the past year goes to show that in institutions, notwithstanding the most enlightened methods and care which may be exercised, the mortality rate is excessive and out of all proportion to that in home

Child Hygiene.

Summer Corps—General Work.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
First visits to first babies	13,396 43,663	7,963 25,089	3,514 13,374	1,254 3,278	341 1,156	324 766
Total first visits	57,059	33,052	16,888	4,532	1,497	1,090
Kept under observation	43,598 13,461	29,746 3,3 0 6	9,729 7,159	2,371 2,161	1,284	468 622
Total first visits	57,059	33,052	16,888	4,532	1,497	1,090
Not Found	7,245 43,098	4,729 24,985	1,799	531 3,378	134 712	52 1,149
Total visits	107,402	62,766	31,561	8,441	2,343	2,291
Cases terminated previously kept under observation	15,297	6,675 478	6,778	1,075	428 16	341
Sick babies	924 ** 283 439 184 18	64 278	137 96 19	55 51 25	10 2	17 12 7
MidwivesOphthalmia Neonatorum Attended at birth by midwife Cases referred to other agencies for t	17	130	8	1 118	3 1	1
aid or treatment)	4,896	3,974	695	110	99	10
Methods of feeding found— Milk: Breast	35,591 1,662 2,306 1,124 664 6,958 5,866 5,774 669 8,085 836	20,017 1,139 1,506 405 342 3,620 3,228 3,255 298 5,725 317 621	11,215 331 534 527 231 2,337 1,558 1,579 267 1,446 289 912	2,633 166 197 93 67 808 906 781 64 504 204 339	1,074 15 47 63 8 125 98 94 18 147 15	652 11 22 36 16 68 76 65 22 263 11
Visits to sick babies	1,924	36	28	2	2	1
Cases of ophthalmia neonatorum re- ported by postal and investigated. Attended at birth by midwife Attended at birth by physician.	7 5	7 3	2			
Number examined for other charit- able organizations	32,535 84 22 60	28,307 46 14 32	4,226 33 7 25	3 I 2	2	
No attendance	947	947	í		I	
Laboratory. Number of lecturers. Number of lecture centres. Lectures delivered. For New York milk committee. For charity organization society. At recreation centres.	60 54 357 154 83 82	38 36 195 32 75 56 32	20 17 154 122	2 1 8 8		
For other agencies. Visits to recreation piers by inspectors. Visits to recreation piers by nurses Sick babies treated at piers. Visits to educational alliance. Visits to milk stations.	38	32 569 856 83 47	6 3 47 463		2	
Visits to all day camp	38 36 5	36 5		38		

localities. For this reason, the placing of infants in homes, when properly safeguarded, cannot but be considered a favorable custom.

For many years it has been the rule of the Department to issue a permit to women to board children, only after a thorough investigation had been made of their personal habits and home surroundings. It has been possible during the past year to have the primary investigation made by specially detailed inspectors, and reinspection of the home, nurse, and baby made at frequent intervals. There are at present 2,500 permits of this nature in force, 158 applications having been denied during the year. Before a permit is recommended the applicant is visited, and inquiry is made as to the following:

Date of inspection
Nature of premises
Location of apartment
Nature of apartment
Nature of apartment
Bedroom
Bedroomcubic feet
Number of adults in family
Number of children in family
Number of boarders(Adults)
Number of boarders(Children)
Infactions discount discount
Infectious diseases present
Sanitary conditions
Condition of premises
Condition of rooms
LightVentilation
Personal appearance of applicant
Condition of shild
Condition of child
Wet or dry nurse

When the application is for wet nursing, inquiry is made as to the date of birth of the applicant's last child. This division has limited the period of lactation to twelve months, beyond which it is not justifiable to issue a permit for a woman to wet nurse. Permits issued for this purpose are in force until revoked. During the year 3.586 applicants for permits have been inspected, and 12,899 inspections made. Owing to frequent reinspections, the conditions surrounding this practice have greatly improved.

Inspection of Institutions.

This work was placed under the Division of Child Hygiene on March 1, 1909. The institutions concerned in the care of dependent children are under the supervision of a State Board of Health, by virtue of the provisions of sections 213, 214 and 215 of the Public Health Laws (Laws of 1893, chapter 661, as amended by section 2, chapter 667 of the Laws of 1900).

This law requires that each institution for receiving or caring for orphans, vagrants, destitute or delinquent children shall have attached thereto a regular attending physician, who shall report to the Local

Board of Health once a month in such form as may be approved by the State Board of Health, upon the conditions of the institution and

its inmates.

This report should include (1) a statement as to the conditions of the plumbing and lighting of the sinks, water closets, privies and urinals; (2) a statement as to the condition of the dormitories, their air space, as well as regarding the space assigned between the beds used by the inmates; (3) as to the physical condition of the inmates, the presence of any contagious disease, especial attention being given to the eyes and skin, and the presence of any non-contagious illness. The physician is required to state under each heading the number of new cases at the time his report is submitted, the number previously reported, and the total number for each month; (4) a report is required as to the condition of the food, clothing and general cleanliness of the inmates. Also as to whether the officers of the institution have provided proper and sufficient nurses for thorough attention of the inmates; also as to whether there are sufficient orderlies and other attendants of proper capacity to attend the children, and to secure for them the proper care and attention; (5) such recommendations for the improvement thereof as he may deem proper.

The law is explicit as to the ventilation of dormitories in these institutions. The beds in each dormitory must be separated by a passage of not less than two feet in width, and so arranged that under each air shall freely circulate. In every dormitory 600 cubic feet of air space shall be provided and allowed for each bed or occupant, and no more beds or occupants shall be permitted than are thus provided for. A permit must be obtained from the Board of Health, specifying the number of beds allowed, and such permit shall be conspicuously posted in each dormitory. The physician of the institution shall immediately notify, in writing, the local Board of Health

of any violation of any provision of this law.

The monthly report of each institution in each borough is mailed to the borough office. It is thence forwarded for investigation and report to a medical inspector, who is required to inspect the institution, and sign the endorsement on the monthly report to the effect that the institution has complied with Sections 314, 315 and 316 of the Public Health Law. The Borough Chief signifies his approval and forwards the report to the Chief of the Division, who in turn forwards it to the Sanitary Superintendent.

Sixty-four institutions have been inspected during the year, with a total of 688 visits. The inspectors have paid particular attention to the welfare of the children, and numerous suggestions for their betterment in connection with a more liberal and varied dietary, improved sanitary surroundings and hygienic living conditions have met with

prompt acquiescence.

Supervision of Day Nurseries.

There are at present 72 day nurseries in the City, each conducted under a permit issued by this Department, and subject to a monthly inspection by this Division. The inspection covers:

(a) Cleanliness, ventilation, heating and lighting.

(b) Air space and seating capacity, and number of cubic feet per bed or crib, overcrowding.

(c) Sanitary conditions of boilers or baths.

(d) Provision for an isolation room.

(e) Provision for properly ventilated clothes rooms or lockers.
(f) Use of individual combs, or provisions for disinfection of combs before using.

(g) Cleanliness of blankets used on cribs, and the prohibition of

the use of mattresses.

Daily lists of the cases of contagious diseases occurring in the City are sent to each nursery, and pamphlets regarding the care of the teeth and scalp are provided by the Division for free distribution.

At present the children are inspected each morning by the matron

of the nursery to determine the presence of contagious diseases.

Owing to the specialized knowledge essential in dealing with the proper supervision of the nurseries, it has been found necessary to detail special inspectors for this work. During the past year orders have been issued and enforced that permits be displayed in prominent places.

Form of Report Used in Inspection of Day Nurseries.

Nature of premises
Location of Nursery
Sanitary condition
Light Ventilation
Toilets Bathrooms
Floor No. of Rooms
Kindergartencu. ft
Nurserycu. ft
Condition of Rooms
Cribs
Mattresses, blankets
Isolation room
Remarks
I would respectfully recommend that a permit to conduct a Day
Nursery at
be executed, depict

Medical Inspector.

MEDICAL INSPECTION AND EXAMINATION OF SCHOOL CHILDREN.

The work of the Division of Child Hygiene in the inspection and examination of school children has not undergone any radical change during the year 1909. Reorganization in the methods formerly used was established in the Fall of 1908, and the system which was then inaugurated has been continued through the past year in its major details. It has been the aim of the Division to improve and maintain the efficiency of its work with a view to securing the greatest practical results.

On January 1, 1909, owing to a marked reduction in the force of inspectors and nurses, it was necessary to entirely redistrict the City. In doing this, a plan was made of the City of New York, showing the location of schools and the number of school children in attendance at each one. This plan served as a permanent basis for the year. As far as practical each inspector and nurse has the same number of pupils under their supervision.

At the opening of the school term in September, 1909, the following notice, properly filled in, was handed to each principal by the inspector

assigned to the former's school.

"To the Principal of Public School No.

I enclose herewith a copy of the rules and regulations for Inspectors and Nurses assigned by the Department of Health to duty in the medical inspection and examination of school children.

The following Inspector and Nurse have been assigned to duty in

P. S. No.

Very truly yours, Chief of the Division of Child Hygiene."

In February, a system of lectures were delivered in the public schools to the principals and teachers by the inspectors on this Division. These lectures covered in detail the work of the Department in the schools, and particularly instructed the teachers in the early signs of contagious diseases, and in the gross symptoms of non-contagious physical defects.

Division of Child Hygiene-Medical Inspection of School Children.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Field of inspection— Total number of public schools Registration Public schools under inspection Registration Other schools under inspection Registration Total schools under inspection Total registration of schools under inspection Medical Inspectors on duty. Nurses on duty Number of physical examinations. Number found needing treatment Number reported treated	506 675,624 504 674,667 136 99.124 660 773,791 131 133 231,081 172,1(2	157 285,903 - 155 284,946 87 57,167 242 342,113 57 61 105,999 90,463 79,668	176 254,042 176 254,042 63 37,205 239 291,247 49 89,451 58,279 51,083	72,806 11 19,981 13,709 12,635	95 53,637 95 53,637 95 53,637 10 95 11,295 6,391 4,368	13,988 35 13,988 35 13,988 3 4.355 5.270 2,320
Cases Found and Excluded— General Contagious Diseases: Found and Excluded Eye and Skin Diseases: Found Excluded Contagious Diseases found in homes of absentees	5,44 1 286,591 5,455 2,902	2,514 144,304 1,939 1,309	2,369 100,436 2,843 1,060	335 16,407 418 154	21,219 231 84	98 4,225 24 295

Inspection for Contagious Diseases.

2,997,928 inspections of children have been made, with the result that 10,896 have been excluded from school attendance because of the presence of contagious disease.

The number of children under supervision includes:

674,667 in the public schools,

86,306 in the parochial schools,

12,818 in industrial and other free schools.

Exclusions have been made for the following causes:

Scarlet fever	125
Diphtheria	1,159
Measles	381
Chickenpox	1,517
Pertussis	434
Mumps	1,587
Tuberculosis	238
Contagious eye diseases	2,730
Contagious skin diseases	2,725

The treatment of contagious eye and skin diseases has been carried on with great thoroughness; 361,225 treatments have been made to 254,315 children, and a total of 1,093,706 instructions have been given to the treatment of pediculosis and trachoma. The former condition, while still unduly prevalent, occurs in a much milder form than in previous years. A circular relating to the treatment of this affection has been prepared and distributed; these circulars have been left at each home visited, while all mothers interviewed have been instructed in the prevention of contagious diseases.

Visits to Homes by Inspectors and Nurses—Cases of Contagious Diseases Found.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Visits— Inspectors Nurses.	182,227 167,939	97,376 82.937	65,766 6e,315	11,644	4,780 8,380	2,661 3,758
Diseases Found— Diphtheria. Scarlet fever Measles Chicken-pox Pertussis. Mumps Tuberculosis.	71 207 1,194 744 367 316 3	41 91 486 396 154 139	19 81 416 243 164 137	2 11 45 47 27 22	1 12 43 6 7 15	8 12 204 52 15 3
Total	2,902	. 1,309	1,060	154	84	295

Contagious Diseases Found in Schools by Inspectors and Nurses-Number and Disposition of Cases.

	Total.	5,441 2,514 335 2,369 1,25 98
	Tubercu-	1238
.ses.	Munips.	1,587 732 777 751 3
ious Disea	Whooping congh.	434 1884 164 157 10
General Contagious Diseases.	Сһіскеп-	1,517 737 737 96 597 51 36
Gener	Measles.	381 210 13 141 11
	Scarlet Fever.	22. 45. 46. 47. 47.
	Diphtheria.	1,159 474 474 595 188 288
		Cases Found in Schools and Excluded— New York Manhattan The Bronx Brooklym Oueens, Kichmond

			Comm	Communicable Diseases of Eye and Skin.	Diseases of	Eye and	Skin.	3		
	Ттасиотпа.	Con- junctivitis.	Kingworm,	Impetigo.	Scabies.	Farus.	Pediculosis.	Molluscum Conta- giosum.	Miscellane-	Total.
New York— Cases found in schools. Cases excluded from school Number of treatments and instructions.	45,615 1,392 310,465	49,807 1,338 159,012	7,788	12,516 250 63,620	4,506 319 23,697	499	151,585 2,014 783,241	154	14,621	286,591 5,455 1,474,919
Cases found in schools. Cases excluded from school. Cases excluded from school. Brooklyn.	31,037 658 205,755	16,681 617 50,362	4,872	4,424 25 30,399	2,012 67 14,476	227	76,483 534 387,668	103	8,465	144,304 1,939 764,602
Cases found in schools. Cases excluded from school. Wumber of treatments and instructions.	7,875 597 50,760	23.902 565 78,262	1,868 69 69 9,014	5,856	1,598 187 7,074	204	53,881 1,243 281,776	35	5,217	100,436 2,843 470,681
Cases found in schools. Cases excluded from school Number of treatments and instructions.	2,298	1,140 98 5,290	586 9 1,973	668 32 2,951	162 36 1,122	26 1 136	11,198		324	16,407
Cases found in schools Cases found in schools Number of treatments and instructions.	4,336	7,073	307 10 1,374	1,161	114 25 724	23	7,795	94	401	21,219
Cases found in schools	69 930	1,011	155	407 3 1,754	120 4 301	19	2,228		214	4,225 24 25,115

Vaccinations in Schools—Borough of Manhattan Only.

Field of Work—	
Inspectors on duty	2
Schools visited	20
Registration in schools covered by school vaccinators	- (
during year	26,974
Work Performed—	
Children examined	26,499
Children vaccinated by department physicians	22,163
Children vaccinated by other physicians	2.724
Children not requiring vaccination	1,550
Children pending vaccination	62

TRACHOMA.

A marked improvement has been noted in the cases of trachoma reported to this division. The children thus affected are referred for treatment either to their own physician or to Department of Health Dispensary, meanwhile, being kept under continuous observation by the nurse.

The routine inspection of the children in the class rooms has been made more effective not only for the reason that contagious diseases are diagnosed earlier by this procedure, but especially for the reason that the opportunity of direct association with the children has enabled the nurses to impress upon them the necessity of personal cleanliness

and hygiene.

Because of the urgent need of the control of contagious diseases, this branch of the work has been carried on not only in the public schools, but also in the parochial and other free schools of the city. Owing to the reduction in the force it has not been possible to pursue the other branches of the schol work in other than the public schools. The results in the latter prove the urgent need of its extension to include all of the free schools of the city.

TUBERCULOSIS.

Exclusion from school of children suffering from an acute type of tuberculosis was instituted during the early part of the year. Incipient cases with no expectoration or objective signs and physical symptoms, and who are not a source of danger to others, are allowed to remain in school.

A large number of the exclusions are made as a result of a primary diagnosis established in the clinics of the Division of Communicable Diseases. In addition, the cases diagnosed by the inspectors in the schools are referred to the clinics for confirmatory diagnosis before exclusion. During the year 258 children have been excluded for this cause.

Eye and Skin Diseases.

					~ ()			
	fal.	451,515	1,474,931	764,602	24,299 418 94,902	159,903 2,843 479,684	36,923	6,608
	iscellaneous.	N 179,545	82,526	38,295	8,216	64,684	16,105	2,597
1	lolluscum. ontagiosum.	25.	1,00,1	†89 :	5	35 217	6	2 : 2
-	·snae	H 664 × 7	3,321	2,267	136	204	23	19
	mpetigo.	12,516	63,622	30,399	32 32 2,951	5,856 168 23,489	1,161	407
	Scabies.	4,006	23,697	14,476	36	1,598	114 25 724	120 4 301
	Kingworm.	7,788	40,040	34,696	1,973	1,868 69 9,014	307 10	155
	Conjunctiviti	19,807	189,01	50,362	5,290	23,462 565 78,262	7,073 58 20,581	1,011
	Pediculosis.	151,585	76,483	387,668	57,217	281,776	7,795 53 42,123	2,228
	, Trachoma,	45,615 1,392 310,465			23,455	50,760	4,336 62 29,565	930
		New York City— Cases found Cases found Cises excluded Treatments and instructions.	Manhattan— Cases found. Cases excluded Treatments and instructions	The Bronx— Cases found Cases excluded	Lreatments and instructions. Brooklyn – Cases found.	Cases excluded Treatments and instructions.	Carees round Carees excluded Treatments and instructions. Richmond—	Cases round Cases excluded Treatments and instructions.

Examination for Physical Defects.

One of the marked advances in the work of the Division during the past year is shown by the results attained in the diagnosis and treat-

ment of non-contagious physical defects.

During the school year of 1908-1909, reports of defects found, and treatment provided for the children were given in each case to the principals of the schools. These reports were rarely tabulated or preserved by the school authorities, and, therefore, these valuable data relating to the child's welfare were of no permanent value. In order to obviate this condition, and to provide a means whereby the facts relating to the child's physical condition and scholastic progress, might be kept in a consecutive and permanent form, a card record form was devised by officials of the two departments. Health and Educational, and put in use at the beginning of the school term. When a child is examined the defects found are indicated in the appropriate column of said card, and the character of the treatment obtained is recorded by the nurse in the second column of the same card, under the same year. The face of the card is filled out by the school authorities to indicate the child's school record. These cards are kept in the school, and in the case of transfer of the child are forwarded to the new school which the child attends.

A new form of inspectors' and nurses' report has been prepared to be used in conjunction with the school record. The system is a marked advance, and promises to afford valuable data hitherto unavailable.

TEETH.

The largest number of defects found have been those of the teeth. The relation of decayed teeth and unclean mouths to malnutrition, adenetis, and the liability to contract contagious diseases is too well known to merit more than passing comment. Of a total of 231,081 children examined, 131,747 were found to have defective teeth.

There are in the city eighteen free dental clinics. Only a few make any pretense of filling teeth, and indiscriminate extraction has occurred in many cases presented for treatment. Notwithstanding the most strenuous efforts on the part of the nurses, treatment has been provided in only 4,616 instances; the cases of extraction numbering 2,025, and

fillings, 2,501.

A special investigation of the condition of the teeth among school children was made, and 500 children, between the ages of 14 and 16 years, were examined by Wallace T. Van Winkle, with results as

follows:

Total number of children examined (boys, 311; girls, 189)	500
Ages, 14, 15 and 16 years	
Total number of defective teeth (boys, 1.702; girls, 1.106)	2,808
Total number showing defective teeth	486
Total number of teeth which were extracted	385
Total number of teeth requiring extraction	257

		19	VA	CCI	NATI	ON																	
	Age	Date																	-				
		Grade	GLASSES	MEDICAL	DEFECTIVE HEARING	OPERATIVE	MEDICAL .	OPERATIVE	MEDICAL	TUBERCULOUS LYMPH NODES	PULMONARY DISEASE	CARDIAC DISEASE	V	MEDICAL	PHYSICAL CULTURE	MEDICAL.	INSTRUCTION	EXTRACTION	FILLING	PRIMARY	DEFECTIVE PALATE	2	
	eg.		-TO:	DEFF	DEFECT	ECT.	DEFI NAS NAS NAS NAS	SILS PH'D PH'D	HYF TROI 10N	5 TUBER LYNPH	6 PULMO	7 CARDIA	8 CHOREA	ECT 100- 140-	087 9 E 0	10 NOI.	JAM TIAT	11 VE	ECTI	DEE	12 DEFECT	HEIGHT	
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		Grade	GLASSES	MEDICAL	DEFECTIVE HEARING	CLUL OPERATIVE	MEDICAL	OPERATIVE	MEDICAL	TUBERCULOUS LYMPH NODES	PULMONARY DISEASE	CARDIAC DISEASE	A	MEDICAL	PHYSICAL CULTURE	MEDICAL	INSTRUCTION	EXTRACTION	FILLING	FRIMARY	DEFECTIVE PALATE		
Name	Address	School	E E I ON	DEFI VIS	DEFECT	ECT. 3 SAL 5AL TH'G	DEFI NAS NAS	SIFS bhid EB•	97H 08T NOT	TUBER	PULMO	CARDIA	CHOREA	ECL OIC .HO-	087 PE1 130	-UN. NOIT	JAM FIRT	ΙΛΕ	T037 T337	L DE	DEFECT	T'NS	
SS	NUI]-;		જ	က		4		5	9	<u></u> 2-1	ω	6		10		11			13	CONSULT'NS	

Total number of teeth with gangrenous tooth pulps (boys,	
247; girls, 152)	399
Total number of children receiving dental treatment other	
than extraction (boys 18, girls 7)	25
Total number of teeth filled (boys 36, girls 5)	41
Total number of gold crowns	3
Total number requiring cleansing of teeth	500
Total number of mal-occlusion of teeth	419
-	

Most of the children showed a more or less complete lack of dental hygiene, their mouths, in many instances, filthy to a degree almost unbelievable.

Many of the parents accompanying the children manifested considerable interest in the examination, and frequently inquired whether there were not some public dispensary to which the child could be taken for treatment.

What percentage of these children are able to pay for dental services is not known. Some of them no doubt could do so, were they less

ignorant of the importance of such care.

Some interesting facts have been emphasized by these examinations: First, the almost complete lack of dental treatment among the inferior classes, coupled with an almost universal need. Second, the importance of preventive dental treatment. Could these children have had proper dental treatment, the present deplorable conditions could have been reduced 75 per cent., to say nothing of the influence of these conditions upon the health of these would-be wage earners. Third, the need of dental dispensaries where those unable to pay can receive treatment. Fourth, some means of educating the people as to the importance of dental treatment, and value of preventive rather than reparative dentistry.

Dental clinics are of great necessity, and practically represent the only solution to the problem of correcting defects of this class among the school children of the City of Greater New York. Plans have been formed by several philanthropic citizens to at least partly meet this need. While in no degree lessening the activity in the line of correction of these defects, the efforts of the Division this year have been largely directed to preventive measures. To this end a circular on oral hygiene has been prepared and distributed in the schools and

homes.

The children in the schools are assembled in groups and instructed by the nurses in the hygiene of the mouth. Home instruction is carried out by the nurses in each family visited, and mothers of infants are urged to care for the baby's teeth as soon as they appear. These instructions are made as thorough as possible. The aim of the Division as regards this work is to see that every school child, and all mothers, not only understand the great importance of clean mouths and sound teeth, but that the practice of mouth hygiene is consistently and persistently followed.

DEFECTIVE VISION.

30,408, or 13 per cent. of the children examined, were found to have defective vision. 22,340, or 73 per cent., were treated for this defect, and in 8,218 instances glasses were provided. Through the co-operation of the Charity Organization Society in the Borough of Manhattan, and the Children's Aid Society in the Borough of Brooklyn, all children whose families were unable to pay for glasses were provided by these organizations free of charge. The decrease in the number of uncorrected defects of this nature is undoubtedly accounted for by the increasing vigilance of the parents and teachers. During the latter half of the year, this decrease has been noticeable in all classes of physical defects, reports from the dispensaries and inspectors clearly showing that there has been a marked effort on the part of the children affected with these conditions to obtain treatment for their defects, before, instead of after their physical examination by the inspector. The realization by the teachers that improved eyesight has meant improved scholarship has contributed largely to this result, and is indicative of the effect of the educational work of this Division.

DEFECTIVE HEARING.

2,340, or a trifle over I per cent, of the children, were found to have defective hearing. There are many difficulties in the way of an accurate determination of this defect. Owing to the large number of foreign-born children in the schools, many of which have but a slight acquaintance with our language or customs, ignorance, confusion or apparent stupidity may often be mistaken for impairment of hearing. Even with these chances of error in diagnosis, it is probable that the number of children whose powers of hearing are below the normal is sufficiently large to warrant their segregation in special schools or classes, where they may have the advantage of a form of instruction suited to their abnormal condition.

DEFECTIVE NASAL BREATHING.

It does not yet seem practical to enter into complicated methods of examination necessary and essential to the proper diagnosis of the presence of adenoids. The wide difference of opinion still existing in the medical profession as to the readily demonstrable stigmata for a positive diagnosis without exploration or visual examination of the naso-pharyngeal vault, has opened an avenue for conflicting diagnoses and criticisms. It has therefore been the policy of the Division to call the attention of the parents to objective symptoms in the child, which point to obstruction of the nasal passages, classifying such cases under the general term of "defective nasal breathing." The cause of the nasal occlusion is left for the family physician to determine. The reports of these physicians have shown conclusively that adenoid growths were present in the vast majority of cases. Of a total of 43,393 children so affected, 40,096 have received treatment.

HYPERTROPHIED TONSILS.

Second in number only to the cases of defective teeth, hypertrophied tonsils have been found in 50,934 instances, 22 per cent. of the children examined. This defect is associated in most cases with adenoid vegetations, and operative treatment employed almost invariably includes the correction of both abnormal conditions. 44,153 of these children have received treatment.

MALNUTRITION.

The determination of this condition affords an opportunity of wide discrimination. The standard of the Division places in this classification those cases only where the subjective and objective symptoms warrant the recognition of the condition existing as a comprehensive entity, and where the child needs immediate and active remedial measures to restore its physical status to the normal.

Experience has shown that malnutrition exists in a varying degree as an associated defect where other definite deviations from the normal standard are found. This associated malnutrition, however, tends to correct itself when the primary or causative physical defect is removed.

Whenever it has been apparent that an adjustment of home conditions, including hygiene and proper feeding, would supply the needed elements to nourish the child, the nurses have instructed the mothers in detail and supervised the routine of the child's life. When mere ignorance was encountered the results of this plan have been most encouraging. Poverty furnished the usual difficult problem, but with the co-operation of the various aid societies, the nurses have been able to afford a partial solution. The number of such cases found, 7,249, though an inconsiderable per cent. of the total, still in the aggregate merits serious consideration.

ORTHOPEDIC DEFECTS.

The wide interest taken in crippled children, and the many societies and dispensaries maintained for their care and treatment, have served to afford adequate relief for the marked types of orthopedic defects. Physical examination of the children has, however, brought to light many hitherto undiscovered cases of milder forms or early symptoms, which, if neglected, would inevitably lead to permanent deformity. 1,461 uncorrected cases have been found. Many of these children can be cured by proper physical exercises. Such classes are maintained in the schools, under the supervision of the Director of Physical Training. Each case is individually judged and a proper course of physical exercises outlined by the inspector in conjunction with the teachers of physical culture. This co-operation has been extremely valuable, and its increased development will prove of great service in correcting the early stages of many otherwise chronic deformities.

OTHER PHYSICAL DEFECTS.

	Cases Found.	Cases Treated.	,
Cardiac diseases	1,503 744	1.083 697	
Chorea	940 810	714 521	
Defective palate	324	186	

In all, during the year, 231,081 children have been examined. 202,150 have been found to have one or more physical defects, including defective teeth, while 69,962 children were normal, except for the presence of defective teeth. The individual defects found numbered 140,106 (excluding those cases of defective teeth only). 117,662, or

84 per cent. received treatment.

Previous to the establishment of this Division, although the children were examined for physical defects, the system pursued did not provide for any adequate method of giving treatment. Under this system about 6 per cent, of the children obtained medical care. It is now the duty of the nurses to visit the homes, explain the nature of the defect, and urge upon the parents the necessity of proper treatment. In the early part of the year many visits to individual cases were made before the parents could be brought to realize that it was necessary that the child be taken to a physician. The attitude of the parents has shown a decided change, as they have realized the ensuing beneficial results to the child, and while ignorance and indifference are still met with, yet the increasing knowledge of the beneficient purpose of the Department, and the helpful, painstaking and untiring efforts of the nursing staff, have brought about a spirit of parental co-operation which promises much for future achievement.

An interesting feature of the work was shown by the children themselves, who, during the summer vacation, presented themselves voluntarily to many of the clinics of the City for diagnosis and treatment of physical ills, so that they might obviate the possible treatment

after examination by the school inspector.

During the routine examination of the children in January marked, physically defective cases requiring immediate treatment were about 5 per cent. of the number of children inspected, whereas the routine inspection in December showed a record of less than 1 per cent.

Special Physical Examination of Boys Intending to Compete in the Public School Athletic Contests.

In November the City Superintendent of Schools requested that all boys desiring to participate in athletic contests be physically examined. This work was commenced on November 19, and between that date and the end of the year 153 such examinations were made. Its effect must necessarily be shown in the elimination from these contests of the physically unfit, and the reduction in the number of preventable organic lesions, resulting from overstrained parts of the body.

EXAMINATION FOR ATHLETIC LEAGUE.

December 13 to December 31, 1909.

Number of children examined Number of children found defective Defective, other than teeth only Defective teeth only 51	153 98
Defects Found.	
Defective vision	25
Defective nasal breathing	14
Hypertrophied tonsils	20
Cardiac disease	4
Malnutrition	I
Defective teeth	84

Physical Examination of School Children—Non-contagious Physical Defects Found and Treated.

	New York.	Man- hattan.	Brooklyn.	The Bronx.	Queens.	Rich- mond.
Number of physical examinations and nade	231,081 172,112 74.48	105,999 90,463 S5.34	89,451 58,279 65.15	19,981 13,709 68.61	11,295 6,391 56.58	4,355 3,270 75.09
Defects Found— Defective vision. Defective hearing. Defective nasal breathing. Hypertrophied tonsils. Tuberculous lymph nodes. Pulmonary disease. Cardiac disease. Chorea. Orthopedic defect. Malnutrition. Defective teeth. Defective palate. Number reported treated. Percentage of those needing treatiment known to have been treated.	30,408 2,340 43,393 50,934 810 744 1,503 940 1,461 7,249 131,747 324 150,314 87-33	18,216 1,105 29,681 29,189 168 426 798 578 1,018 5,120 69,231 79,608 88.00	8,367 773 7,898 13,932 1122 98 456 115 290 1,332 47,015 68 51,683 88.68	2,157 259 3,423 4,248 39 162 181 187 67 619 9,968 18 12,635	932 169 1,809 2,801 447 50 32 16 50 43 2,865 15 4,068	736 94 582 764 44 8 36 44 36 135 2,668 2,320 70.95

Examination and Treatment of School Children for Non-contagious Physical Defects.

	New York,	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
Examination— Total schools under inspection Total registration in schools under inspection Number of children examined Percentage of registration Number needing treatment Percentage of those examined needing treatment	660	242	239	49	95	35
	773,791	342,113	291,247	72,806	53,637	13,988
	231,081	105,999	89,451	19,981	11,295	4,355
	29.86	30.98	30.71	27.44	21.06	31.13
	172,112	90,463	58,279	13,709	6,391	3,270
	74.48	85.34	65.15	68.61	56.58	75.09

Treatment of Individual Defects.

Defect.	Number Children Defective.	Character of the Treatment.	Number Treated.	Per Cent Treated.
I. Defective vision	30,408 {	Glasses	S,218 14,122	27.0 46.3
Total			22,340	73.3
2. Defective hearing	2,340	Medical	1,868	80.0
3. Defective nasal breathing	43,393 {	Operative Medical	9,974 30,122	23.0 69.5
Total			40,096	92.5
4. Hypertrophied tonsils	50,934 {	Operative	10,757 33,396	20.0 65.5
Total			44,153	85.5
5. Tuberculous lymph nodes. 6. Pulmonary disease. 7. Cardiac disease. 8. Chorea.	\$10 744 1,503 940	Treatment	521 697 1,083 717	64.5 93.7 72.0 75.2
9. Orthopedic defects		Medical Physical culture	S20 53	75.0 4.7
Total			873	79.7
10. Malnutrition	7,249 {	Medical	4.878	67.3 3.4
Total			5,128	70.7
11. Defective teeth	1 (Extraction	2,025 2,591 131,747 186	1.9 2.4 1co.0 61.0

WHERE THE CHILDREN WERE TREATED.

A record of the place where treatment was obtained has been kept during the past year. Although this record does not cover the entire year, 84,533 cases in which treatment was obtained were tabulated as follows:

Treated by Private Physician	18.
Operative treatment	7,010
Medical treatment	39,915
_	46,925—55 per cent.

Treated at	t	Dispensaries	or	Hosp	itals.
Operative treatment	t				13,955
Medical treatment .	•				23,653

37,608—45 per cent.

This seems to show that the greater proportion of children consulted private physicians. The dispensaries and hospitals, however, have done most of the operative work, *i. c.*, nearly twice as many operations were performed in dispensaries, etc., as were done by private physicians.

Treatment of Physical Defects, 1909—General Summary.

	Number.	Per Cent.
Children examined	231,081	
Found needing treatment		74.5
For defective teeth only 69,962	2	30.1
For teeth and associated defects. 61,785 For other defects only. 40,365		29·5 <u>{</u>
For other defects only 40,365		14.9) 44.4
Children who received treatment	150,314	87.3

ISSUING OF EMPLOYMENT CERTIFICATES.

The enforcement of that part of the Mercantile or Child Labor Law, which relates to the issuing of employment certificates to all children between the ages of 14 and 16 years, who wish to work, shows an increase in the work performed over that of 1908.

The following table shows in detail the results accomplished:

	1909.						
	New York City.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	
Applications pending New applications received	138	125 16,587	6 2,740	9,952	5 2,045	423	
Total	31,885	16,712	2,746	9,954	2,050	423	
Certificates granted	29,843 1,635 407	15,488 913 311	2,560 161 25	9,429 477 48	1,964 63 23	402 21	
Total	31,885	16,712	2,746	9,954	2,050	423	
Refused for— Insufficient education Insufficient Tuition Insufficient evidence of age Under age Physical incapacity Duplicate certificates issued	484 414 95 351 291 939	191 303 60 167 192 577	20 33 4 25 79 90	262 51 9 136 19 240	11 23 14 14 1 27	4 8 9	

In order to obtain more systematic alliance in its enforcement, copies of the Mercantile Law have been sent to each Public School Principal in the city, and a weekly statement of certificates issued in the indicated school is also sent to the principal.

On July 1, at the close of the school year, it was decided to institute the work for the summer months. Accordingly a force of inspec-

Employment Certificates.

	New York.	Man- hattan.	Brook- lyn.	The Bronx.	Queens.	Rich- mond.
*Applications for employment cer-	31,885	16,712	9,954	2,746	2,050	423
tificates	29,843	15,488	9,429	2,560	1,964	402
Refused	1,635	913	477	161	63	21
By reason of insufficient ed-	484	191	262	20	11	
By reason of insufficient tuition.	414	303	51	33	23	4
By reason of insufficient evidence as to birth	95	60*	9	4	14	8
By reason of physical inca-	291	192	19	79	1	
By reason of being under age	351	167	136	25	14	9
Pending Duplicate certificates issued	407	311	48	25	23	
Certificates in force January 1, 1909	939 33,921	18,652	9,238	90 3,296	27 2,233	502
Certificates granted during year 1909	29,843	15,488	9,429	2,560	1,964	402
Certificates expiring during year 1909	25,076	14,045	6,878	2,314	1,465	374
Certificates in force December 31, 1909	38,688	20,095	11,789	3,542	2,732	530

^{*} Children applying and found over age are considered as not having applied.

tors was detailed to the various borough offices, and each child applying for an employment certificate was given a thorough physical examination, to determine its physical fitness for work. The results were as follows:

A Tabulation of the Physical Examinations Made in the Mercantile Bureau of Children Applying for Employment Certificates from July 1 to September 14, 1909, Inclusive.

	New York City.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.
Number of children examined	3,736	1,764	343	1,330	269	30
Number found defective— Other than teeth only Teeth only	844 1,696	245 914	104 95	471 566	17 102	7 19
Defects— Defective vision Defective hearing Defective nasal breathing Hypertrophied tonsils	379 7 179 390	48 2 59 175	36 I 28 47	288 4 89 152	2 2 I4	 I 2
Tuberculous lymph nodes	1 2 9 2	2 I	I 2	I I 5	••••	
Orthopedic defect	7 19 2,185	3 3 1,102 1	1 145	4 15 808 2	108	22

At the opening of the school session in September, 1909, an arrangement was made with the City Superintendent of the Public Schools, whereby each child applying to the principal for a record of school attendance to be used in applying for an employment certificate is directly referred to the inspector in the school for a physical examination. A record, showing the defects found, is made in duplicate by the

inspector, one copy is given to the child, who is required to present it at the Department office as part of his application record, and the other copy is forwarded, by the inspector directly, to the Chief of the Division, where it is kept on file. This system has shown its value by the increased number of children refused certificates because of physical

incapacity.

Uniformity of methods have been established in all of the borough offices, in addition to the special agent in the Manhattan office, the Child Labor Committee has assigned a representative to the Brooklyn office. These agents are assigned for the purpose of rendering aid to children who need assistance in establishing necessary proof of age. Their efforts have proved of much value, and have materially increased

the efficiency of the work.

Acting on the authority furnished by opinions rendered from the office of the Corporation Counsel, transcripts have been made of documentary proof of age submitted by applicants. These transcripts are filed with the application and the original evidence returned to the applicant. This documentary proof includes school diplomas, family bibles, insurance policies and other forms of personally valuable data. It has formerly been the cause of much hardship and anxiety to have these documents retained by the Department. Their return not only affords much satisfaction to the applicant, but obviates the filing of cumbersome and often valuable records.

Inspectors familiar with foreign languages have been assigned to duty in the Mercantile office, and all foreign documents are translated for applicants. This has resulted in a great saving of time, labor and money for these people, as formerly they were required to have the translations made at their own expense, with an added fee for their attestation by a notary public. During the year 29,843 certificates were granted; an increase of 5,911 over the preceding year. 1,635 applications were refused, as opposed to 2,427 in 1908. The refusals in detail and the reasons for the decrease may be summed up as follows:

Insufficient Education.

Four hundred and eighty-four applications were refused for this reason, as compared with 462 in 1908. That portion of the law that requires the inspector to test the child's ability to read and write simple sentences in the English language has been more vigorously and uniformly enforced. During the first six months of the year, 320 children were refused, in comparison with 193 during the first six months of 1908. The fact that 19 per cent. of the total refusals were for this cause is worthy of particular comment, for each of these children presented a record of school attendance signed by the principal, certifying that the child had received the requisite instruction required by the laws. Probably, as a result of this serious situation, with its implied comment on the quality of the education provided for these children, the Department of Education has instituted a special test or examination, which each child must now pass before a school record will be issued.

The result of this measure is well illustrated by the decided decrease in the number of children refused for this reason during the latter six months of the year; 164, or nearly 50 per cent. less than the preceding period.

Insufficient Tuition.

These cases include those children who have either never attended school, or who have not attended the required 130 days the year previous to their fourteenth birthday, or the date of application. The decrease in the number from 700 in 1908 to 414 in 1909, is undoubtedly due to the increased knowledge of the law and its requirements. This year the names and addresses of all children who have never attended school have been regularly sent to the Associate City Superintendent of Schools in charge of the enforcement of the compulsory education law, thereby affording an opportunity for enforcing school attendance on this heretofore neglected class of truants.

INSUFFICIENT EVIDENCE OF AGE.

The section of the Mercantile Law which provides that children unable to submit documentary evidence of the date of birth, may apply for a physical examination to determine their age, has been more actively enforced in the past year. As a matter of fact, this provision should eliminate all refusals for this cause. A certain number of children, however, after filing applications for the physical examination, do not return to have it made. That the Division has been very successful in its efforts, however, is indicated by the marked decrease in this class of refusals from 424 in 1908 to 95 in 1909.

PHYSICAL INCAPACITY.

The increase in the number of refusals for this cause is most gratifying, as indicating the more thorough attention given this subject. From 111 in 1908, the number has increased to 291 in 1909. For the first time a definite standard of physical status has been established this year, and this, added to the information obtained from the physical examination now being made, has resulted in keeping from the factory and work room those children physically unfitted to perform labor of this nature.

UNDER AGE.

Another evidence of the more general knowledge of the law is shown by the lessening number of children under the legal age who applied for certificates. This decrease, from 730 in 1908 to 315 in 1909, can only be accounted for in this manner.

To sum up, the increase in the refusals of applications are in those lines which show a more adequate enforcement of the law by the Department, while the decreases are for reasons which clearly indicate

the increased knowledge of the law on the part of the public.

While the Department has no option in its enforcement of the Mercantile Law, its practical working does undoubtedly, in some instances, impose seemingly unnecessary difficulties and hardships on applicants and their families. This is especially evident in the provisions of the law relating to the proof of age. While it is eminently desirable that all possible means be taken to ascertain that the child is at least fourteen years of age, it would seem that this end might be attained by the submission of proof quite as reliable and satisfactory as the required birth certificates now demanded as primary evidence.

SECRETARY'S REPORT.

DEPARTMENT OF HEALTH, CITY OF NEW YORK, Southwest Corner 55th St. and Sixth Ave.,

Borough of Manhattan,

New York, December 31, 1909.

To the Board of Health, City of New York:

Gentlemen—I have the honor herewith to submit the following report of transactions in the office of the Secretary, of the Chief Clerk and of the Assistant Chief Clerks assigned to duty in the various boroughs of this city, during the year 1909. From a comparison of the work performed during the past year with that of the previous year there is an appreciable increase, not only in the amount of business transacted but in the efficiency of those comprising the staffs in the various offices.

Orders of the Board for the abatement of nuisances and notices calling attention to violations of the sanitary code are, under an authority granted several years ago, issued by and through the Sanitary Superintendent and the Assistant Sanitary Superintendents in the various boroughs, and statistics relating to such orders and notices will

be found in the report of the Sanitary Superintendent.

Some years ago, the Board instituted a system of charging applicants for searching records containing sanitary violations against premises and the amount received during the current year will compare favorably with that of preceding years. One thousand four hundred and seventy-seven dollars and fifty cents (\$1,477.50) were received from this source and transmitted to the City Chamberlain to be added to the general fund. Receipts for searches of the records of vital statistics in the various boroughs amounted during the year to twenty-three thousand seven hundred and ninety-one dollars and thirty cents (\$23,791.30), distributed as follows:

Borough of Manhattan	\$13,911.40
Borough of Brooklyn	7,288.50
Borough of The Bronx	1,519.10
Borough of Queens	813.10
Borough of Richmond	259.20

This amount was also forwarded to the City Chamberlain. Formerly all moneys received from these sources were applied to the Health Department Pension Fund, but under an amendment to the law specifying what moneys shall be included in the pension fund, these fees were eliminated, and ordered applied to the redemption of the public debt. From the number of persons who have recently been added to the list of beneficiaries of the Health Department Pension Fund, it will be only a question of time when the outgo will greatly exceed the income and it will be necessary for the trustees to commence payments from the principal of the fund, for pensions, unless some means are found to supply a larger income, and, in this connection I would strongly urge that steps be taken to again amend the law, so that the Health Department Pension Fund will embrace all fees for searches of the records of vital statistics and other records of the department,

as formerly.

The total appropriation made to the department during the year, amounted to two million four hundred and eighty-four thousand eight hundred and fifty-nine dollars and twenty-five cents (\$2,484,-859.25); revenue bonds to the amount of fifty-four thousand two hundred and seventy-five dollars (\$54,275), while the corporate stock authorized and issued by the Board of Estimate and Apportionment during the same period totaled five hundred thousand dollars (\$500,-000). The amount received for sales of laboratory products, such as vaccine virus, antitoxin, preventive hydrophobia treatment, etc., etc., was forty-three thousand four hundred and ninety-one dollars and sixteen cents (\$43,491.16), while that received from the United States Government for the care and maintenance of immigrants amounted to fifty-six thousand and ninety dollars (\$56,090), a grand total of three million one hundred and thirty-eight thousand seven hundred and fifteen dollars and forty-one cents (\$3,138,715.41).

The amount paid in salaries for the same period, in all boroughs, exclusive of hospitals, was one million four hundred and forty-six thousand three hundred and forty-seven dollars and ninety-four cents (\$1,446,347.94); hospitals, three hundred and thirty-eight thousand and eighty-nine dollars and forty-nine cents (\$338,089.49), and the amount disbursed by the Secretary for postage and incidental expenses of the office was fifty-seven thousand eight hundred dollars (\$57,800),

for all boroughs.

Estimates of the amounts needed to carry on the work of the department, are made up during the months of June and July of the year preceding that in which the moneys are to be expended. When this is remembered, it will be readily appreciated how difficult it is to frame an estimate which will meet the needs of the department for a time so far in advance. Looking backward to the year 1910, the budget for that year, based upon the estimates framed during the early part of the year of 1909, contained provision for an appropriation of two million seven hundred and forty-seven thousand seven hundred and twenty-three dollars (\$2.747.723), an increase of two hundred and sixty-two thousand eight hundred and sixty-three dollars and seventy-five cents (\$262.863.75) over the previous year.

A new system of accounting inaugurated on January 1, 1908, has been perfected during the past year and with the new form of budgetary appropriations, the financial records of the department are at all times, in such a condition as to enable the Chief and Auditing Clerk to determine the exact financial condition at any moment. Trial bal-

ances are prepared and forwarded to the Comptroller, the Mayor, and the Commissioners of Accounts on the tenth day of every month.

Contracts for supplies for the various offices, hospitals, laboratories and clinics of the department during the year amounted in the aggregate to three hundred and twenty-one thousand one hundred and sixty-four dollars and fifty-three cents (\$321.164.53). This should not be confounded with orders for supplies in amounts costing less than one thousand dollars (\$1,000), which are filled by what are termed "open market orders."

The inspection of all supplies is under the immediate supervision of the Chief Clerk, who has a competent corps of inspectors detailed to

his offices for the purpose.

Again referring to the subject of the Health Department Pension Fund, the receipts for the year from four sources, namely, attorneys' costs, fines and penalties for violations of the sanitary code, and assessments of one per cent, paid by participating employees, together with the interest allowed by depositories amounted to forty-four thousand three hundred and forty dollars and thirty-two cents (\$44,340.32). There was on deposit on January 1, 1909, the sum of two hundred and forty-seven thousand two hundred and fifty-nine dollars and eightyone cents (\$247,250.81). Expenditures for the year amounted to thirty-five thousand eight hundred and four dollars and seventy-six cents (\$35,804.76). On December 31, 1909, after deducting the amounts paid during the year, there remained on deposit with the Windsor Trust Company, the Empire Trust Company and the Knickerbocker Trust Company, designated depositories paying interest at three and one-half per cent., the sum of two hundred and fifty-five thousand, six hundred and ninety-five dollars and thirty-seven cents (\$255,-695.37), a very slight increase over the preceding year.

During the year, the duty of preparing and auditing claims for burial expenses for honorably discharged, deceased soldiers, sailors and marines from the army and navy of the United States, who were residents of the City of New York, as well as the deceased widows of such soldiers, sailors and marines, which devolves upon the Department of Health, made necessary the preparation of vouchers calling for the sum of ten thousand six hundred and twenty dollars (\$10,620), which were forwarded to the Department of Finance for payment. This embraces two hundred and sixteen deaths which occurred in the

four counties comprising the City of New York.

Respectfully submitted,

EUGENE W. Scheffer, Secretary.

REPORT OF CORPORATION COUNSEL FOR THE YEAR 1909.

Violations for arded to the Assistant Corporation Counsel for coval actions year ending December 30, 2009

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Report of Corporation Counsel.

Criminal actions in Magistrates' Courts year ending December 31, 1909:

	New York.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.
Cases—						
Pending January 1, 1909, in Magistrate's Courts	27	5	10	2	6	4
New cases in Magistrate's Courts	6,290	4,662	284	1,199	121	24
Total cases	6,317	4,667	294	1,201	127	28
Disposition						
Held for Special Sessions Held for General Sessions	1.134	614	59	423	29	9
Discharged	897	628	118	73	60	18
Fined	3,857	3,406	111	330	io	
Sentence suspended	361		**	361		* *
Appealed	57	9	5	14	28	ī
Total cases	6.317	4,667	294	1,201	127	28
Amount of fines	\$5,053 56	\$4,511 81	\$122 25	\$396 50	\$23 00	

Criminal action in Court of Special Sessions year ending December 31, 1909:

	New York.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.
Cases— Pending January 1, 1999 Transferred from Magistrate's Courts	273 1,134	10 624	30 49	222 423	6 29	5
Total cases	1,407	634	79	645	35	14
Disposition— Discharged. Fined. Sentence suspended Jail sentence. Appealed. Pending December 31, 1929	214 722 322 5 3	22 485 88 4	43 6	186 174 217 1 3 64	2 16 5 	4 4 6
Total cases	1,407	634	79	645	35	14
Amount of fines imposed	\$13,421 00	\$8,375 ∞	\$715 ∞	\$3,761 00	\$530 00	\$40 00

One appeal from a conviction for violation of Section 183 of the Sanitary Code was received, or as a fine was imposed and credited, it is not included in this table.

Report of legal work continued, being a comparison of fines and

including the more important cases:

Pursuant to the provisions of the Greater New York Charter, Section 1241, Chapter 466, Laws of 1901, 609 applications were received to record in a special book for such purpose the births of children, which, through the neglect of the physician or other medical attendant present at such birth, were never filed with the Department of

Health. Great care must be exercised in the examination of these various petitions, in order to ascertain whether the applicants have

strictly complied with the provisions of the statute.

Special attention is called to the aggressive action of the Department in prosecuting violators of the Sanitary Code in the Courts of Special Sessions throughout the city, as shown by table hereto annexed. These fines were imposed largely for food adulteration, and aggregated \$13,421, as against \$8,128 in 1908. The increase is most apparent in the Borough of Brooklyn where from \$805 in 1908 the fines increased to \$3,761 in 1909. As there were only about the number of defendants fined in the latter year as against the former, a material increase is also evident in the average fine imposed. In the Borough of Manhattan the fines imposed amounted to \$8,375 in 1909, as against \$6,423 in 1908. In the Borough of The Bronx the fines increased from \$385 in 1908 to \$715 in 1909, while in the Borough of Queens they increased to \$530 in 1909 from \$355 in 1908. The only decrease is shown in the Borough of Richmond, where the fines diminished from \$160 in 1908 to \$40 in 1909, which was due to the fact that there were less prosecutions in 1909 than in 1908, and the cases brought were for less flagrant violations.

CERTAIN DECISIONS OF IMPORTANCE.

Department of Health vs. Isadore Greenberg—Isadore Greenberg of No. 48 Cook Street, Borough of Brooklyn, City of New York, was convicted in the Court of Special Sessions, Second Division, on May 27, 1909, for a violation of Section 68 of the Sanitary Code, and sentenced to pay a fine of \$10, or, in default, to imprisonment in the

City Prison for five days.

Greenberg was a candy jobber, who supplied small stores in the Borough of Brooklyn with candy. The proof upon which he was convicted showed that the candy sold by him contained sulphurous acid. He carried his case to the Appellate Division of the Supreme Court, Second Judicial Department, and the judgment of conviction was unanimously affirmed at the November, 1909, term of the said Court, Mr. Justice Jenks writing the opinion, which is set forth in full as follows:

"The appellant was convicted of a violation of the Sanitary Code of the Board of Health of the City of New York, in that he did have and offer for sale certain confections that contained sulphurous acid, an ingredient deleterious and detrimental to health, and in particular in violation of the 68th Section of the said Code, that provides:

"'Sec. 68. No person shall have, sell or offer for sale in The City of New York, any food which is adulterated or misbranded. The term food as herein used shall include every article of food and every beverage used by man and all confectionery. Food, as herein defined, shall be deemed adulterated: * * * (g) If, in the case of confectionery, it contains terra alba, barytes, tale, chrome yellow, or other mineral substance or poisonous color or flavor, or other ingredient deleterious or detrimental to health; or any vinus, malt or spiritous liquor or compound or narcotic drug.'

"He was sentenced to pay a fine of \$10 or in default to imprisonment in the City Prison for 5 days.

"It is urged against the judgment that the mere possession of such confections is not an offense under this section and that there was no proof that the defendant had the confections for sale or offered them for sale. Buckley, an inspector, testified that he visited certain premises where the defendant carried on a 'candy jobber' business, that he saw the defendant at his place of business, informed him that the witness was an inspector come to examine his candies, that he examined a number of candies in boxes and took six samples thereof, that he paid the defendant ten cents for the six samples which were taken and delivered to the Chemist of the Health Department. The witness further testified that he asked how much he owed to the defendant for these samples, whereupon the defendant 'told me ten cents, and I paid him ten cents.' And the witness asked how much he owed for the confections, and the defendant named a price which was paid and accepted, this transaction was a voluntary sale, unaffected by the circumstance that it was made to a buyer who theretofore had said that he was an inspector who desired to examine his candies. Moreover, we think that the record justifies the conclusion that the defendant had for sale or was offering for sale these confections. They were taken from the confections kept in the defendant's place of business. The defendant admits that he was a 'jobber' of candy, that he sold candies to the stores, that he had purchased these candies from a manufacturer and that he had them at his place of business. There was no contention that these confections from which the samples were taken were bought for consumption by the defendant or for any other use outside of his business of resale.

"It is further contended that the said Section 68 does not apply to 'candy jobbers' in that the criminal intent is a necessary part of the crime. The provision in its terms applies to a candy jobber, if he be a person who sells or offers for sale, and such, we understand, is the business of a 'jobber'—in other words, a middleman? As we read the provision, intention is not an element of the offense, and it is not essential that it should be. (People vs. Kibler, 106 N. Y., 321; People vs. Werner, 174 N. Y., 132.) The Legislature has seen fit to constitute the act itself the offense. If the statute seems severe in isolated cases of which the one at bar may well be an example, if the uncontradicted contention of the defendant be true that he was deceived by the manufacturer, the courts have no powers of remission, limitation or multiplication in the face of the plain language of the statute. Such legislation has been justified by the paramount purpose to preserve the public health because experience has taught that if such statutes make intention to deceive and to defraud an essential part of the offense, they are of 'little use and rarely accomplish their purpose.' (People vs. Kibler, supra, at page 324.)

"The judgment must be affirmed."

The case was an important one, as it affected the sale of a commodity consumed mostly by children and settled the law on the subject,

which will undoubtedly put an end to the nefarious practice of selling

candy containing the ingredient so injurious to children.

Department of Health vs. Louis Goldfarb.—Louis Goldfarb, a milk dealer, doing business at 138 Norfolk street, Borough of Manhattan, was found guilty of selling adulterated cream in violation of Section 57 of the Sanitary Code, in the Court of Special Sessions, First Division, on August 16, 1909, and sentenced to pay a fine of \$150 and to serve five days in the City Prison.

In pronouncing sentence the Presiding Justice said:

"It's criminal enough to poison grown people, but it is a tragedy to furnish poison for the innocent little babies who are defenseless against such conscienceless men as you are. You would rather add the scant margin of profit made by adulterations and indifferent cleansing of your cans to your already large profits than guard against the deaths of these children, whose health should be your care as good citizens. Yours is a despicable offense, and I can find no excuse for your pleas of not knowing the law sufficiently. Your conscience should supply this knowledge."

CERTAIN CONVICTIONS OF IMPORTANCE.

Department of Health vs. Philip Friedman.—On May 20, 1909. Philip Friedman, of No. 151 Tompkins Avenue, Borough of Brooklyn, City of New York, was convicted in the Court of Special Sessions, Second Division, City of New York, of violating Section 42 of the Sanitary Code of the City of New York, and sentenced to serve sixty

days in the City Prison.

Friedman was a baker doing business at the above address. On January 27, 1909, an Inspector of Foods of the Department of Health visited his premises and found about thirty quarts of liquid eggs in a state of putrefaction. Liquid eggs are used in the manufacture of bread and cake, and it was indeed fortunate that the Inspector arrived in time to prevent these unwholesome eggs from finding their way into bread and cake, where their identity would be lost.

Friedman served thirty days and was finally released on bail on a certificate of reasonable doubt. The case is now pending on appeal and will be heard by the Appellate Division of the Supreme Court.

Second Department, at the March term of said Court.

Department of Health vs. Herman Katz.—The defendant, Herman Katz, was a wholesale dealer in eggs, doing business at 143 Moore Street, Borough of Brooklyn, City of New York. On the 20th day of January, 1909, an Inspector of Foods of the Department of Health visited said premises and found twenty dozen bad eggs, in violation of Section 42 of the Sanitary Code.

The said Katz was tried in the Court of Special Sessions, Second Division, City of New York, on the 20th day of May, 1909, and found

guilty and sentenced to serve sixty days in City Prison.

Motion for a certificate of reasonable doubt was made before Mr. Justice Jaycox, at a Special Term of the Supreme Court, Kings

County, and was argued on May 27, 1909, the said Justice denying the motion.

On May 25, 1909, the Department was served with notice of appeal, but, as the same was never perfected, the said defendant served his

full term in prison.

Department of Health vs. Victor Mitterstein.—On September 13, 1909, Victor Mitterstein of 239 East 10th Street, Borough of Manhattan, was found guilty by the Court of Special Sessions, First Division, City of New York, of selling adulterated cream, in violation of Section 57 of the Sanitary Code, and sentenced to serve three days in the City Prison.

Department of Health vs. Emil Jeremaier.—On June 21. 1909, Emil Jeremaier, a meat dealer, doing business in the Borough of Manhattan, was found guilty by the Court of Special Sessions, First Division, City of New York, of selling chopped meat which contained sulphurous acid, in violation of Section 68 of the Sanitary Code, and sentenced to serve ten days in the City Prison.

Department of Health vs. Louis Waldman.—On June 21, 1909, Louis Waldman, a candy dealer, doing business in the Borough of Manhattan, was found guilty by the Court of Special Sessions, First Division, City of New York, of selling candy which contained sulphurous acid, in violation of Section 68 of the Sanitary Code, and sentenced

to serve ten days in the City Prison.

Department of Health vs. Samuel Klein.—On April 21, 1909, Samuel Klein, of 309 East 10th Street, Borough of Manhattan, was convicted in the Court of Special Sessions, First Division, of a violation of Section 125 of the Sanitary Code, for leading a horse affected with glanders through a public thoroughfare, and sentenced to pay a fine of \$25.

MISCELLANEOUS ACTIONS.

Patrolman Crawford, of the Sanitary Squad, detailed to the Department of Health, Borough of Brooklyn, shot and killed a dog which was running at large on the public highway. The owner of the dog, one Irving W. Lovejoy, residing on Ocean Parkway, Borough of Brooklyn, procured a summons for the said Crawford to appear at the Seventh District Magistrate's Court, Borough of Brooklyn, to answer to the

charge of cruelty to animals.

On the return day, an Assistant Corporation Counsel appeared for the defendant and informed the Court that the said patrolman was acting under orders from the Department, in accordance with a resolution passed by the Board of Health, declaring that logs running loose and at large and unmuzzled were a public nuisance. Proof of the power of the Board of Health to pass such a resolution and to enforce the provisions thereof within the limits of the City of New York was also presented. Counsel for the plaintiff, thereupon withdrew the summons and the action was dismissed.

Special reference has already been made to certain actions in which the defendants were sentenced to serve a term in prison. In addition thereto, the synopsis herewith appended has been compiled, showing a few of the more important convictions obtained by the Department in the various Courts of Special Sessions throughout the City. In all the cases mentioned therein, fines were imposed, in default of payment of which, in any instance, the defendant would be compelled to serve a stated number of days in the City Prison in accordance with the sentence of the Court.

Certain of the more important convictions in which the amount of fine imposed exceeded the sum of \$25, for violations of Section 42

of the Sanitary Code, which provides as follows:

"No meat, fish, eggs, birds, fowl, fruit, vegetables, or milk not being then healthy, fresh, sound, wholesome, and safe for human food, nor any meat or fish that died by disease or accident, shall be brought into the City of New York, or offered or held for sale as such food anywhere in said city, nor shall any such articles be kept or stored therein."

1909.			
February	1Eipsky, SamuelF	ined	\$50.00
April	1Miller, James	64	100.00
May	17 Anderson, Harry	4.4	35.00
May	27Lebewitz, Israel	6.6	00,001
June	28 Diamond, Abraham	66	50.00
July	13Levy, Jules	6.4	100.00
August	10 Abramowitz, Louis	6.6	100.00
September	· 20 Zahn, Philip	4.6	35.00
October	14 Fader, Jacob	6.6	50.00
October	21Tobak, Edward	8.8	50.00

Certain of the more important convictions in which the amount of fine imposed exceeded the sum of \$25, for violation of Sections 52 and

53 of the Sanitary Code, which provides as follows:

"Sec. 52. No person shall have at any place where milk, butter or cheese is kept for sale, nor shall at any place sell, deliver, or offer, or have for sale, or keep for use, nor shall any person bring or send to said city any unwholesome, watered or adulterated milk, or milk known as 'swill-milk,' or milk from cows or other animals that for the most part have been kept in stables or that have been fed in whole or in part on swill, or milk from sick or diseased cows or other animals, or any butter or cheese made from any such milk, or any unwholesome butter or cheese.

"Sec. 53. No milk which is watered, adulterated, reduced or changed in any respect by the addition of water or other substance, or by the removal of cream, shall be brought into the City of New York or held, kept, sold or offered for sale at any place in said city; nor shall any one keep, have, sell or offer for sale in the said city any

such milk."

1909.		
February	15	\$35.00
March	I	30.00
"	1	50.00

Report of Corporation Counsel.

1909.			
March	1Reich, SamuelFin	ned	30.00
April	5 Bernitt, Hy. G	4.4	30.00
	8Wulf, Jacob	4.4	100.00
- "	15 Hocker, Hyman	4.6	50.00
66	15 Rothman, Leopold	4.6	00.00
May	3Wolinsky, Rosie	4.6	35.00
	13Sobler, Meyer	6.6	50.00
4.6	17Anelworth, Vitus	6.6	50,00
4.6	17Reich, Samuel	4.4	75.00
"	20 Frangheau, Isidore	4.4	50.00
"	27 Hoffman, Christopher	4.6	50.00
Tune	7Weissberg, Herman	4.6	50.00
16	7Morrison, David	6.6	50.00
66	7Knoller, William	4.4	75.00
64	21Kastink, Morris	4.6	35.00
6.6	28Goldberg, William	4.6	100.00
July	15Israel, Julius	4.4	100.00
,,	26Nicosia, Benjamin	+6	35.00
"	26Weber, Robert	4.6	50.00
August	5Ambrasins, Mary		30.00
" " "	9Ginnta, Samuel	4.6	150.00
"	16Kelly, Joseph	6.6	75.00
"	17Mulloy, James F		100.00
66	19Hill, Henry	4.6	50.00
66	23McGann, Frank	6.6	50.00
64	30Rubenfield, Charles	4.4	50.00
Sept.	23Di Candio, Gilardo	. 6	U
October	5Dittmar, Michael	6.6	250.00
66	14Raucher, Sarah	4.6	50.00
66		66	50.00
66	18Plock, Abraham	4.6	50.00
"	18 Grossman, Hyman	. 6	30.00
Manan 1	21Breakstone, Jacob	66	100.00
	r 22Blumber, William	. 6	100.00
December	r 6Haase, Herman		75.00

Certain of the more important convictions in which the amount of fines imposed exceeded the sum of \$25 for violations of Section 57 of the Sanitary Code, which provides as follows:

"No cream which is adulterated shall be brought into the City of New York, or held, kept, sold, or offered for sale in said city, nor shall any one keep, have, sell or offer for sale in said city any such cream. * * * "

1909.	
April 1Bard, Dora	
" 20Lubitz, Max	
Aug. 16 Sauter, George	50.00
Oct. 4	 75.00
Dec. 23Cohen, Philip	50.00

Report of Corporation Counsel.

Certain of the more important convictions in which the amount of fine imposed exceeded the sum of \$25.00, for violation of Section

68 of the Sanitary Code, which provides as follows:

"No person shall have, sell or offer for sale in the City of New York, any food which is adulterated or misbranded. The term food as herein used shall include every article of food and every beverage used by man and all confectionery."

1909.		
Feb. 15 Kehl, Andrew	Fined	\$100.00
April 1 May, Max	16	50.00
" 8Melinsky, Harris		50.00
June 7Lerner, Barney		50.00
" 7Kurtin, Max	4.4	50.00
" 28Panzer, J		30.00
" 28Lagattuta, Nicola		30.00
Aug. 23 Krausher, Edward	. **	250.00
Sept.30Schactner, Samuel		35.00

Certain of the more important convictions in which the amount of fine imposed exceeded the sum of \$5.00, for violations of Section

183 of the Sanitary Code, which provides as follows:

"It shall be the duty of all persons having in their possession bottles, cans or other receptacles containing milk or cream, which are used in the transportation and delivery of milk or cream, to clean or cause them to be cleaned immediately upon emptying * * *."

1909.		
Jan. 4Fischler, HermanF	ined	\$10.00
" 4 Epstein, Ellis	4.4	10.00
Feb. 15Friedman, George	**	15.00
" 15Bartolatta, Louis	**	15.00
" 15Levy, Rosie	4.6	10.00
" 15 Melicoso, Jacob	* *	10.00
Mar. 15 Miller, Sarah	**	10.00
Apr. 19 Hornick, Max		10.00
" 19Cohen, Fannie	44	10.00
May 2 Herskovitz, Nathan	**	10.00
" 10 Hornick, Max	66	10.00
" 17Weber, Charles	4.6	10.00
June 7Baer, Max	**	10.00
" 7 Mann, Joseph	4.4	10.00
" 7Solowey, Harry	66	10.00
" 7Spillholtz, Samuel	+ (10.00
" 28Ephron, Quat	6.6	10.00
Aug. 16Rauch, John	4.6	10.00
Sept. 27 Gillman, Harris	46	10.00
Oct. 4Antes, Henry	"	10.00
Nov. 15 Moseman, Charles J	46	10.00
Dec. 2Belmont, Henry	"	10.00

It will be observed, upon examination of the above list, that the defendants mentioned therein were convicted for violating the provisions of the sections of the Sanitary Code, which have reference to the adulteration of foods. In addition thereto, many other actions were successfully prosecuted in the various criminal courts throughout the city for violations of many other sections of the said Code. In the majority of these cases nominal fines were imposed, and the imposition of these fines had the effect of preventing repetitions of the offenses.

CIVIL ACTIONS.

Many actions were begun against various defendants to recover a penalty for a failure to comply with the provisions of orders and notices issued by the Department of Health. In the great majority of these cases the action was discontinued for the reason that the defendant subsequently fully complied with the requirements of the said order or notice.

A brief summary of some of the more important civil actions,

other than those already mentioned, is herewith submitted.

Department of Health vs. John Rumore.—This was an action brought to recover penalties aggregating the sum of \$100 for violating

sections 141 and 165, respectively, of the Sanitary Code.

The defendant, an undertaker, in business at No. 2089 Second avenue, Borough of Manhattan, had charge of the funeral of one Francis D'Arrigo, a child one year and two months of age, who died of measles at No. 344 East One Hundred and First street, Borough of Manhattan. The said undertaker failed to enclose the said body in a properly constructed casket, and also put up funeral decorations in the apartments of the deceased, in violation of the provisions of section 141 of the Sanitary Code. He allowed the said body to remain unburied more than twenty-four hours after death, in violation of section 165 of the Sanitary Code.

A criminal action had previously been brought against the said John Rumore, for violation of the above mentioned sections of the Sanitary Code. The Magistrate presiding held that it was necessary to show that the said undertaker had personal knowledge of the disease and its contagious character. The complaint was therefore

dismissed.

As a result of the said decision, the above-mentioned civil action was begun against the said defendant, inasmuch as his liability for the penalty prescribed was in no way affected by knowledge or intent upon his part.

The Department consented to the settlement of said action upon

the defendant paying a penalty of \$25.

Department of Health vs. Alfred IV. Herzog.—This action was brought to recover of defendant, a practicing physician in the City of New York, a penalty in the sum of \$50, for a violation of section 133 of the Sanitary Code, in that the defendant had failed to report to the Department of Health a case of diphtheria within twenty-four hours after said case was first observed by said physician.

The action was tried in the Municipal Court, Sixth District, Borough of Manhattan, City of New York, and resulted in a judgment being rendered for the Department of Health for the sum of \$25, together with the costs of said action.

The defendant paid the full amount of said judgment, in settle-

ment of the above-mentioned action.

Department of Health vs. Abraham J. Levitas and Henry B. Levitas.—This was an action in conversion to recover the sum of \$23.40 due the Department of Health for antitoxin, consigned and delivered to the said defendants at the drug store, No. 1399 Madison avenue, Borough of Manhattan, at which premises an antitoxin station had been established by the said Department.

The defendants paid the full amount of said claim in settlement of

the above-mentioned action.

Department of Health vs. John J. Benson.—This was an action in conversion, instituted on behalf of the Department of Health against John J. Benson, a druggist, conducting business at the corner of Columbus avenue and Seventy-second street, Borough of Manhattan, to recover from the said defendant the sum of \$3.91 due to the said Department for Laboratory supplies.

The defendant paid the full amount, \$3.91, in settlement of said

action.

Department of Health vs. Isaiah Lewin.—This was an action in conversion instituted by the Department to recover of the said defendant the sum of \$89.98 due to the said Department for antitoxin and virus delivered to the said defendant at drug store owned by him at No. 130 Rivington street, Borough of Manhattan, at which premises an antitoxin station had been established by the Department.

The defendant paid the full amount of said claim in settlement of

said action.

Department of Health vs. Abraham Lightstone.—The above action was instituted against the said defendant, a physician, of No. 268 Willis avenue, Borough of The Bronx, for a violation of section 161 of the Sanitary Code, in that he failed to report the birth of one Lillian Gardner, born October 7, 1909.

The Department consented to the settlement of said action upon

the said defendant paying a penalty of \$25.

Department of Health vs. Joseph H. Mittelman.—This was an action brought against the said defendant, a practicing physician, of No. 116 Columbia street, Borough of Manhattan, to recover penalties aggregating the sum of \$150, for three violations of section 133 of the Sanitary Code, in that he failed to report to the said Department three cases of scarlet fever, occurring at No. 97 Cannon street, Borough of Manhattan, which he attended professionally.

The said defendant paid the full amount, \$150, together with the

costs, in settlement of said action.

Department of Health vs. Quillas A. Meyers.—This was an action in conversion instituted against Quillas A. Meyers, a druggist, of Lexington avenue and One Hundred and Thirteenth street, Borough of

Report of Corporation Counsel.

Manhattan, for failure to pay the sum of \$19.53 due the Department

for laboratory products disposed of by him.

The said defendant settled the above action by paying the sum of \$13.45 in cash, and also furnishing free antitoxin slips, properly filled out and signed, equal to the balance of \$6.08.

Supreme Court,

Appellate Division, Second Judicial Department.

Woodward, Jenks, Burr, Rich and Miller, JJ.

THE PEOPLE OF THE STATE OF NEW YORK, Respondents,

Isidor Greenberg,
Appellant.

November Term, 1909.

Appeal by the defendant from a judgment of conviction of the Court of Special Sessions of Kings County rendered on the 27th day of May, 1909.

Jenks, J.— The appellant was convicted of a violation of the Sanitary Code of the Board of Health of The City of New York, in that he did have and offer for sale certain confections that contained sulphurous acid, an ingredient deleterious and detrimental to health, and in particular in violation of the sixty-eighth section of the said Code, that provides: "Sec. 68. No person shall have, sell or offer for sale in the City of New York any food which is adulterated or misbranded. The term food as herein used shall include every article of food and every beverage used by man and all confectionery. Food, as herein defined, shall be deemed adulterated * * * (g) If, in the case of confectionery, it contains terra alba, barytes, tale, chrome yellow or other mineral substance or poisonous color or flavor, or other ingredients deleterious or detrimental to health, or any vinous, malt or spirituous liquor or compound or narcotic drug." He was sentenced to pay a fine of ten dollars or in default to imprisonment in the City Prison for five days.

It is urged against the judgment that the mere possession of such confections is not an offense under this section and that there was no proof that the defendant had the confections for sale or offered them for sale. Buckley, an inspector, testified that he visited certain premises where the defendant carried on a "candy jobber" business, that he saw the defendant at his place of business, informed him that the witness was an inspector come to examine his candies, that he examined a number of candies in boxes and took six samples thereof, that he paid the defendant ten cents for the six samples which were taken and delivered to the Chemist of the Health Department. The witness fur-

ther testified that he asked how much he owed to the defendant for these samples, whereupon the defendant "told me ten cents, and I paid him ten cents." As the witness asked how much he owed for the confections, and the defendant named a price which was paid and accepted, this transaction was a voluntary sale, unaffected by the circumstances that it was made to a buyer who theretofore has said that he was an inspector who desired to examine his candies. Moreover, we think that the record justifies the conclusion that the defendant had for sale or was offering for sale these confections. They were taken from the confections kept in the defendant's place of business. The defendant admits that he was a "jobber" of candy, that he sold candies to the stores, that he had purchased these candies from a manufacturer and that he had them at his place of business. There was no contention that these confections from which the samples were taken were bought for consumption by the defendant or for any other use outside of his business of resale. It is further contended that the said section 68 does not apply to "candy jobbers" in that the criminal intent is a necessary part of the crime. The provision in its term applies to a candy jobber, if he be a person who sells or offers for sale, and such, as we understand, is the business of a "jobber"—in other words, a middleman. As we read the provision, intention is not an element of the offense, and it is not essential that it should be. (People vs. Kibler, 106 N. Y., 321); People vs. IVerner, 174 N. Y., 132). The Legislature has seen fit to constitute the act itself the offense. If the statute seems severe in isolated cases of which the one at bar may well be an example, if the uncontradicted contention of the defendant be true that he was deceived by the manufacturer, the courts have no powers of remission, limitation or multiplication in the face of the plain language of the statute. Such legislation has been justified by the paramount purpose to preserve the public health because experience has taught that if such statutes make intention to deceive and to defraud an essential part of offense, they are of "little use and rarely accomplish their purpose." (People vs. Kibler, supra, at page 324).

The judgment must be affirmed.

Court of General Sessions.

New York County.

The People of the State of New York against Abraham Korn.

This is an appeal from a decision of Magistrate Peter T. Barlow, rendered on the 17th day of December, 1907, at the City Magistrates' Court, First Division, Third District, finding the defendant guilty of a violation of section 108 of the Sanitary Code. The defendant, upon his conviction, was fined two dollars.

That portion of the section which the defendant is charged with

violating provides:

"And it shall be the duty of every owner, lessee or agent of any such building or place of business to cause to be separated and put into their respective receptacles all such materials and substances (ashes, garbage and refuse) and such receptacles shall not be filled to within four inches of the top thereof."

This ordinance was reasonable. No contention to the contrary is made. The Board of Health had the power to make it by virtue of section 1223 of the Greater New York Charter, and the Legislature had

the power to enact the section of the Charter referred to.

Any violation of the Sanitary Code is made a misdemeanor by section 1222 of the Charter. The evidence before the Court sustained the charge of Jeremiah Perkins, a police officer detailed to the Street Cleaning Department, to the effect that he visited the premises in question, No. 131 East Broadway, on December 6, 1907, at about one o'clock in the afternoon, and that he found in a certain can in front of said premises ashes and garbage mixed. It was further in evidence that the defendant was the owner and personally in charge of the premises in question (S. M., p. 6).

Motion was made to dismiss on the ground that it did not appear that the defendant personally mixed the ashes and garbage, or that the employee of the defendant, being the janitor of the premises, personally mixed the ashes and garbage, and therefore it did not appear that the defendant failed to cause the ashes and garbage to be separated and put in different receptacles. The motion was denied and an

exception taken.

The can in question appears to have been at the time of inspection in the area or within the stoop line of the premises, but it does not appear how long it had been there. It is now urged upon appeal that it would be an improper construction of the section in question to hold that the owner is at his peril obliged to see to it that ashes and garbage are not mingled in a receptacle while the receptacle is

within the areaway or within the stoop line of his premises.

It is practically urged that the responsibility of the owner for the condition of the receptacle ceases after he has placed it outside of the building and within the areaway. This contention, if sustained, would incorporate a qualifying clause into the ordinance and, in my judgment, would do much to destroy its utility. In the view that I take of the ordinance, the defendant was chargeable with the duty of causing the ashes and garbage to be placed in separate receptacles. The law provided that he might discharge this duty through another, but if he sought to delegate the performance of the duty to another, he took the risk of being held liable for a violation of the law in the event that that other failed to discharge the duty.

Judgment affirmed.

Dated New York the 4th day of February, 1908. Thos. C. T. Crain,

Judge, Court General Sessions.

People ex rel. Charles F. Bandel against

The Department of Health of The City of New York.

Application for a mandamus to compel the Board of Health to register the relator as a physician. The motion was argued before Mr. Justice Dickey of the Supreme Court, Second Department, and in granting the motion Judge Dickey rendered the following opinion:

"Before any recognition by statute was given to the practitioners of osteopathy, section 153 of the Public Health Laws had a provision making it a misdeameanor for any one to 'practice medicine' without license and lawful registration, and one was prosecuted and convicted under this act. On his appeal, it was held, 117 Appellate Division, 546, that one not licensed to practice medicine, who advertised himself as a doctor, who takes payment and consultations, was properly convicted of a violation of the statute, although he administered no medi-

cine or used no surgical instruments.

"So it seems that the practice of medicine does not consist of merely administering drugs or the use of surgical instruments. The Courts say 'the day has passed when it is thought that a physician's advice was of no use unless he ordered a dose of medicine.' By chapter 344 of the Laws of 1905 what was meant of practitioners of medicine was clearly defined with these words: 'A person practices medicine within the meaning of this act, except as hereinafter stated, who holds himself as being able to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity or physical condition and who shall either offer or undertake by any means or method to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity or physical condition.'

"By this same act osteopathy is recognized and its practice is regulated with the provision for admission to practice for those qualified. In my opinion, the lawmakers intended to and do make osteopaths practitioners of medicine, and also make them physicians, because subdivision 8 of section 1 of this act says that a physician means a practitioner of medicine. It is claimed that the practice of osteopathy first began in the State of Missouri, and by the statutes of that State it is specifically provided that osteopathy is not the practice of medicine. It was in the power of our legislators to make a similar provision, but they did not do so. On the contrary, they defined the practice of medicine so that it must be interpreted to include the work done by the

osteopaths in the practice of their profession.

"The Sanitary Code of this city provides the word physician shall include every person who practices about the cure of the sick and injured or who has charge of any person sick, injured or diseased.

"So it is clear to my mind that osteopaths are physicians and practice medicine, and except for restrictions put upon them by chapter 344 of the Laws of 1905, prohibiting them from administering drugs and performing surgery with the use of instruments, they are entitled

to all the rights and subject to all the privileges of other physicians and medical practitioners. The fact that their degree is O. D., instead of M. D., makes no difference, so far as to register and grant death certificates is concerned. The study required of them before their admission is of such general and extensive character as to fully fit them to certify as to the cause of death of a patient.

"Application for mandamus granted."

Supreme Court, Kings County, Joseph Cohen vs. the Board of Health of the City of New York-In the month of October, 1908, the plaintiff commenced an action against the Board of Health by reason of the refusal of the Board to grant a permit to slaughter chickens at 614 Flushing avenue, in the Borough of Brooklyn. The rules of the Department require the approval of a site at which to slaughter chickens and this approval must be first obtained; after approval of the site, plans and specifications of the building must be submitted to the Board for its approval; and when the plans and specifications have been approved and the building is erected, an inspection is made to determine whether the plans and specifications have been followed and the building erected in accordance therewith. Then a permit to slaughter chickens is granted in accordance with the requirements of the Code. In the present case Mr. Cohen did not have a site approved nor were plans and specifications approved nor was a permit obtained to slaughter chickens. Notwithstanding he proceeded to fit up a building at the premises aforesaid, although previously similar applications for a slaughter house on the same block had been denied. When he understood that the Department would not give him a permit to slaughter chickens, he commenced his present action and moved for temporary injunction. Mr. Justice Stapleton, who heard the motion, denied the same on November 22, 1908, and handed down the following opinion:

"The plaintiff moved for a temporary injunction restraining the defendant from interfering with the plaintiff in keeping, selling, slaughtering, storing and in otherwise disposing of poultry at 614 Flushing

avenue, in Borough of Brooklyn.

"He alleges in his complaint that he made an application to the defendant, the Board of Health, for a permit to keep, sell and slaughter live poultry on premises, that the application was denied without notice and without giving him any hearing, that he complied with all the rules and regulations prescribed by the Board of Health, that he spent large sums of money fitting up his premises for the purpose of keeping, selling and slaughtering live poultry that the defendant intended instituting civil and criminal action against him, for the purpose of preventing him from carrying on the business for which he sought a permit. These are all the material allegations in his complaint.

"The acts sought to be enjoined are the prosecution of civil and criminal proceedings. The defendants present no answer to the complaint, and submit no affidavits upon this motion. The plaintiff does not prove that the section of the Sanitary Code under which the defendants have the right to grant or control the permit. Ordinarily the Court could not take Judicial notice of it. The Sanitary Code of the City of New York, however, was ratified and confirmed by the Legislature, by

chapter 135 of the Laws of 1880. Section 575 of the Laws of 1882, chapter 410, The Greater New York Charter (Laws of 1897, chapter 378, section 1172), and amended charter, Laws of 1901, chapter 466.

"Section 79, Sanitary Code, by the statute adopted and declared to be binding and in force, except as the same may, from time to time, be revised, altered or annulled, as provided in the Greater New York

Charter as follows:

"'No live chickens, geese, ducks, or other fowls shall be brought into or kept, or held, or offered for sale, or killed, in any yard, area, cellar, coop building, premises, or part thereof, or in any public market, or on any sidewalk, street or other place within the built-up portions of the City of New York, without a permit from the Board of Health and subject to the conditions thereof.'

"The burden of showing change in its provisions after its adoption by the Legislature is therefore upon the plaintiff. Any violation of the Sanitary Code is a misdemeanor and pecuniary penalties for violation of its provisions may be provided for and recovered by Board of Health in a civil action. Greater New York Charter, section 1172.

People vs. Davis, 78 App. Div., 571.

The motion of the plaintiff therefore is an appeal to a court of equity to restrain public officers from enforcement of the criminal law. This appeal equity will not heed. Delaney vs. Flood, 183 N. Y., 323.

"The Court of Appeals in the case of the Metropolitan Board of Health 28. Herster, 37 N. Y., 661, 664, 672, reversed a judgment granting an injunction preventing the Board enforcing an order forbidding slaughtering cattle in a densely populated part of the City.

"This is not an application for an order enjoining the abatement of a nuisance involving the destruction of or injury to private prop-

erty when a nuisance is fact and in law does not exist.

"If the action of Board of Health in refusing the plaintiff a permit was arbitrary, tyrannical or unreasonable he may have remedy by an alternative writ of mandamus. People *ex rel*. Lodes 7's. Board of Health, 187 N. Y., 187, 194, 196.

"Motion for a temporary injunction must be denied.

"L. D. S., J. S. C."

Supreme Court, Kings County, John Hill vs. Thomas Darlington and Walter Bensel—This was an application made to the Court to show cause why the defendant should not be restrained from interfering with the occupancy of the tents erected on Surf avenue, Coney Island. The Board issued an order requiring certain things to be provided in and about the tents so that no nuisance might arise.

The orders were not complied with and the Board thereupon ordered the tents vacated. The plaintiffs on September 9, 1908, obtained an order to show cause returnable September 14, why the Department should not be prohibited from interfering with the tents, and in the meantime and until the hearing of the motion were granted a temporary

injunction.

On the application of the Department of Health made on the 10th of September, the injunction was vacated on the ground that the Charter

Report of Corporation Counsel.

provides that no injunction shall be granted against the Department or any of its officers except upon five days' previous notice.

The motion under the order to show cause came on for hearing on the 15th. Judge Aspinall, before whom the motion was argued, denied the plaintiff's application and handed down the following opinion:

"Supreme Court, Kings County, John Hill vs. Thomas Darlington, et al.—The complaint alleges that the defendant Darlington is the Commissioner of Health and the defendant Bensel is Sanitary Superintendent of the Board of Health of the City of New York. The acts complained of by the plaintiffs grew out of the official positions of these defendants. Section 1192 of the City Charter provides:

"Said Board of Health may sue and be sued in and by the proper name of the Department of Health of the City of New York, and not

in or by the name of members of the said Board or any of them.

"This proceeding is therefore improperly brought. Motion denied without prejudice and without costs.

"J. ASPINALL, J. S. C.

"September 15, 1908."

REPORT OF THE BUREAU OF RECORDS.

POPULATION.

The estimated population of the city for the year 1909 was 4.564.792, this figure being obtained by assuming that the same rate of increase existing between the Federal Census year 1900 and the State Census of 1905 continued in operation through the years following. The rate of increase in the intercensal period of 1900-1905 and the resultant estimates of the borough populations are as follows:

Borough.	Annual Rate Per Cent. of Increase.	Estimated Population, July 1, 1909.
Manhattan The Bronx Brooklyn Queens Richmond.	2.6901 6.2599 3.0989 5.3178 1.6809	2,354,576 348,057 1,539,235 244,947 77,977
City of New York	3.1530	4,564,792

This method of estimating the population has been in vogue in this Department for twenty-five years, and has been called the Registrar General's method, as followed in Great Britain for many years; it is a compounding of the population based upon geometrical progression, as compared with the ordinary or arithmetical method.

GENERAL STATISTICS.

BIRTHS.

There were 122,975 births reported during the year, against 126,862 in 1908, a decrease of 3,887, distributed among the boroughs as follows: Manhattan, 3,276; The Bronx, 31; Brooklyn, 412; Queens, 107, and Richmond, 61. In Manhattan the birth rate fell from 29.17 per 1,000 of the population in 1908 to 27.01 in 1909, a loss of 7 per cent.; in The Bronx the fall was from 29.32 to 27.51, a loss of 6 per cent.; in Brooklyn, from 28.07 to 26.96, a loss of 4 per cent.; in Queens, from 27.61 to 25.78, a loss of almost 7 per cent.; in Richmond, from 26.80 to 25.57, a loss of 5 per cent; in the greater city, from 28.68 in 1908 to 26.94 in 1909, a loss of 6 per cent.

, By reason of the passage of a State law giving the Board of Health power to regulate the practice of midwifery in this city, and the promulgation of rules and regulations by the Board in 1908, it was thought that the percentage of births reported by midwives would

be lower than in previous years, as a considerable number of permits to practise was refused to those not able to fulfil the requirements demanded. The result was that the number of births reported by midwives in 1908 fell from 55,652, representing 44 per cent. of all reported, to 49,616 births and 40 per cent. in 1909. It does not follow that this decline in the birth rate for the year 1909, compared with that of 1908, was due to the concealment of continued practise of midwifery upon the part of the former midwives who were refused licenses; a comparison of the nativities of the mothers, as shown in the table of births by nativities, page 220, with a similar table for the previous year, shows that the births to Italian, Russian, Polish and Austro-Hungarian mothers (by whom midwives are chiefly employed) showed exactly the same percentage of the total births reported as in the preceding year—that of the highest birth rate in the history of the city.

The following table shows the number of births reported and birth rates per one thousand of the entire population since the formation of the greater city in 1898; it must be borne in mind that the births of this city are not reported in their entirety, as some still escape registration by reason of the negligence of the medical attendant or midwife.

Births Reported and Birth-rates by Boroughs and City, 1898-1909.

Borough.	Number of Births.	Rate.	Number of Births.	Rate.	Number of Births.	Rate.
	18	98.	189	99.	190	00.
Manhattan The Bronx. Brooklyn Queens Richmond. City of New York.	49,835 3,524 21,395 2,826 1,348 78,928	27.54 21.07 15.54 20.62 21.14 24.12	48,397 3,671 21,203 2,943 1,418 77,632	26.44 19.96 18.73 20.27 21.67	50,494 4.122 22,572 3,084 1,449 81.721	27.23 20.45 19.34 20.07 21.59

	1901.		1902.		. 1903.	
Manhattan The Bronx. Brooklyn Queens Richmond. City of New York		26.25 18.79 18.40 19.32 20.71	52,291 5,220 23,507 3,198 1,428 85,644	26.74 22.94 18.91 18.76 20.58 23.36	56.078 6,053 27,292 3,802 1,530 94,755	27.93 25.03 21.29 21.18 21.68

	1904.		1905.		1906.	
Manhattan The Bronx Brooklyn Queens Richmond City of New York	59,196 6,033 28,859 3,871 1,596	28.71 23.48 21.89 20.48 22.25 25.52	60,202 6,659 30,972 4,355 1,692	28.43 24.39 22.73 21.87 23.19	63,005 7,306 34,538 5,050 1,873	29.11 25.18 24.59 24.08 25.25 26.91

Births Reported and Birth Rates by Boroughs and City, 1908-1909-Continued.

	1907.		1908.		1909.	
Manhattan The Bronx Brooklyn Queens Richmond.	65,771 8,487 38,632 5,825 2,005	29.46 -27.53 26.68 26.38 26.59	66,875 9,605 41,906 6,421 2.055	29.17 29.32 28.07 27.61 26.80	63.599 9,574 41,494 6,314 1,994	27.01 27.51 26.96 25.78 25.57
City of New York.	120,720	28.17	126,862	28.68	122,975	26.94

The number of reported births to native mothers was 39.771, or 32.4 per cent. of the total, and to foreign mothers 83,180, or 67.6 per cent., and of these latter 61,686, or 73 per cent., were to Italian, Russian, Polish and Austro-Hungarian mothers. Another view of relative fecundity of native versus foreign mothers may be had by calculating a birth rate per one thousand females at all ages according to their nativity, and it will be found that the preponderant prolification of the foreign-born mother is even more evident.

Estimated number of native-born females	1,437,104
Number of births by native-born mothers	39,771
Birth rate per 1,000 native-born females at all ages	27.67
Estimated number of foreign-born females	805,835
Number of births by foreign-born mothers	83,187
Birth rate per 1,000 foreign-born females at all ages	103.23

For every four children born of native mothers, fourteen were born of foreign mothers; almost 73,000 of the births reported were to foreign mothers whose knowledge of the English language was extremely meagre; 25,173, or 20.5 per cent. of all births, were to Italian mothers; 25,131, or 20.4 per cent., Russian Polish; 11.372, or 9.2 per cent., to Austro-Hungarian; 8,091, or 6.6 per cent., to Irish; 5,124, or 4.2 per cent., to German, and 8,271. or 6.5 per cent., to other foreign.

As usual, the number of male births exceeded the female, the figures being 63,153 and 59,822, respectively; 1.938 colored and 17 yellow births were reported; 73.359 births were reported by physicians and 49,616 by midwives; 1.772 apparently illegitimate, 970 twin and

13 triple births were reported.

MARRIAGES.

There were 41,513 marriages reported in the entire city during 1909, against 37,499 in the year previous, an increase of 4.014. The marriage rate of 19.19 persons married per 1,000 during the year 1909 was an increase over that of 1908 by 2.23. In the latter year the effects of the enforcement of the Marriage License Law and the panicky financial conditions produced the lowest marriage rate since the formation of the greater city in 1898.

The following table gives the number of marriages and rates reported by boroughs and city since 1898:

Borough.	Number of Marriages.	Rate.	Number of Marriages.	Rate.	Number of Marriages.	Rate.
	189	S	189	9.	190	
Manhattan	20,118 551 7,129 636 351 28.885	3.89 6.51 4.64 5.50 8.83	20,836 904 7,612 710 412 30,474	11.36 4.92 8.48 4.89 6.30	21.979 948 8.214 768 428 32.247	11.85 4.69 7.04 5.00 6.38 9.36

	190	1.	1902	2.	1903	
Manhattan The Bronx. Brooklyn Queens. Richmond. City of New York.	22,895 t,067 8.303 777 405 33,447	12.02 4.80 6.89 4.80 5.93	24,766 1,227 9,014 768 432 36,207	12.67 5.03 7.25 4.51 6.23 9.88	25,911 1,354 9,616 855 438 38,174	12.90 4.76 7.50 4.76 6.21

	1903	1904.		1905.		1906.	
Manhattan The Bronx Brooklyn Queens Richmond City of New York	26,500 1,465 10.019 921 531 39,436	12.85 4.97 7.61 4.67 7.40	28,408 1,820 10,778 1,092 573 42,671	13.42 6.67 7.91 5.48 7.86	32.342 2.027 11,966 1,420 600	14.87 6.99 8.51 6.77 2.09	

	1907	1907.		1908.).
Manhattan The Bronx Brooklyn Oueens Richmond City of New York	33,829 2,268 12,916 1,490 594 51,097	15.15 7.36 8.92 6.75 7.88	23,944 1,639 10,171 1,311 434 37,499	10.44 5.00 6.81 5.64 5.66	26,689 1,770 11,110 1,504 440 41,513	11.33 5.08 7.22 6.14 5.64

There were reported the marriages of 38,175 bachelors, 3,064 widowers and 274 divorced males to 38,770 spinsters, 2,404 widows and 339 divorced females, the spinsters outnumbering the bachelors by 595, the widowers the widows by 660, and the female divorcees the male by 65; there were 31,143 natives married as compared with 51,183 foreigners; 12,709 certificates were filed by Roman Catholic priests, 12,234 by Protestant ministers, 10,834 by Jewish rabbis, 24 by leaders of the Ethical Culture Society, and 5,712 by civil officials.

DEATHS.

Comparison of the Mortality of the Year 1909 with that of Previous Periods.

The following table gives the populations, deaths and the death rates per 1,000 from all causes for the four decennia included in the years 1869-1908, and the year 1909, in the territory covered by the present Boroughs of Manhattan, The Bronx and Brooklyn, the Boroughs of Queens and Richmond being excluded by reason of the absence of complete mortality returns therein previous to the year of the formation of the greater city in 1898.

Periods.	Average Population.	Average Deaths.	Average Rates Per 1,000	Decrease Per Cent. from Previous Decendium.
1869-1878 1879-1884 1889-1808 1899-1908	1,470,562 1,084,800 2,713,660 3,602,706 4,241,868	39,128 50,452 62,818 67,877 68,752	26.61 25.42 23.15 18.84 16.21	 4 9 19 14

A glance at the table above shows that a continuous decrease in the rate has prevailed during the period covered, a decrease comparing the decennia in the order of arrangement corresponding respectively to 4, 9 and 19 per cent.; comparing the rate for the year 1909 with that of the immediately preceding decennium, a decrease of 14 per cent. is shown, and with that of the first decennium, a decrease of 39 per cent.; to put it otherwise, for every 100 persons who died in the first decennium mentioned only 61 died during 1909; or if the death rate ascribed to the decennium 1869-1878 be applied to the population of the three boroughs in the year 1909, then 112,876 persons would have died, whereas, the actual number of deaths was 68,752, a saving of 44,115 lives.

This tremendous reduction in the mortality is due to the vigilance upon the part of the health officials in seeking out preventable causes of death and applying remedies for their total extirpation when possible, and when not, the restriction of their activities to limited zones.

TYPHUS FEVER.

This dreaded contagious disease has entirely disappeared from the mortality reports during the past seventeen years, with the exception of that of 1898, when one death was reported in which the cause of death was stated as probable typhus fever, the correctness of the diagnosis being very much open to question. In January, 1892, the steamship "Massilia" arrived at this port, and landed 248 Russian Hebrews and over 400 Italians. Within a week typhus fever broke out among those housed in this city, and 138 cases were found among the immigrants; later, 114 cases developed among residents of the

city, 31 of which latter were nurses, helpers and policemen; the total number of cases amounted to 241, with 45 deaths, a case mortality of 18 per cent.

The following table gives the deaths and rates for the decennia

since 1868 and the individual years 1908 and 1909:

Period.	Number of Deaths.	Rate Per 10,000.
1868-1877	716 317 251 1	.50 .20 .10

ASIATIC CHOLERA.

In the year 1832 there were attributed 3,513 deaths to this cause, in 1834 there were 971 deaths reported, in 1849 the deaths numbered 5,071, in 1854 the number fell to 2,509, and in 1866—the year of the organization of the Board of Health—1,137 deaths; the deaths in decennial groups were as follows: 30 in 1868-1877, none in 1878-1887, 9 in 1888-1897, and none since 1892, when 9 deaths occurred.

SMALL-POX.

Out of every 100,000 of the population 48 died in the decennium 1868-1877, 7 in that of 1878-1887, 3 in that of 1888-1897, 2 in that of 1898-1907; one death was reported in 1908, and 2 in 1909; comparing the last decennium quoted with the first, a reduction of 95 per cent. has taken place. The number of deaths in the old City of New York, the decennium 1867-1876 amounted to 4,471, and of these 54 per cent. were under 15 years of age; during the succeeding three decennia the number of deaths amounted to 2,065, and of these 50 per cent. were under 15 years of age, that is, the combined deaths for thirty years, after the effects of free vaccination began to be felt, was 46 per cent. less than the total number of deaths in the previous ten years, not taking into consideration the more than doubling of the average population for the periods compared. Before 1876 this disease, constantly present, recurred every one or two years with greater intensity, the waves of recurrence lasting for two years; since that year the epidemics have been far milder and recurred at first every four years, with waves lasting two years, then a period of recurrence at the end of six years, with a wave lasting two years, and has not recurred for seven years, this last postponement of the recurring wave being due to the tremendous number of vaccinations performed in 1902 and 1903. amounting to 1,026,000.

As the immunity conferred lasts about six or seven years, it is advisable that a preventive campaign be begun next fall, in order that

the number of non-immunes be reduced to a minimum.

Typhoid Fever.

The following table gives the decennial rates from 1868-1907, and for the years 1908 and 1909:

	Rate Per
Period.	100,000.
1868-1877	 31
1878-1887	 28
1888-1897	 20
1898-1907	 18
1908	 12
1909	

If we compare the rates for the years 1908 and 1909 with those of the previous periods, an immense reduction will be noticed, amounting to 61 per cent., comparing the first decennium with the year just passed. The physicians of the present day are far ahead of those of former years in the ability to diagnose typhoid fever as a disease clearly distinct from all others; the bacteriologist was unknown thirty or forty years ago; to-day he is the right-hand man of the busy practitioner, aiding him in his diagnoses of various diseases, tuberculosis, diphtheria, typhoid fever; we must admit that in the earlier decades of the administration of the Board of Health many causes of death were reported under headings that in recent years would mean rejection as insufficient or indefinite; for example, under the heading of typhoid fever 4,445 deaths were enumerated in the first decennium, and 3,626 under that of malarial fevers, while under the headings in the decennium 1898-1907 the figures were 6,349 and 1,112 respectively, the ratio of typhoid to malarial deaths in the first decennium being five to four, and in the last, twenty-four to four; there has been undoubtedly a considerable transference in recent years from the malarial death column to that of typhoid, and the designation of malaria as a cause of death is apt to be followed by a letter of inquiry as to the complications attendant upon the case, except in those pernicious types of malaria having origin in tropical latitudes. Well may we question the accuracy of the diagnoses of malarial fever forty years ago, and rightly may we consider the mortality from typhoid fever at that time as far below the actual!

MALARIAL FEVER.

In the following table the rates per 100,000 are shown for the decennia between 1868 and 1907, and for the individual years 1908 and 1909:

																	Rate Per
Period	1.																100,000.
1868-18;	77				 												26
1878-188																	
1888-189	97				 				٠								18
1898-190	07			 													3
1908																	0.8
1909						 									 		0.9

There were 40 deaths reported from malarial fevers during 1909, and many of these were of the pernicious type, contracted in tropical climates.

MEASLES.

The deaths and rates from this cause since 1868 were as follows:

	Rate Per
Period.	100,000.
1868-1877	 28
1878-1887	 37
1888-1897	 31
1908	 23
1909	 22

SCARLET FEVER.

The decrease in the mortality from this cause has been a tremendous one, as evidenced by the following figures:

4	Rate Per
Period.	100,000.
1868-1877	. 91
1878-1887	. 74
1888-1897	. 39
1898-1907	. 20
1908	. 31
1909	. 17

Comparing the first with the last decennium above given, a decrease of 78 per cent. will be found; in other words, if the rate of 1868-1877 prevailed during the year 1909, there would have been 3,860 deaths recorded for this disease in the Boroughs of Manhattan, The Bronx and Brooklyn, whereas, as a matter of record, there were only 734 deaths recorded, a saving of 3,126 lives.

DIPHTHERIA AND CROUP.

The rate from this cause was 154 in the decennium 1868-1877, which rose to 170 in the following decennium, fell to 130 and then to 53 in the succeeding decennia; in 1908 the rate fell to 40 and in 1909 to 38; in the year 1895 diphtheria antitoxin was introduced in the treatment of this dread disease and in consequence the deaths which totaled 53,256 in the fifteen years previous to the appearance of this life-saving factor, amounted to 31,571 in the succeeding fifteen years, the rates for the time periods compared being 160 and 61 per 100,000, respectively, a decrease of 62 per cent.

WHOOPING COUGH.

Under this heading 5,212 deaths and a rate of 37 per 100,000 were recorded in the decennium 1868-1877, and 4,124 deaths and a rate

of 12 in that of 1898-1907, a decrease of 68 per cent.; that is, three children succumbed from this disease in the former to one in the latter decennium.

PULMONARY TUBERCULOSIS.

There were 53,742 deaths reported under this heading in the decennium 1868-1877, with a mortality rate of 376 per 100,000 of the population. This high rate fell gradually until in the decennium of 1898-1907 it reached the comparatively low figure of 224, a decrease of 40 per cent. Notwithstanding this fall in the rate this disease holds the second place as a mortality factor. The campaign of prevention and education introduced by this Department in 1896 is still being fought with unabated, even increased vigor, and with gratifying results.

DIARRHOEAL DISEASES.

The mortality rate of 30.3 per 1,000 children under the age of five years in the decennium 1868-1877 fell to 23.4, then to 19.7 and finally to 13.5 in the subsequent decennia. In 1908 the rate was 11.8 and in 1909 it reached the lowest rate on record, 10, which, compared with the rate in the first decennum, gives a decrease of 66 per cent. The fall in this rate is especially noticeable if we consider the factors to be contended with in our efforts to minimize the ravages of this infection. The foremost obstacles to be met with are a supply of pure milk, the extremely high temperature prevailing in the summer months, the density of the population and the high birth rate among the foreign-born, non-English speaking residents. Special attention was paid to this latter factor, and a large increase in the force of district nurses was made before the summer season began, which undoubtedly had considerable effect upon the mortality, admitting that on the whole the summer might be classified as a "cool" one. The efforts of this Department to secure a constant supply of pure milk for use by the inhabitants are well known, and have been followed by admirable success, but pure milk per se will not lessen the mortality rate from diarrhoeal diseases unless it is supplemented by education of the parent as to the necessity of proper and clean feeding, and this latter factor is being driven home into the minds of the parent by the nurses in the employ of the Department who visit the homes of the poor and constantly reiterate the preachings of cleanliness and intelligent methods of infant feeding.

Acute Respiratory, Cancerous, Organic Héart and Kidney Diseases.

In contrast to the reduced mortality in the causes mentioned previously, that of the causes not amenable to sanitary intervention has increased considerably. The rate from the acute respiratory diseases, bronchitis and pneumonia, has increased 8 per cent., the rate of 291 per 100,000 in the decennium 1868-1877 increasing to 315 in that of 1898-1907. The mortality from cancer and sarcoma has increased at an

Decrease in 19 from comparise with corrected d cennial average	220 91 91 134 134	592 218 141 1,266	3,648	1,464	342	128	513 20 9 743 103	14,604	55
Increase in 190 from comparison with corrected de cennial average.	130		767	: :	: :	: :		3,159	11,445
.6061	564 4 04 7867 104 104	335 8,643 1,268	3,260 3,260 1,0,175 1,051	5,126	3,248	71,9	\$97 182 890 3.331 4,189	74,105	5
*Corrected average.	784 131 867 920 920 458	2,390 2,553 1,535 1,535	6,000 6,000 7,514 1,825 12,020	6,590	3,590	5,862	1,110 208 899 4,074 4,292	85,550	11,445
Average 10 years.	111 773 773 773 785 773 773 773 775	1,950 467 1,298 1,298	524 5,839 6,351 1.543	5,571	3,034	716	938 176 760 3.444 3,627	72,316	:
.8061	536 34 34 1,333 1,333	8,869 1,288	9,297 9,297 9,508	5,977	3,039	669	636 231 994 3,512 3,497	73,072	
·2061	740 69 728 796 393	1,740 714 116 8,999 1,264	5,662 8,788 11,848	6,346	3,186	783	683 285 710 3,916 3,918	79.205	
·9061	639 64 64 64 64 64 64 64 64 64 64 64 64 64	241 241 8,955 1,239	630 630 630 630 10,319	5,783	3,158	763	890 253 707 3,781 4,069	76,203	
	649 53 53 473 6473	311 311 8,535 1,123 2,875	589 7,501 6,437 1,417 9,783	5,877	3,109	815	723 165 660 3,651 3,933	73,714	:
.4061	661 91 195 195 195 195 195 195 195 195 195	8,512 1,176 2,709	6,959 6,959 6,251 1,735	5,647	2,994	737	933 176 853 4,162 4,182	78,060	
·£061	653 508 734 324	8,020 1,284 2,608	630 630 5,234 5,770 1,560 9,714	4,443	2,803	637	811 805 3,126 3,584	62,864	
1902	764 125 310 710 940 605	2,509 7,509 1,314 2,450	5,478 3,478 1,898 1,898	4,938	2,812	642	959 127 772 2,853 3,228	68,112	
.1001	727 197 1,162 289 289	8,135 1,254 2,463	5,7,732 5,363 1,683 9,1683	5,796	2,873	4,707	1,231 112 713 3,811 3,216	70,720	:
.0001	216 216 816 816 777 777	8,154 8,154 1,516 2,291	357 403 5,648 4,417 1,964 10,482	5,744	3,321	711	1,212 140 761 3,010 3,857	70,872	
·66gr	546 167 167 188 533 533	267 8,015 1,522 2,136	301 444 4,984 1,983 8,531	5,160	3,042	725	1,305 137 628 2,620 2,787	65,343	
Cause of Death.	Typhoid fever Malarial fever Small-pox Measles Scarlet fever Whooping cough		d y		Other diseases of digestive system system strict disease and acute nephritis.	Congenital debility and parallel parallel (fined)	Old age. Homicides. Suicides. Accidents. All other causes	Total	Balance

* This column represents the figures of the decennial average corrected to correspond with the increase in population.

concrimous pace; in the decennium 1868-1877 the number of deaths reported was 5,556 and the rate 39 per 100,000, and in that of 1898-1907 the deaths numbered 23,648 and the rate reached the high figure of 67 per 100,000, an increase of 72 per cent. in the rate. While there is no doubt as to the more accurate certification of causes of death contributing to this increase, still it must be admitted that this explanation does not explain, save in part, the increased mortality recorded (see page 242, Annual Report of year 1902). The rate per 100,000 from organic diseases of the kidneys increased from 67 in the decennium 1868-1877 to 139 in that of 1898-1907, an increase of 107 per cent.; the rate from organic heart disease increased, comparing that of 1878-1887 with 1898-1907, from 111 to 138 per 100,000, an increase of 20 per cent.

DEATHS FROM PRINCIPAL CAUSES IN THE GREATER CITY, BY YEARS, FROM 1899 TO 1909.

The table on page 227 shows the deaths from principal causes in the years since the formation of the greater city and compares the deaths in 1909 with the average deaths for the previous ten years, corrected to correspond with the increase in population. Measles shows a considerable increase, as do cancer and diabetes; the tremendous increase in the deaths from circulatory diseases is partly real and partly due to transference from the nervous system of a large number of deaths originally attributed to cerebral hemorrhage or apoplexy, but which upon investigation were assigned under more definite causes, such as diseases of the arteries, organic heart disease, Bright's disease, alcoholism and syphilis.

COMPARISON OF DEATHS BY AGE AND SEX GROUPS.

The following table shows the decennial death rates per 1,000 by sex and by age groups typifying infancy, childhood, youth, maturity. decline and old age, and is based upon deaths in the former City of New York (present Boroughs of Manhattan and The Bronx):

Age Groups.	Decennium Rates Per 10 at Those	ooo Living	Rates Per	1890-1899, 1000 Living se Ages.	Compa	e in Rate red with Decennium
	Male.	Female.	Male.	Female.	Male.	Female.
Under 5 years	109.12 7.29 9.00 17.36 35.89 110.93 29.17	94.67 6.92 7.51 14.55 27.96 100.47 24.57	87.75 5.38 7.60 15.34 34.96 104.41 25.05	75.98 5.26 6.07 12.08 27.45 98.66 21.10	20% 26% 16% 12% 3% 6%	20% 24% 19% 17% 2% 2% 14%

Age Groups.	Rates Per	n 1900–1909, 1000 Living se Ages.	Compa	e in Rate ped with Decennium.	Compar	e in Rate red with ecennium.
	Male.	Female.	Male.	Female.	Male.	Female.
Under 5 years	60.54 4.25 6.32 13.92 35.51 103.95 20 93	52.24 3.96 5.00 10.23 26.37 93.96 17.05	31% 21% 17% 9% *1½% ½% 16%	31% 25% 18% 15% 4% 5%	45% 42% 30% 20% 1% 6% 28%	45% 43% 33% 30% 6% 6% 31%

^{*} Increase.

The death rate among females, as compared with males, is lower in each decennium and at each age group; the per cent. reduction in the rate among the females has equalled or surpassed that among the males at every age group in comparing the last with the first decennium, and under the age of fifteen and above forty-five years the degree of reduction is almost the same, while between twenty-five and forty-five years of age the reduction is much greater among the females; by far the greatest saving in human life has taken place before the age of forty-five, and above this latter the saving is comparatively very small. Those causes which the Department of Health has sought to eradicate have reflected their disappearance or abeyance in the absent or diminished mortality of smallpox, typhus fever, Asiatic cholera, typhoid fever, diphtheria and croup, measles, scarlet fever, whooping cough, tuberculosis and diarrhoeal diseases, causes which affect mankind before and during maturity, while on the other hand those that no sanitary interference can possibly affect have increased tremendously, especially cancerous, circulatory and urinary diseases. To a lesser extent the mortality from acute respiratory diseases has increased. Judging from calculations made two years ago, the decreased mortality from tuberculosis at the ages over forty-five years has had the effect of turning what would have been an increase from all causes to a very slight reduction.

In the comparison of the last decennium rates with those of the immediately preceding decennium the only increase in the percentages in the whole table is shown at the age period 45 to 65 years among the males, and coincidently it is at this same age period among males that an increase exists in the death rate from all tuberculous diseases.

It is also evident from this table that the entrance of the female into the business world has not been followed by an increased mortality at any age group, as compared with the male, and if we consider the ages 25 to 45 years as the most productive in a social and political economy sense, we find that it is at these ages that the decrease in the mortality of the female, as compared with the male, is greatest. The work assumed by the female has not added to her mortality; it has brought greater physical comforts and increased her span of life.

INFANT MORTALITY.

The number of infants under one year of age dying in the greater city during the past year was 15,976, against 16,231 during 1908. This mortality is generally expressed in cities and countries where the returns of births are complete in figures proportionate to one thousand births. In this city the returns are not complete as yet, though the percentage reported has gradually increased until the present year, when an estimated ninety-five out of every hundred born have been received. Notwithstanding this incomplete registration, the infant mortality of this city compares favorably with most of the large cities of the world, as shown by the following rates for the year 1908:

City.	Rate per 1000 Births Reported.	City.	Rate per 1000 Births Reported.	City.	Rate per 1000 Births Reported.
Moscow. St. Petersburgh Montreal Nuremburg Trieste. Breslau Cologne Munich Konigsberg Vienna Berlin. Bremen	321 282 259 208 198 194 193 192 186 183 168	Hamburg Dresden Manchester Budapest Copenhagen. Belfast. Dublin. Hull Birmingham Bradford Liverpool Sheffield.	152 151 150 150 147 145	Frankfort a. M. Glasgow. Leeds. New York. Milan. Edinburgh London. Rotterdam Paris. Melbourne Amsterdam Stockholm Sydney.	103 98 95 87

The German cities mentioned in the table all possessed a higher rate than New York, as did all of the English cities save London; the Russian cities showed a tremendously higher rate than all others. Of course in comparing the death rate of infants in one city with that of another it must be borne in mind that there exist uncontrollable operative factors that increase the rate irrespective of sanitary intervention; the geographical and climatic surroundings of one may conduce to an extremely low rate and those of another tend to the opposite extreme. The proportion of illegitimate to legitimate births and of hand to breast-fed infants plays a most important part in the determination of infant mortality; the density of the population, the care bestowed upon the infant and racial characteristics all have bearing upon the question.

The table on opposite page shows the infant mortality in boroughs and City for fifty-two weeks of the year 1909, giving the number of deaths from all causes and diarrhoeal diseases by age subdivisions under

one year:

Out of every thousand deaths under one year of age from all causes 325 die before the completion of the first month of life, 505 die before the age of three months is attained and almost 700 died before the age of six months. Most of the deaths under the first month of life are due to prematurity, malformations, injury at birth, inability

Deaths from All Causes and Diarrhoeal Diseases, by Subdivisions of Ages, of Children Under One Year, for the Fifty-two Weeks Ending December 25, 1909.

BOROUGHS.

	Man	Manhattan.	The	The Bronx.	Broc	Brooklyn.	n Ö	Queens.	Rich	lichmond.
, \8cs.	All Causes.	Diarrheal.	All Causes.	Diarrheal.	All Causes.	Diarrheal	All Causes.	Diarrhwal.	All Canses.	Diarrhœal
Under 1 month. I moth and under 2 months. 2 months and under 3 months. 3 months and under 6 months. 6 months and under 9 months.	2,816 1,023 7,00 1,623 1,391 1,398	200 220 220 630 352 352	377 82 69 197 132	% 5 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1,597 415 382 932 847 734	105 156 160 388 247	283 76 72 160 139 119	24 8 8 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	98 22 27 74 36 36	20 20 20 12
Total under 1 year	8,861	2,126	994	238	4,907	1,522	849	162	310	92

CITY OF NEW YORK,

Ages.	All Causes.	Diarrhoeal.
	1	440
month and under 2 months	1,625	431
2 months and under 3 months	1,245	453
months and under 6 months	2,986	1,298
6 months and under 9 months	2,560	1,014
nonths and under iz months	2,334	904
Total under 1 year	15,921	4,269

to assimilate nourishment and gastro-enteric infection; over 15 per cent, of deaths of infants under three months is due to diarrhoeal diseases.

The table on opposite page indicates to a fair degree the infant mortality as dependent upon congestion of population, birth rate and race; objection may be made to the smallness of the figures in some areas and with a certain amount of justice to warrant it, but the following conclusions may be justly drawn; the areas showing a density of over eight hundred to an acre produce rates per one thousand births—with one exception—considerably above that of the entire city, which in 1909 was 130; those below 800 persons to the acre—except one—in which the total number of births reported was 101, and in which the element of paucity of figures enters, gave rates below the average for the city; in fact, an area inhabited by persons well off in this world's goods gave an extremely low birth rate of 6.95 per 1,000 population and a mortality rate of 51 per 1,000 births; all areas with a birth rate of over 19 per 1,000 population gave, with one exception, high death rates among the infants; two square blocks inhabited almost exclusively by negroes gave death rates of 298 and 319 per 1,000 births; one square block inhabited by Jews gave a birth rate of 54.9 per 1,000 population and a death rate of 166; two "Italian" blocks gave death rates of 156 and 165; one "Irish" block gave a death rate of 204, while another block of the same character gave one of 141; the two "colored" blocks gave the highest death rate from the diarrheal and acute respiratory diseases, and were second highest as regards those from congenital debility; an "American" block gave the highest death rate from this latter cause, and as congenital debility includes under its general title chiefly prematurity and marasmus the conclusion may be drawn that to abortion or lack of vitality may be attributed this phenomenon; the "colored," Italian and Jewish areas showed double to treble the mortality from the acute pneumonias and bronchitis than the two "American" blocks; the deaths from contagious diseases and syphilis were so few that no conclusions are attempted therefrom.

The following table gives the causes of death among children under one year of age and the percentages of all deaths occurring at this age group in the entire city for the year 1909:

Causes.	Number of Deaths.	Per Cent. of Total					
All causes. Congenital diseases Diarrhœal diseases Acute respiratory diseases. Contagious diseases. Marasmus Convulsions. Tuberculosis. Syphilis.	3,668 726 491 383 310 224	27. 4 26. 6 22. 6 4. 5 3. 1 2. 4 2. 0 1. 4					
Violence		0.7					

Acute Respira-tory Diseases. Per 1000 Births. 6.91 8.101 56.5 52.9 75:4 52.1 119.1 Infant Mortality Per 1000 Births in Certain Blocks, Borough of Manhatlan, for the Yeurs 1907, 1908 and 1909 Combined. Mortality 28 36 1 23 24 Deaths. Per 1000 Births. 13.7 20.3 18.3 21.6 Congenital Debility. 49.3 34: Mortality 6 Deaths. 39.8 Births. 34.2 72.3 1 0 75.8 28.8 Diarrhoeal Diseases. 29.7 Mortality Per 1000 1 \$8 16 91 6 17 21 92 Deaths. 8.262 Causes. 318.8 203.8 166.3 0.141 58.4 127.4 156.4 Mortality Per 1:00 Births from All 164. Deaths Under Year of Age. 92 2 90 63 ·uo11 26.65 19.91 25.75 50.47 45.13 9 6.95 9 54 9.71 Birth Rate Yearly Per 1000 Popula-26. 54. 5 416 382 229 101 Births Reported. 541 2,471.9 1,079.4 7.940. 1,050. sons to Acre, Number of Per-14.98 2.53 10 3.65 2.53 2.10 90. 3.65 3.05 Area in Acres. 26. 2,939 3,284 5,191 2,938 2,885 Population, 2001 1905. Cen-Group of 9 Blocks—West Sixty-eighth to West) West End avenues.
Block bounded by West Sixty-first and West Sixty-second streets, Amesterdam and West End avenues.
Block bounded by Monroe, Madison, Market bus avenue and Broadway... Group of 7 Blocks—East Innerymen to Jexing-Thirty-sixth street, Third avenue, Lexing-and Catherine streets.

Block bounded by West Thirty-eighth and West Thirty-ninth streets, Ninth and Tenth avenues
Block bounded by West Thirty-ninth and West
Fortieth streets, Ninth and Tenth avenues. Block bounded by East One Hundred and Thirteenth and East One Hundred and Fourteenth streets, First and Second ave-Block bounded by East One Hundred and Seventy-seventh street, Amsterdam, Colum-First and Second avenues. welfth and East One Hundred and Thirteenth streets, First and Second avenues... East One Hundred Amsterdam Block bounded by West Sixteeth Sixty-first streets, Amsterdam Columbus avenues....ck bounded by West Sixtieth Location street, Block bounded by Fourteenth and Fifteenth streets. Fighty-fourth

Compared with a similar table for the year 1908, the most noticeable change has been the great decrease in the number of deaths reported from diarrhœal diseases amounting to 864, which placed the deaths from this cause in second place in lieu of first for the first time since the organization of the Greater City in 1898; this decrease was due to the favorably low temperature prevailing aided by the extraordinary efforts upon the part of this Department to reach and educate the mothers to the necessity of scrupulous cleanliness in the feeding of bottle-fed infants and of breast nursing when possible; private philanthropy as usual was of great aid in establishing means of providing pure milk, seaside and country homes, water excursions, etc.

Deaths and Death-rates Per 1,000 Infants Under 1 Year of Age (Estimated), Former City of New York—1890 to 1909, Inclusive.

Cause of Death.	Quinque 1890-	ennium, 1894.	Quinque 1904-		Year	1909.
	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
Measles Scarlet fever Whooping cough Diphtheria and group. Erysipelas. *Titherculous diseases Syphilis. Meningitis (simple) Convulsions Acute respiratory diseases Diarrheal diseases Congenital debility, malformations and marasmus. Other causes	19I 47 199 193 76 361 83 396 530 2,050 3,227 2,915 702	3.99 .98 4.16 4.03 1.59 7.54 1 73 8.27 11.07 42.83 67.44 60.91	151 23 95 142 89 162 118 260 333 2,092 2,863 3.432	2.41 .37 1.52 2.27 1.42 2.59 1.88 4.15 5.31 33.38 45.69 54.78 9.16	142 30 133 149 110 140 177 148 225 2,201 2,354 3,174	2.07 .44 1.94 2.17 1.60 2.04 2.58 2.16 3.28 32.06 34.29 46.24
Total	10,970	229.18	10,334,	164.92	9,905	144.29

^{*} Deaths from pulmonary tuberculosis not included

Comparing the mortality of the first five years with that of the last five years of the past generation the rates from each cause or causes specified will be found to have diminished considerably, that from the acute respiratory diseases to the extent of 20 per cent., that from congenital and wasting diseases to per cent. and that from diarrhoeal diseases 32 per cent. The rates from those causes that form a smaller part of the mortality have all decreased except syphilis, which has increased slightly. Comparison of the mortality of the year 1909 with that of the previous quinquennium should be made with the understanding that there were 3,300 less births reported in 1909 than in the previous year, and, in consequence, the estimate of the population is somewhat higher than it actually is, and, to make the comparison more equitable, it would be advisable to add 2.33 points per 1,000 to the rate from the congenital debility group of causes, 1.75 to that from diarrhoeal diseases and 1.62 to that from acute respiratory diseases. The amount to be added to the minor causes would be so small as to be negligible. With these additions it will be seen

that the year 1909 showed a much decreased mortality from the diarrhoeal and congenital diseases; that from the acute respiratory diseases has remained almost stationary; the rates from scarlet fever, whooping cough and syphilis show increases, the last named a considerable one.

Comparison of Deaths of 1909 and 1908.

The following table shows the number of deaths from the principal causes in the entire city during the year and compares its mortality with that of 1908, indicating the increases and decreases:

Cause of Death.	1908.	1909.	Increase in 1909.	Decrease in 1909.
Typhoid fever. Malarial fever. Small-pox Measles. Scarlet fever. Whooping-cough. Diphtheria and croup. Influenza. Dysentery. Pulmonary tuberculosis. Other tuberculous diseases. Cancer, sarcoma. Diabetes. Alcoholism Diseases of the nervous system. Diseases of the circulatory system. Acute bronchitis. Lobar and broncho pneumonia. Diarrhœal diseases (under 2 years). Diarrhœal diseases (2 years and over).	536 34 1 972 1,333 1,758 1,758 493 91 1,288 3,243 670 409 4,146 9,297 8,19 9,508 5,977 6,17	564 40 2 997 786 401 1,714 335 94 8,643 1,268 3,488 696 533 3,260 10,175 1,051 10,614 5,126 641	28 6 1 25 213 3 245 26 124 878 232 1.106	547 547 68 226 20 886
Other diseases of the digestive system Bright's disease and acute nephritis Puerperal diseases. Congenital debility and malformations. Old age Homicides. Suicides Suicides Sunstroke Other accidents. Ill defined causes. All other causes. Total.	3.039 5.049 699 4.581 636 231 994 142 3,370 675 3,497	3,248 5,522 719 4,443 597 182 890 130 3,201 556 4,189	209 473 20 692	138 39 49 104 12 169 119
Balance	74.105 +1.033		+1,033	••••

TYPHOID FEVER.

The number of deaths reported from this cause in 1909 was 564, against 536 in 1908, the rate remaining the same; i. e., 12 per 100,000 of the population, the lowest rate from this cause in the history of the Department, and 61 per cent. lower than the rate in the decennium 1868-1877, when it was 31 per 100,000. In the early years of the Department's history there were many deaths attributed to malarial fevers that in all probability were deaths from typhoid fever; in the years 1881 and 1882 there were 1,438 deaths reported from malaria; it seems as if this cause was often used as a cloak to hide the pardon-

able medical ignorance, when we consider that during the past two years there were only 74 deaths reported.

SMALL-POX.

Nine cases of smallpox, with two deaths, were reported during the year. The recurrent wave of small-pox mortality was due, judging by past experience, in 1908, failed to appear in that year and in the one just passed, and this absence may be attributed to the thoroughness and volume of the vaccinations performed since the wave of 1901 and 1902.

MEASLES.

There were reported 997 deaths and a rate of 22 per 100,000, against 972 deaths and a similar rate for 1908. The incidence of this disease has taken place in alternate years since 1898, but in 1909 the recession of the case wave was much less marked and a death rate exactly the same as that of the previous year was the result. No explanation can be offered for this unusual phenomenon.

SCARLET FEVER.

There were 786 deaths and a rate of 17 per 100,000, as against 1,333 deaths and a rate of 30, a decrease in the rate of 43 per cent. Compared with the rate of the decennia 1868-1877, 1878-1887, 1888-1897 and 1898-1907, which were 91, 74, 39 and 20 per 100,000, there is a decrease of 81, 77, 56 and 15 per cent., respectively. The number of cases reported was 12,475 during 1909, against 24,426 in 1908. The case fatality has gradually decreased from 7.7 per cent. in 1898 to 6.3 per cent. in 1909.

WHOOPING COUGH.

There were 401 deaths reported and a consequent rate of 8.8 per 100,000 in 1909, against 188 deaths and a rate of 4 per 100,000 in 1908. This rate more than doubles that of 1908, but is 25 per cent. lower than that of the previous decennium. As usual, the number of female deaths from this cause exceeded that of the male, the figures being 223 and 178.

DIPHTHERIA AND CROUP.

Thehe were 1,758 deaths reported in 1908 from this cause, against 1,714 in 1909, the rate showing a reduction from 39.7 to 37.5 per 100,000. The combined mortality figures of the former cities of New York and Brooklyn (an area containing about 93 per cent. of the present population of the city), show a rate of 154 per 100,000 in the decennium 1868-1877, which rose to 170 in the next decennium, then fell to 130 and to 53 in the two succeeding decennia. The use of diphtheria antitoxin was begun by this Department in 1895, but by reason of the bitter opposition to serum therapy it was not until 1898

that it began to be used in anything like sufficient dosage. The case fatality of the years 1893 and 1894 combined was 33 per cent.; that of the past two years only 11 per cent.

INFLUENZA.

The deaths reported in 1909 numbered 335, against 403 in 1908, a decrease of 68, and with this decrease one would naturally expect to find a decrease in the deaths from respiratory diseases, but such is not the case, as evidenced by the deaths from lobar pneumonia reaching the total 5,254, which, compared with the figures for 1908, show an increase of 572 deaths. Influenza first appeared in the mortality tables of the City in 1889, assumed epidemic proportions in 1890 and in 1891 reached its apogee, from which time to the present we have had it with us as a disturbing morbidity and mortality factor. In 1891 the death rate founded upon the number of deaths reported as influenza reached the height of 5.15 per 100,000 of the population, but its effect as a contributing factor upon the all chronic diseases has never been accurately measured.

PULMONARY TUBERCULOSIS.

During the year 1909 8,643 deaths and a death rate of 1.89 per 1,000 were recorded, against 8,869 deaths and a death rate of 2.01 in 1908, a decrease of 6 per cent. in the rate. The decennial rate in 1868-1877 was 3.76 per 1,000, that of 1909 showing a comparative decrease of 50 per cent. The International Tuberculosis Congress, held at Washington, D. C., in October, 1908, attracted world wide attention and awakened a lively interest in the struggle going on for the extermination of this disease, and it is fair to assume that the education of the citizens of this country to its cause, prevention and treatment will be reflected in a lessened mortality from this disease throughout the land. The Department of Health of this City was and is the pioneer in this movement, and the efforts being put forth at the present moment exceed those of previous years and should be attended by a greater decrease in the mortality than that of the year 1909.

Cancer and Sarcoma.

The number of deaths ascribed to malignant growths reached 3,488 in 1909, against 3,243 in 1908, an increase of 245 deaths, the rate per 1,000,000 being 764 and 733, respectively. The rate from this cause has gradually increased for the past forty years, and while it is conceded that part of the increase has been due to more accurate diagnoses and certification and to an increase in the population over the age of thirty-five years, still there are undoubtedly factors of which we are ignorant at work causing this increasing mortality. In the decennium 1868-1877 the rate was 390 per million, against 764 in 1909, almost double.

DISEASES OF THE NERVOUS SYSTEM.

In 1909, 3,260 deaths from these causes were recorded, a decrease of 886 deaths compared with 1908. The cause of this decrease was due entirely to efforts on the part of this Bureau to obtain a more definite cause of death than apoplexy and cerebral hemorrhage. Letters were written for the underlying factors and the replies received were of such nature that over nine hundred deaths that would have been credited to apoplexy were assigned under Bright's disease, organic heart disease, syphilis, alcoholism and arteriosclerosis.

DISEASES OF THE CIRCULATORY AND URINARY SYSTEM.

In the year 1909, 16,294 deaths of these combined systems were reported, chiefly made up from the deaths attributed to organic heart and Bright's diseases; in 1908, 14,904 deaths were reported under diseases of these two systems, thus showing an increase in 1909 over 1908 of 1,390 deaths. This increase was apparent to a considerable extent and was due to the transfer of six hundred or more deaths from under the nervous diseases, especially apoplexy, to chronic nephritis and diseases of the heart and arteries. On the other hand, there is hardly any doubt but that the increase in the organic heart and kidney diseases which has been noted for thirty years is still going on; in the decennium 1878-1887 the rate from these combined causes was 195 per 100,000, which rose to 244 and 277 in the two succeeding decennia, to 337 in 1908 and 357 in 1909.

Acute Respiratory Diseases.

There were 11,665 deaths in 1909 from the diseases included under this title, to wit, acute bronchitis, broncho-pneumonia and lobar pneumonia, against 10,327 deaths from these causes in 1908, an increase of 1,338 deaths. Almost 80 per cent. of this increase took place in the deaths of children under five years of age, there having been 1,064 more deaths at these ages in 1909 than in 1908, and as the mortality from measles remained about the same for the two years in question, this factor in the acute respiratory deaths among children can be excluded. Influenza deaths were fewer in 1909 than in 1908. The severe epidemic of whooping cough which prevailed in 1909 must be held accountable for this great increase in the deaths among the children, the months in which the deaths from whooping cough were in excess in 1909 over those of 1908 were attended by an increase in the deaths from broncho-pneumonia, save in the first two months of the year, when the epidemic of whooping cough was at its commencement.

DIARRHOEAL DISEASES.

There were 5.767 deaths at all ages from these diseases during 1909, against 6,594 deaths in 1908. The death rate fell from 149 to 126 per 100,000, a decrease of 15 per cent. The following table shows the population, deaths and death rates of children under two years

of age from all causes and diarrhoeal diseases for a period of twelve years, since the organization of the greater city:

Year.	Population Under Two Years.	Deaths All Causes Under Two Years.	Rates Per 1000 at Two Years.	Deaths Diarrhoea Under Two Years.	Rates Per 1000 Under Two Years.
1898	156,421 160,451 164,720 169,884 175,226 180,752 186,468 192,384 198,506 204,843 211,404 218,337	21,678 19,875 21,526 20,156 20,280 18,418 21,146 20,816 21,990 21,930 20,462 20,716	138 6 123.9 130.7 118.7 115.7 101.9 113.4 108.2 110.3 107.1 96.8 94.9	6,459 5,236 5,846 5,796 4,938 4,940 5,647 5,87 5,783 6,977 5,126	\$ 41 2 32.6 35 5 34.1 28.2 24.3 30.3 30.5 29.1 31.0 28.3

It will be readily seen from the above table that the mortality at this age group reached the lowest point since the formation of the greater city in 1898; in fact, the rates are the lowest in the history of the Department. The mortality from diarrhoeal diseases is a shade lower than that of 1903 and considerably lower than that of 1908. Comparing the meteorological conditions for 1909 and the year previous, we find them to have been favorable to a decreased diarrhoeal mortality. The mean temperatures recorded during the months of June, July, August and September in 1908 were 72.97, 79.80, 75.78 and 68.58, and those of 1909 were 72.13, 73.55, 72.22 and 66.89. The rainfall during 1909 during the four months mentioned was considerably above that of 1908, and as the temperature and rainfall are two important factors in the determination of diarrhoeal mortality, and as during 1909 there was a continuation of the concerted action of official and philanthropic endeavor in this direction it is not surprising that this low record was reached.

DEATHS FROM VIOLENCE.

Homicides.

There were 182 homicide deaths reported during 1909, against 231 in 1908, a decrease of 49 deaths.

Suicides.

There were 890 suicides reported during the year, against 994 during 1908, a decrease of 104 deaths, this decrease being explained by the clearing up of the financial skies following the stormy conditions prevalent in the fall of 1907 and the whole of 1908. The male suicides numbered 700, against 190 females; 230 males ended their lives by means of illuminating gas, and the same number, 230, used firearms to accomplish their purpose; hanging was used by 61 males, carbolic acid by 45 males and cutting instruments by 44 males: 80

females out of the 190 reported used illuminating gas, 22 carbolic acid. 21 by jumping from buildings and 14 by firearms. The number of native born surpassed that of any other nationality, as 311 were reported as Americans, 206 as Germans, 81 Russians, 58 Auustro-Hungarians, 33 English, 31 Irish and 29 Italians; 61 committed suicide whose birthplaces were unknown.

ACCIDENTS.

The deaths reported from accidents in 1909 were 3.331, against 3.512 in 1908, a decrease of 181; 1,132 deaths were reported from falls and fractures in 1909, against 1,180 in 1908; in 1909 there were 290 deaths reported as due to street vehicles, 18 more than the previous year; 289 were killed by steam and electric cars in 1909, against 393 in 1908, a decrease of 104 deaths; in each year one person was killed by a horse car; burns and scalds claimed 394 victims in 1909, an increase of 24 over 1908; deaths in conflagrations fell from 142 in 1908 to 82 in 1909; insolation claimed 130 in 1909, a decrease of 12; criminal abortion was given as the cause of death in 38 instances, against 54 in 1908; deaths from illuminating gas rose from 206 in 1908 to 244 in 1909.

SEARCHES AND TRANSCRIPTS.

During 1909 there were 127,887 searches made and 48,009 paid transcripts issued of the records of births, deaths and marriages, an increase of 8,063 searches and 2,226 transcripts. Fully 50 per cent. of the total number of searches were made without charge, to aid children to gain admission to the public schools and to obtain employment certificates.

Respectfully submitted,

Wм. H. Guilfoy, M. D., Registrar of Records.



Report of Bureau of Records

	Boro	ugh of
	Manhattan.	* The Bronx.
Number of deaths	37,963 16.12	6,424 18.46

^{*}The death-rate in the Borough of The Bronx is materially increased by the deaths in institutions,

Borough.	Estimated	· Certificates Received and Tabulated.					
	Population.	Marriages.	Births.	Deaths.	Still-births		
Manhattan The Bronx Brooklyn Oveens Richmond	2,354,576 348,057 1,539,235 244,947 77,977	26,689 1,770 11,110 1,504 440	63.599 9,574 41,494 6,314 1,994	37,963 6,424 24,365 3,838 1,515	3,563 493 2,202 358 81		
City of New York	4,564,792	41,513	122,975	74,105	6,697		

	Borough of		
	Manhattan.	The Bronx	
Number of deaths in institutions	16,071	2,646	
Number of deaths in tenements	19,070 1,577	2,336 1,283	
Number of deaths in streets, rivers, etc	476 769	14	

for Year Ending December 31, 1909.

	City of Novy Visit			
Brooklyn.	Queens.	Richmond.	City of New York	
24,365 15.83	3,838 15.67	1,515 19.43	74,105 16.23	

most of the inmates having been transferred from the Borough of Manhattan.

Rate per 1,000.				Transit Permits	Coroners'	Searches	Tran- scripts
Marriages.	Births.	Deaths.	Still-births.	Issued.	Cases.	Made.	Issued.
11.33 5.09 7.22 6.14 5.64	27.01 27.50 26.96 25.78 25.57	16.12 18.46 15.83 15.67	1.51 1.42 1.43 1.47 1.04	1,091 30 599 654	5,188 738 3,178 654 245	73,838 8,563 39,012 4,656 1,818	26,413 3,654 15,344 2,021 577
9.10	26.94	16.23	1.47	2,374	10,003	127,887	48,000

	City of New York		
Brooklyn.	Queens.	Richmond.	City of New York
6,452	599	547	26,315
11,149	983	142	33,682
6,185	2,072	750	11,867
108	41	18	657
471	143	58	1.584

*Corrected Mortality from All Causes.

	Residents of					
Place of Death.	Man- hattan.	The Bronx,	Brook- lyn.	Queens.	Rich- mond.	Total.
Manhattan. The Bronx. Brooklyn. Queens. Richmond.	1,197 401 63 86	456 31 9	493 97 61 29	90 15 143	52	1 091 1 313 575 133 119
PlusMinus	1,747	499 1,313	680 575	249 133	56 119	3,23I 3,23I
Net gain or loss	+656	<u>814</u>	+105	+116	<u>-63</u>	
Deaths reported	37,963	6,424	24,365	3,838	1,515	74,105
Corrected	38,619 16.12 16.40 16.12	5,610 18.46 16.12 18.43	24,470 15.83 15.90 15.84	3.954 15.67 16.14 15.74	1,452 19.43 18.62 19.31	74,105

^{*}Corrected death-rate means that the death-rate of each borough is corrected by the exclusion of the deaths of residents of the other boroughs occurring within its limits and the inclusion of the deaths of residents of the borough occurring in other boroughs.

Corrected Mortality of Children Under 5 Years of Age.

	Residents of						
Place of Death.	Man- hattan.	The Bronx,	Brook- lyn.	Queens.	Rich- mond.	Total.	
Manhattan The Bronx Brooklyn Oueens Richmond.	64 288 12 41	125 20 I	85	17 29 1	3	230 64 337 17 54	
PlusMinus	405	146 64	101 337	47 17	3 54	702	
Net gain or loss	+175	+82	<u>-236</u>	+30	<u>—51</u>		
Deaths reported	13,387	1,555	7,885	1,258	436	24,52	
Corrected Death rate Death rate corrected	13,562 49.60 50.25	1,637 38.98 41.04	7,649 44.05 42.73	1,288 44.59 45.65	385 50.10 44.25	24,52	

Corrected Typhoid Fever Mortality.

,	Residents of					
Place of Death.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	Total.
Manhattan. The Bronx Brooklyn Queens Richmond.	7	, I	3	3		6 7 3 1
Plus Minus	7 6	3 7	3 3	4		17
Net gain or loss	+1	4		+3		
Deaths reported	262	63	191	37	11	564
Corrected	263 .11 .11	59 .18 .17	191 .12 .12	40 .15 .16	11 .14 .14	564

Corrected Measles Mortality.

	Residents of					
Place of Death.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	Total.
Manhattan. The Bronx Brooklyn Queens. Richmond	5 216	13	I	8		5 237
Plus Minus	22 I I	13	2 237	8	<u>ı</u>	244
Net gain or loss	+220	+8	-235	+8		
Deaths reported	388	58	509	30	12	997
Corrected Death rate Death rate corrected	608 .16 .26	66 .17 .19	274 •33 •18	38 .12 .15	. 15 . 14	99

Corrected Scarlet Fever Mortality.

Place of Death.	Residents of					
	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	Total.
Manhattan. The Bronx Brooklyn Queens Richmond	9	18			1	19
Plus Minus	20 19	18		10	1	49 49
Net gain or loss	+1	+7	<u>—19</u>	+10	-+1	
Deaths reported	358	50	326	42	10	786
Corrected	359 .15	57 .14 .16	307 .21 .20	52 17 .21	.13	78 6

Corrected Diphtheria Mortality.

Place of Death.	. Residents of					
	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	Total.
Manhattan. The Bronx. Brooklyn. Queens. Richmond.	35 59	24	6	 8		3 2 3 5 7 4 1
Plus	95 32	3 I 3 5	7 74	10	· · · · · · · · · · · · · · · · · · ·	143 143
Net gain or loss	+63	<u>-4</u>	67	+9	. — 1	
Deaths reported	963	102	556	73	20	1,714
Corrected	1,026 .41 .44	98 . 29 . 28	489 .36 .32	82 .30 ·33	19 . 26 . 24	1,714

Corrected Pulmonary Tuberculosis Mortality.

		R	esidents of			
Place of Death.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	Total.
Manhattan The Bronx Brooklyn Queens Richmond.	876 6 2 34	42 	79 47 i	15 4 13	2 I 	138 928 19 3 45
PlusMinus	918 138	43 928	137	32	3 45	I,133 I,133
Net gain or loss	+780	—885	+118	+29	—4 ²	
Deaths reported	4,205	1,623	2,347	309	159	8,643
Corrected. Death rate Death rate corrected.	4.985 1.79 2.12	738 4.06 2.12	2,465 1.53 1.60	338 1.26 1.38	117 2.04 1.50	8,643

Corrected Broncho Pneumonia Mortality.

			Resid	ents of		
Place of Death.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	Total.
Manhattan The Bronx Brooklyn	4	17	19	3	3	4:
Queens Richmond	3 9	ı	3 6			r
Plus Minus	17 42	18	28	5 7	3 15	7 7
Net gain or loss	<u>-25</u>	+14	+25		<u>—12</u>	
Deaths reported	3,133	284	1,593	275	7.5	5,36
Corrected Death rate Death rate corrected	3,108 1.33 1.32	298 .82 .86	1,618 1.03	273 1.12 1.11	63 .96	5 36

Corrected Pneumonia Mortality.

		I	Residents of	ī		
Place of Death.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	Total.
Manhattan The Bronx Brooklyn Oueens Richmond	 15 2 1 6	17 	3	9		40 15 12 4 6
PlusMinus	24 40	18	24 12	11 4	6	77 77
Net gain or loss	<u>-16</u>	+3	+12	+7	<u>6</u>	
Deaths reported	2,575	382	1,918	279	100	5,254
Corrected Death rate Death rate corrected	2,559 I.09 I.09	385 1.10 1.11	1,930 1.25 1.25	286 1.14 1.17	94 1.28 1.21	5,254

Corrected Diarrhoeal Disease Mortality.

		Re	sidents of			
Place of Death.	Man- hattan.	The Bronx.	Brook- lyn.	Queens.	Rich- mond.	Total
Manhattan The Bronx Brooklyn Queens Richmond	6 5 8	26	 6 3	4	I	4.5 6 9 1.4 1.7
PlusMinus	3 ² 4 5	26 6	23	9 14	1 17	9:
Net gain or loss	<u>-13</u>	+20	+14		<u>—16</u>	••••
Deaths reported	2,857	348	2,047	396	119	5,76
Corrected	2,844 1.21 1.21	368 1.00 1.06	2,061 1.33 1.34	391 1.62 1.60	103 1.53 1.32	5,76



Table of Mortality from the Principal

									C	ity of
Cause of Death.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Ang.	Sept.	Oct.
Total, all causes	6,297	5,743	7,018	6,995	6,409	5,802	6,103	6,088	5,321	5,855
1. Typhoid fever	36	25	26	18	31	33	39	56	94	95
3. Malarial fevers	4	3	4	2	2	3	6	3	2	4
5. Measles	73 83 18	88 85 18	III	165 76	136 116	138 85	99 37 51	53 21	27 22	29 19
	18	188	31 196	33 193	46 161	31 142	51 106	55 64	51 73	30 80
8. Diphtheria and croup	37	34	77	89	28	3		1	4	
11. Cholera nostras	27	36			 36	33		38		20
12 Tuberculosis pulmonalis	750	707	50 840	50 861	774	717	31 683	633	32 585 63	649
14. Tubercular meningitis 15. Other forms of tuberculosis	54 26	64 38 284	70 46 281	91 42	71 40	63 38	85 45	31	42	55 30
16. Cancer, malignant tumors	279 45	284 57	281 67	291 58	40 278 82	285 56	300 54	281 58	259 60	308 47
(of which) 17a. Cerebro-spinal meningitis	20	25	32	28	34	26	30	34	32	23
18. Apoplexy, congestion and softening of brain	96	68	75	75	78	74	59	77	58	85 589
19. Organic heart disease	694 127	584 92	703 115	635	560	490 46	453 40	473 48	426 68	Só
21. Chronic bronchitis	16	15	33 676	36 712	35	27	200	12	17 231	34 337
cho-pneumonia)	539 558	453	631	653	47I 509	307	300	157 260	249	343
22 Diseases of stomach (cancer (35	27	35	46	52	46	41	32	45	41
excepted)	147	159	182	206	226	285	1,122	1,328	818	551 61
25. Hernia, intestinal obstruction 26. Cirrhosis of liver	109	48 81	50 79 580	36 95	58 82	39 99 478	76	78	36 87	104
27. Bright's disease and nephritis28. Diseases of women (not cancer)	447 27	458 21	580	523 28	482 33 26	478	384	396	347	426 15
29. Puerperal septicæmia 30. Other puerperal diseases	36	2I 30	29 44	2I 4I	26 38	34	53	16 35	13	38
31. Congenital debility and mal-	409	345	399	351	368	322	323	447	350	362
32. Old age	51 314	56 262	62 374	57 384	50 373	40 450	42 451	37 395	39 321	53 367
a. Sunstroke	224	186	271	276	276	450 85 276	33	308	243	278
b. Other accidents	13	II	15 S8	24 84	20	12	19	17 58	14 64	13 76
d. Suicide	77 954	65 863	979	979	77 1,028	77 955	840	773	763 82	921
35. Ill-defined causes	27	21	===	36	39	39	71		<u> </u>	57
Under one yearOne year, under two years	1,234 339	1,076	1,322	1,272 513	1,216	1,102	1,759	1,939	1,456	1,303
Total under five years	1,903	378 1,780 967	2,111	2,173	2,057	1,846 889	433 2,531 726	459 2,674 735	2,104	329 1,873 974
Sixty-five years and over	771	647	850	760	647	613	487	735	449	646
Males	3,471	3,086	3,746	3,829	3,471	3,228	3,329	3,338	2,905	3,190
FemalesColored	2,826	2,657	3,272	3,166	3,471 2,938 213	2,574 20I	2,774 181	2,750	2,416	2,665
Chinese	10	6	197	9	4	5	10	2	4	4

Causes of Death During the Year 1909.

New Y	ork.							Borou	gh of	Manha	ıttan.				
Nov.	Dec.	Total.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
5,879	6,595	74,105	3,251	3,017	3,667	3,782	3,422	2,981	2,844	3,051	2,624	3,002	2,976	3,336	37,963
66	45	564	15	12	12	9	11	17	16	25	45	39	40	21	262
6		40	Ι		I			I	I			2 I	I		7 2
25	53 85	997 786	31	37	33	72	67	55	29	16	7	13	10	18	388
56 22	15	786 401	39	35	19	43 23	70 27 82	37 24	21 27	28 28	23	12	13	28	358 220
138	181 38	335	117 21	107	118 38	104 45	82	72 2	59	34	42 3	47	83	98	963 166
::			::				::	••							
695 48	37 749	8,643	2I 358	19 344	38 384	37 438	26 382	2 I 347	17 318	16 292	21 298	10 317	338	27 389	270 4,205
48	62	806	35	39	43	60	50	40	47 16	58 19	39	29 18	29 26	43 22	512 226
309	44 333 51	3,488	152	148	142 43	156	159	17 168 38	138	129	134	178 28	146 28	178	1,828
41		326	8	34	21	20	20	17	16	19	11	12	11	15	184
100	23 100	945	25	33	39	42	31	28	22	37	25	32	40	40	394
575 81	672	6,854	343 48	295	359	335	264	233 18	187	229	195	262	240	281	3,223
29	142 38	1,051	48	41 7	47 10	65	49	7	22 6	27 6	31 6	35 12	30 7	71 9	484 98
472	641	5,254	260	274	367	368	239	148	96	68	90	161	230	274	2,575
413	594	5,360	337	267	393	411	310	232	146 16	140	141	200	243 26	313	3,133
43 215	39 141	5,380	95	98	20 96	19	33 144	30 146	431	689	402	275	92	67	250
52 92	41 98	558	30 49	20	26 29	27 43	34 36	19 50	24	21 36	15 39	275 28 50	26 50	20 53	290 507
470	531	5,522	221	219	282	220	242	214	190	193	158	207	223	243 12	2,612
31 12	19	301 250	16	15	19	13	16	IO	11	6	9	8	4	10	121
393	29 374	469	25 234	19 206	20 24I	208	194	17 166	32 178	15 251	163	213	22	15 203	245 2.458
61	49	597	9	26	28	20	21	10	14	8	11	17	18	18	200
351	361	4,403 130	173	146	202	205	209	241 45	213 19	206	152	204	191	208	2.350 71 1,687
272 12	272 12	3,201	8	100	141	153	156 12	145	144	164	6	153	146 7 38	155	104
67 907	77 991	10,953	43 498	38 458	52 498	43 545	41 574	45 529	37 443	24 379	38 417	44 521	38 515	45 579	488 5,956
41	23	556	21	18	39	33	31	30	41	50	61	33_	34	17	408
1,089	1,208	15,976	689	647	794	811	739	630	810	1,071	759	733	597	634 176	8,914
282 1,632	321 1,835 1,158	4,740 24,519	197	1,053	246 1,240	309	261 1,224	220 1,003	203 1,180	232 1,434	759 178 1,056	986	855 855	176 944	2,540
1,018	1,158 766	11,607 7,811	505 336	434 275	552 382	5 I 4 334	485 310	395 265	283 184	321	318	44I 290	456 298	554 360	5 258 3,441
								-					-	-	
3,201	3,539 3,056 181	40,333	1,811	1,657	1,959	2,078	1,867	1,670	1,537 1,307	1,685	1,516	1,689	1,660	1,832	20,961
176	181	2,176 77	121 10	107	118	1,704 148 8	141	127	92	91 2	76	93	99	113	1,326
											1		1		1

Table of Mortality from the Principal

Cause of Death.									Bor	ough of
Cause of Beatin	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total, all causes	529	509	635	620	536	536	528	569	455	494
1. Typhoid fever			2	2	8	6	3	9	13	9
3. Malarial fevers	 2	7	8	13	8			3		2
6. Scarlet fever	5 4 10	9 2 16	12 2 14	4 2 15	6 6 10	6 1 8	2 4 9	1 6 1	3	2 3
o. Asiatic cholera	3	3	3	4	••	••				
12. Other epidemic diseases 13. Tuberculosis pulmonalis	3 135 2	5 124	3	6 157 8	4 149 4	161 6	1 133 10	3 122 7	1 94 8	117
15. Other forms of tuberculosis 16. Cancer, malignant tumors	2 22 2	2 23 8	7 6 23 8	 19 5	20	1 23 4	1 31 4	33	3 19	34
17. Meningitis, simple	1	3	3	4	3	3	2	I	8	2
18. Apoplexy, congestion and softening of brain	74 10	53 8	57 9	62 8	57 7	5 47 4	9 44 1	18 46	46	16 79 6
20. Acute bronchitis	1 49	38	3 48	3 61	33	1 26	14	16	15	14
23. Diseases of stomach (cancer)	20 4	28 2	34 4	28 8	23	19	25 5	13	15 4	19
excepted)	7 4 10	7 56	10 6 6	10 5	8 8 8	10 2 7	62 2 9	93 3 8	49 3 6	30 6
26. Cirrhosis of liver27. Bright's disease and nephritis28. Diseases of women (not cancer).	31 I	35 1 2	38 2 1	49 5 2	33 2	42 2	2I I 2	29 1 1	26 I	3 25 1 2
29. Puerperal septicemia	3 2 20	2 2I	8 23	31	7 22	20	4 24	7 43	31	2 22
formations	3 23	1 24	5 23	5 30	16 16	48 6	2 46 1	5 33	3 32	6 26
a. Sunstrokeb. Other accidentsc. Homicide	13	19	16 7	17 3	12	29	35	24 I	23 3 6	20 2
d. Suicide		64	75	64	61 3	63 5	50 7	7 60 2	49	57 2
Under one year	73	65 25	81	75 24	71 32	56	106	133	87	76 19
One year and under two years Total under five years Sixty-five years and over Seventy years and over	101 107 72	119 82 57	139 99 71	133 91 65	123 80 60	103 76 49	159 69 46	37 188 59 34	137	117 79 53
Males	312	278		373	295	321	201	319	244	262
Females. Colored Chinese	217	231	348 287 22	247 22	241	215	237 18	250	211 10	232 14
				}	1	1	!		1 0	

Causes of Death During the Year 1909.

The Br	ronx.				-		Во	orough	of Bro	ooklyn					
Nov.	Dec.	Total.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
504	500	6,424	2,098	1,838	2,236	2,134	2,044	1,871	2,189	1,953	1,831	1,898	1,967	2,306	24,365
1		63	12	7	10	6	8	8	18	16	29	38	20	19	191
1	5	3 58 50	36 36	3 42	3 63 38	75 25 6	60	67	62 12	31	17	13	13 28	30	509
4 2 8 2	5	34 102 16	56 12	35 7 56 18	10 56 33	6 64 34	32 12 66 14	33 5 55 1	14 29	13 18 24	10 18 27	11 11 22 2	6 31	53 7 70 18	326 118 556
		29	3		9	5	6			::				7	139
124 5	6	1,623 71 17	225 16	196 21 13	212 16 18	220 19 19	210 16 21	178 14 18	197 22 26	13 180 14	164 12 20	176 18	195 12 10	194 11 18	2,347 191 191
17 6	31	295 60	82 12	91	91 12	98 5	82 21	79 13	104	95 16	89 20	77 14	120	102	1,110
4 16	17	34 141	10 44	7 24	7 29	3 18	10 32	39	10 25	12 17	1 I 22	8 31	4 34	36	96 351
54 7 4	61 6 	680 70 15	240 58 8	192 37 7	242 50 19	193 33 21	191 36 24	158	170 16	150 16 5	148 31 10	20.4 32 19	232 41 17	284 54 28	2,404 425 187
31	37	382	192	164	214	233	160	110	78	64	108	132	176	287	1,918
22	38 4	284 43	168 18	131	173	172	152	114	103	85	72 15	98 16	123	202 12	1,593
19 5 4	. 15 I 7	320 45 79	4I 4 44	47 19 36	64 12 36	54 5 34	58 13 32	101 13 28	513 11 24	422 24 28	285 14 35	188 23 41	90 17 31	49 17 31	1,912 172 400
33	4I 	403 17 17	151 7 14	169 3	22I 9 6	2 04	173	177 14 4	141	143	136 6 9	159	177	197	2,048 98
6 38	30	47 325	11	88	13	5 16 90	9	16	10	8	13	13	116	5 9 117	93 137 1,314
6 23	4 25	53 349 8	34 91	24 70	19 113	26 121	17	14	14	19	16 112	17	26 111	21	247 1,318
18	21	8 247 10	68	50	8 ₇	85 10	81	26 77 6	93	89 5	90	84	85	71	39 960
4 60 2	4 47 1	84 701 32	18 349 3	3 17 285 2	21 330	26 308	28 331	16 314	26 285 10	24 270 2	18 248 6	21 288 5	3 23 270	3 22 310 3	59 260 3,588 33
=	===		==	==		==	==	==	=		=	==	==	==	
92 16 129	76 15 106	991 281 1,554 969	384 117 611	300 120 518	367 119 617	328 155 601	335 147 607	341 155 613 328	682 172 968	562 152 819	489 144 726	385 119 603	324 116 535 380	426 108 667	4,923 1,624 7,885
63	89 58	663	294 ——	368 260	462 318	406 291	337 227	328 237	288 191	278 187	259 187	365 246 ===	380 258	284 ====	4,317 2,980
276 228 13	278 231 15	3,597 2,827 191	1,111 9 ⁸ 7 45	950 888 35	1,189 1,047 44	1,139 995 55 1	1,078 966 43	1,016 855 45 2	1,214 975 59	1,057 896 32	929 902 34 I	994 904 43 1	1,032 935 52	1,190 1,116 47	12,899 11,466 534 7
		1			1	l	1			-	1		l		

Table of Mortality from the Principal

					В	orough	of Qu	ieens.			
Cause of Death.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Total, all causes	292	265	342	317	296	310	398	366	288	331	317
ı. Typhoid fever	2		2	1	4	1	2	6	6	7	4
2 Typhus fever				••	1	••	3		I	••	
5. Measles	3	1 5	8	4	1 5	7 8	5 2	2	3	I 2	2
7. Whooping-cough. 8. Diphtheria and croup 9. Influenza	8	5	5 2	2 7 3	3 3	6	8	3 4	4	3 7	14
II. Cholera nostras				• •					••		
12. Other epidemic diseases	24 I	28 I	36 3	2 27 2	22 1	I 21 I	2 22 5	6 21 1	20	27 1	25 2
15. Other forms of tuberculosis 16. Cancer, malignant tumors 17. Meningitis, simple	16 4	15 3	2 20 3	10	4 9 2	10	1 21 3	15 5	9 3	13 1	18 1
(of which) 17a. Cerebro-spinal meningitis 18. Apoplexy, congestion and soften-	I	1					2	2	2		
ing of brain	3 24 9	31	25 8	29 6	36 7	43	43 1	37	25	35	37
20. Acute bronchitis	31	23	31	·· 26	2 26	3 1 17	12	4 1 8	3	2 26	3 29
pneumonia)	24	22	25	38	18	31	15	13	18	23.	18
cepted) (24. Diarrhœas (under 5 years)	3 4	5	10 6	I I 2	14	24	96 96	92	48	42	13
25. Hernia (intestinal obstruction) 26. Cirrhosis of liver	3 4 25	2 23	4 27	3 12 35	4 22	8 28	3 2 21	3 4 19	4 4 17	23	4 4 25
28. Diseases of women (not cancer) 29. Puerperal septicemia 30. Other puerperal diseases	3	2	3 3	I I 2	 I 2	3	1 2 3	1 2 3	 2	1 1 3	1 1 4
31. Congenital debility and malfor-	31	18	20	15	25 6	23	18	17	22	17	29 9
32. Old age 33. Violent deaths a. Sunstroke	23	3 17	9 25	22	24	5 24 6	36	26	5 17	7 23	19
b Other accidents	18	14	19	16 2 4	19 1 4	16 	29	23	15	17	18
34. All other causes	37	49	59	44	46	36	45 5	3 55 14	44 5	38	44
Under one yearOne year and under two years	68	40	63	46 21	56 13	65 24	120	118	84	76 27	61
Total under five years. Sixty-five years and over. Seventy years and over.	96 62 38	59 61 39	89 76 52	76 67 42	79 50 28	24 108 61 44	25 168 58 46	25 158 53 31	35 21	57 34	90 66 48
MalesFemales	165	122	169 173	161	166 130	160 150	210	184 182	147	171	166
Colored. Chinese.	11	5	9	9	13	9	8	4	4	4	9

Causes of Death During the Year 1909.

						I	Borough	of Ric	chmond					
Dec.	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
316	3,838	117	114	138	142	111	104	144	149	123	130	115	128	1,515
2	37	3	1				r			1	2	I	2	11
	5	• • •										I		I.
	30	1	· · ·	3 2				2		 I	• •			12
3 2 6	42	3	I		••	3	1							10
6	42 23 73 10	I	4	3	3	::			, I	3	2 I	1 2	2	20
I	1	• • •			3						• •			4
::		::			• • •						• • •			:
1 36	309	8	1 15	iš	19		10	I 12	is	9	12	13	13	2
1	20	••	2	I	2		2	13 1		3			1 1	12
4 14	23 170	7	1 7	5	8	8	5	6	9	8	6	8	Š	159 12 5 85 11
4	29	ί	Í	ī	2	1	ĭ		Í	I	1		I	11
	8		• •	I	1	1			••		I			4
2	20	5	5	3	3	• • •	I	2	3	2	4	6	5	39
30 8	395 58 8	13	13	20 I	16	12 I	9	9	II	12	9 5	12	16	152 14
1	8		• • •				I				ĭ	1		3
33	279	7	12	16	24	13	6		I	I	4	6	10	100
30	275	9	5	6	4	6	I	11	9	3	3	7	11	75
1	15	• •	••	2	5	I	• •	••	I		5	1	1	16
10	370	**	2	2	·	2 I	4 I	20	32	34	16			113 9 32 162
6	42 62	3 2	2	4	I	2	6	4	2	3	2.	3	1	32
32	297	19	12	12	15	12	17	Il I	12 1	10	I2 I	12	18	162
2	16				2					I				5 3 13
16	27	8	I	8		I	I	4	2	2		I	8	
1	251 69	ı	12	ı	7	9	4	5 2	11	7	7 6	9		95 28
23	279	4	5	11	6	8	4 12	23	5 9	8	5	7	I 9	107
17	9 22 I	3	3	8	·. 5	8	2 9	iš	8	7	4	5	·. 8	86
1	5		2	I				2						4
5 40	44 537	19	7	2 17	18	 16	1 13	3	9	 5	1 17	18 18	1 15	4 14 171
	43			i	I	2	ĭ	8		4	9	I	2	40
54	851	20	21	17	12	15	10	41	55	37	32	15	18	207
54 17 88	851	5 30	2	4 26	4	7	4	7	55 13 75	37 15 58 16	33 7 47	4	5	297 77 436 361 263
56	1,25S 702	30 -39 31	31 22	33 27	4 17 38 28	24 30	19 29	7 56 28	75 24 18	16	47 32	23 35	5 30 35 23	436 361
41	464	31		27	28		18	20	18		23	22	23	263
171	1,992 1,846	72	79 35	81	78	65 46	61	77	93	69	74	67	68	884
145	1,846	45	35	57 4	54	46 2	43 5	77 67 4	93 56 4	54 1	74 56	67 48 3	60 I	884 631 35
			[}							4	3		35

Deaths of Males by Age. and Cause of Death, City of

		Deams						nst of		-, 0.	
Cause of Death.	Total both Sexes.	All Ages.	Under r Year.	1	2	3	4	Total Under 5.	5	10	15
I Consul Discours											
I.—General Diseases. I. Typhoid fever	564	376	2	2	2	2		7.5	12	22	20
2. Typhus fever	204	3,0	3		3		5	15	13		30
3. Relapsing fever											
4. Malarial fever	40	27		2	I	I	2	6			2
5. Small-pox	2	2	138		85	• •	• •				
	997 786	504	138	214	85 67	28	12	477	21 87	I	I
7. Scarlet fever	401	402 178	25 96	73	17	65 9	40 4	270 171	5	28 I	9
9. Diphtheria and croup	1,714	903	121	73 45 268	185	118	79	771	112	8	6
10. Influenza	335	151	17	7	2	I	Í	28	4	2	2
11. Miliary fever				• • •	• •		• •	• •	• •		•••
12. Asiatic cholera	• •			•••		•••	• •	• •		• • •	• • •
13. Cholera nostras	94	45	12				3	16	т.	2	1
15. Plague	74	••									
16. Yellow fever										• • •	
17. Leprosy	I	I	::	• • •	- 1		• • •	68			• •
18. Erysipelas	311	159	67 I	т.	I 2	т.	Ι	6	I	1	I
20. Pyæmia, septicæmia	110	71	11	I	3	I		16	3	4	3
21. Glanders	3	2									•••
22. Malignant pustule	5	5									
23. Hydrophobia	7	5			• •				3	I	
24. Actinomycosis	4	I			• •	• • •	• •	• • •	• • •	٠.	••
24a. Trichinosis	I			::	::	••	••				••
25. Pellagra	48		1					I			
27. Tuberculosis of lungs	0,043	34 5,559	52	37	15	6	6	116	23	24	246
	806	467	99	110	72	37 6	30	348	44 6	20	II
29. Abdominaltuberculosis	171	97 38	17 2	10	3	2	I	37 6		3	5
30. Potts' disease	58 4	2		2 I	••	2	•	1	3		4 I
32. White swelling	31	15		Î	1		2	4	1	3	ī
33. Tuberculosis of other organs	79	48		2	2	· ·		8	2	2	2
organs		1	4			•••	• •		3		
34. General tuberculosis	71	35	7	2 I		• •	1	10	• •	3	4
35. Scrofula	396	228	121	7	1			130	2	··	 I
37. Gonorrhæa (adults)	12	5	•••								
38. Gonorrhæa (children).	10	4	4					4			
39. Cancer, etc., of the	131	116	1					I		1	
mouth	J.										
liver	1,421	753		1		• •	1	2			1
41. Cancer of intestines, \	450	222							ī		}
rectum	459	223				••	• • •	• •	1	• • •	•••
42. Cancer of female (genital organs	557										
43. Cancer of the breast	318	4									
44. Cancer of the skin	70	39	••				• •				
45. Cancer of other or-)]									
gans and unspeci-	532	307		2	I	1	2	6	3	5	4
fied) 46. Other tumors (except)											
of female genital	65	26			ī			I	1	ī	
organs)									-		
47. Acute articular rheu-	401	187	2	1	1	5	7	16	31	21	15
48. Chronic rheumatism											
and gout	119	6r	• • •	•••	• •	••	••	••	3	2	••
49. Scurvy	12	7	5	. I				6			
50. Diabetes	696	288		I		• •	I	2	I	6	5
51. Exophthalmic goitre	50	5		• • •	• •		••			• •	- ;
52. Addison's disease	16 78	9 43	· · I	· ·	::		· · ·	3	2	5	I 2
54. Anæmia, chlorosis	120	43	ī	I	ı		• • •	3	3		
55. Other general diseases.	3	1.3									
56. Alcoholism, acute	5 33	431									
and chronic	200	13-									

New York, for the Year Ending December 31, 1909.

20	25	30	35	40	45	50	55	60	65	70	75	8o	85 and Over.	Colored.	Chinese.
59	64	50	46	26	21	17	5	5	I	2				7	
::	::				::					::					
4	••	I		2	I	::	3	1	I	2	2	2		2	
2	2 I	2		• •							• •			5 I	
5 2	2				• • •					::	1	::		13	
3	5	7	1 9	9	9	13	7	14		13	5	7	3	15 4	
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	· · I	· · ·		4	3		· · ·	3	3	2	2	3	· · ·		
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3	7	 5 1	6	3	9	3	2	4	1	2				2 I	
	·· I	I				I		I							
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			••		••		• •	• •	•••			::	••	• •	
3 540 11 5 4	694 12	797 8	8 ₅₂ 5 7	5 753	568	3 403 1	3 229	148	97	41	I 21	4	3	272	31
II	12	8	5 7	4 6	2	ī	1	2	· · · · · · · · · · · · · · · · · · ·		2			20	
4	9 3	4 2	2	4	• • •	5 I	Ι							5 2	
2			2	I							::	::		Ι	
6	3	3	2	2	3	6	2	4			I		I	2	
3	3		2	I	5					2				I	
2	7 I	17 4	20	15	18	7	3	3	I		I			13	I
•••		• • •	••	• •	• • •	• • •	•••								
6		I	4	8	18	13	20	13	15	12	6	I	2	I	I
	7	17	31	54	83	95	109	119	104	66	42	16	5	4	I
			II	20	20	21		37	30	27	13	2	I	2	I
••			••	••	I	••	1								
••		I	••	I	4	5	6	7	4	8	3				
5	9	7	16	16	33	34	38	37	44	32	12	3	3	2	
••	1	••	5	3	5	1	2	3	3						
13	10	6	5	16	8	12	9	8	5	7	4		I	5	I
2	2	2	4	3	3	7	3	9	11	4	3	2	I		
·. 6	8	9	12	1 13	34	39 1	41	 4I	36	17	14	4	::	2	
·· I	I	 I	2	I		I	I 2	1							
2 2	2 I	5 2	2 2	5	 3 5 1	6 6	3	6	2					2	
•••)		••		• •		• • •			3		::				ł ::
3	25	42	83	82	72	53	27	18	12	9	3	2		4	

Deaths of Males by Age, and Cause of Death, City of New

Cause of Death.	Total both Sexes.	All Ages.	Under 1 Year.	I '	2	3	4	Total Under 5.	5	10	15
57. Lead poisoning 58. Other chronic poison-)	15	15									
ings of occupation.			••		••	• •	• •		• •	• • •	
59. Other chronic poison-	5	3	I			••		1	••	••	
II.—Diseases of Nervous System and Organs of Sense											
60. Encephalitis	26	12	2	3	1	28		7 248	28	13	12
61. Simple meningitis 61a. (Of which) cerebro-	676	397	121	50	39			J	21		-
spinal meningitis (326	191	59	17		17	7	120		9	9
62. Locomotor ataxia 63. Other diseases of \	89	67		13	6	6	4	39	3	2	
spinal cord)	222	131		13	ı ı		4	- 7		-	
64. Apoplexy, congestion of brain	896	457	2		•••		••	2	• • •	• • •	1
65. Softening of brain66. Paralysis unspecified	49 128	36 57	3	::		::		4	• •		::
67. General paresis 68. Other forms of insanity	176	125			• • •						
60 Epilepsy	48	63	4		2			7	2	3	3
70. Convulsions (not pu-		• • • • • • • • • • • • • • • • • • • •									
71. Convulsions of infants	457	267	222	37	2	6		267			
72 Tetanus, trismus	53	41	16	I				17	3	4	3
73. Chorea	175	89	2	7	2	1	3	15		4	4
75. Diseases of the eyes 76. Diseases of the ears	3 142	78	23	8	3	2	3	 39	8	2	7
70. Diseases of the cars	142	,0	-5		٠ ١		3			1	
IIIDiseases of Circula-											
tory System.	.0				2		ī	2	1	2	
77. Pericarditis 78. Acute endocarditis	841	24 422	9	·· 5	4 3	4 3	8	3 23	9	15	3
79. Organic heart diseases. 80. Angina pectoris	0,854	3,320	10		3	3	8	24	43	51	59
At. Diseases of afteries,	1,928	962									
angurism etc	192	91	3					3	1	2	.,
82. Embolism, thrombosis 83. Diseases of veins (hemorrhoids, var-)											
(hemorrhoids, var- ices, phlebitis, etc.)	28	14	1	I	• • •	• •	•••	2	• • •	•••	1
84. Diseases of lymphatics (29	20	10	1	3	1		15	1		
(lymphangitis, etc.) § 85. Hæmorrhage	79	46	32	1	1			34	1	1	٠٠ ا
86. Other diseases of cir-						• • •					
chiatory system,											
IVDiseases of Respira-											
tory System.	10	5	I				۱	I			
87. Diseases of nasal fossæ 88. Diseases of the larynx. 80. Diseases of thyroid!	36	21	4	4	1	1	I	11	1		
	8	1						• • •	1		
gland) 90. Acute bronchitis	1,051	518	350	75	16 2	8	2	451 16	3	::	2 2
91. Chronic bronchitis 92. Broncho-pneumonia	5,360	160 2,747	1,283	576	208	65	38	2,170	50	20	9
93. Pneumonia	5,254	2,971 181	308	250 29	108	65 45 3	22	733	63	30	45
94. Pleurisy	1	36	10					10	,		
pulmonary apoplexy of Gangrene of lung	77 25	15									
		77 38	I		• •	٠		1			
o8. Pulmonary emphysema	56	38	I	••	••		•••	I			
99. Other diseases of re- spiratory system	74	47		1	• •			1	1		1
(phthisis excepted))	1		- Contract	-		1	1	1	l	1	1

York, for the Year Ending December 31, 1909—Continued.

20	25	30	35	40	45	50	55	60	65	70	7 5	85	85 and Over.	Colored.	Chinese.
	1	2	2	3	4	1	2								
						I									
 16 11	2 7 5	 13 6	I 16 2	I I4 2	1 10 3	2	12	4	·· 2		• •	••		 14 4	
3	7	5	7	11 4	9 4	IO IO	11	7	4	6	6		3	2 5	
	6	16	18	27	38	66	59 6	77	75 8	35	22	8	7	10	
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8	7	6	8	3	2 I	3	4	3	2 I	3	2 I			3	
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3 8 63 1 2	1 15 101 3	30 133 	37 192 5 21	36 227 6 38	28 256 5 56 1	37 350 15 73	1 40 317 16 89	1 35 422 11 106	33 374 18 129	25 307 12 154	1 22 209 2 139	 9 126 1 83	8 66 60	 8 78 1	7 I
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1 6 16 101 4	3 6 6 131 10	10 24 179 3	4 6 40 248 15	8 38 252	2 6 42 237 13	36 195 4	7 11 38 158	5 15 59 177 13	4 12 52 168 3	9 18 60 119 2	14 43 75 2	13 21 36 1	7 23 24 1	13 7 92 95 3	38
4	2		••	2	1	3			3	6	I	3	I	1	
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2	3	9	4	6	4	7	5	1	2	1				2	

Deaths of Males by Age, and Cause of Death, City of New

			-	•							
Cause of Death.	Total both Sexes.	All Ages.	Under 1 Year.	I	2	3	4	Total Under 5.	5	10	15
V.—Diseases of Digestive											
System.											
and adnexa	29	16	-4	I		1		6	1		1
101. Diseases of pharynx	77	45	14	2	3	2		- 21	6	2	5
102. Diseases of desopha-	11	11	1			1	١	2	1		1
gus	182	117									4
103. Ulcer of the stomach. 104. Other diseases of	102	**/									4
stomach (cancer>	300	148	59	10	1	2	2	74	I	•••	
excepted))											
105. Diarrhœa and en- teritis (under two)	5,126	2,765	2,295	470				2,765			
years)											
(of which) chron-tic diarrheea			• • •	••	••	٠٠.	• • •	• • •			•••
106. Diarrhœa and enteri-									}		
tis (two years and	641	301		• • •	98	34	17	149	19	7	
over)) 107. Intestinal parasites 108. Hernia, intestinal	4	3			1			1	1		
108. Hernia, intestinal	558	284	57	6	3	3	3	72	8	2	2
obstruction		204			3		3	'-		_ ~	
testines	86	50	6	3	• •	• •	1	10	I		••
phy of liver	16	7	1		٠.,			1			
phy of liver	7										
112. Cirrhosis of liver	1,080	698	I			I		2	1		,.
113. Biliary calculi	105	31 65		••			• •				• • •
114. Other diseases of liver 115. Diseases of spleen	154	5	2 I	т.		::		2 2	2		
116. Simple peritonitis (36	22	4					4	I		I
(non-puerperal)	30		4					*	1		
117. Other diseases of di- gestive system (ex-											
cept tuberculosis	30	17	1				• • •	I	• • •	• • •	•••
and cancer)											
iliac abscess	566	340	2	2	6	4	4	18	27	35	34
VI.—Diseases of Genito- urinary System.							1				
119. Acute nephritis	653 4,869	339 2,522	32	12	13	7	5	69	11	3	12
120. Bright's disease	4,869		9	5	1	2	2	19	9	10	,18
121. Other diseases of kidneys and adnexa	97	60	2	3	•••			5			I
122. Urinary calculus	16	12									1
123. Diseases of bladder	66	56	•••		• • •	•••	••	••	• • •		• •
124. Diseases of urethra, turinary abscess, etc.	21	19	••		••	• • •	•••	••	••		••
125. Diseases of the pros-	92	92									
tate											
eases of male geni-	I	1									
tal organs)											
127. Metritis 128. Uterine hæmorrhage (9	•••			••					••	
(not puerperal)	2	••	••		••	••	• • •	••	• •	••	
129. Uterine tumor (not)	90										
130. Other diseases of											
uterus	27	•••	••		• • •		••	••		••	٧.
131. Ovarian cysts and tumors	54	••				••			•••	• •	
132. Other diseases of fe-	119										
male genital organs (1.79										
(not puerperal, nor	3										
cancer))											
VII.—Puerperal Diseases											İ
134. Accidents of preg-	132										
nancy											
rhage	41	•• [•••	••	••	•••	••

Report of the Bureau of Records.

York, for the Year Ending December 31, 1909—Continued.

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20	25	30	35	40	45	50	55	60	65	70	75	80	85 and Over,	Colored.	Chinęse.
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Deaths of Males by Age, and Cause of Death, City of New

Cause of Death.	Total both Sexes.	All Ages.	Under r Year.	I	2	3	4	Total Under 5.	5	10	15
136. Other accidents of)	102										
labor	250										
137. Puerperal septicæmia. 138. Puerperal albuminu- (160										
ria and convulsions (139. Puerperal phlegma- sia alba dolens	2								••		
parturition, sudden	31								• •		
death	1					••					
VIII.—Diseases of Skin											
and Cellular Tissue.	77 28	35 18	1 6	2				3		::	
143. Carbuncle		56	13	7				21	1	I	2
144. Phlegmon, acute ab-	93		-			_					1
145. Other diseases of the skin and adnexa	38	23	13		I	••	••	14	••	•••	1
IX.—Diseases of Loco- motory System. 146. Diseases of bones (non-tuberculous).	192	113	26	11	6	••		43	11	6	4
147. Arthritis, other diseases of joints (except tuberculosis)	11	6			••	••					
and rheumatism)											
149. Other diseases of or-		••	••	••	••	••		••			••
X.—Malformations. 150. Congenital malformations	648	366	333	15	7	2		357	4	3	1
XI.—Diseases of Infancy. 151. Congenital debility,	3,795	2,153	2,149	I	2		I	2,153			
icterus and scler- ema (of which)		237	236				1	237			
51a. Injury during birth 52. Other diseases pecul-	400	49	49					49			
iar to infancy)	230	129	128	. I				129			
XII.—Diseases of Old Age. 154. Senile debility	597	206						••			
XIIIExternal Causes.	120	88		.:							2
155. Suicide by poison		238						•••			6
156. Suicide by asphyxia 157. Suicide by hanging or strangulation}	74	60								••	2
128 Suicide by drowning	11	8 229						::			10
159. Suicide by firearms 160. Suicide by cutting (245 47	43									
instruments { 161. Suicide by precipita- tion from height }	51	29					,.				
162. Suicide by crushing	0	5									
163. Suicide by other !				••							
methods) 164. Fractures	58	44	I	I			::	2	I	1	2
165. Dislocations	1,712	1,370	5	12	33	27	25	102	117	65	51
juries)	447	1,370	11	26	29	21	11	98	18	5	9
substances	2	2									2
169. Sunstroke	. 130	73	17	1	2	2	1	23		}	

York, for the Year Ending December 31, 1909—Continued.

													d /er.	red.	ese.
20	25	30	35	40	45	50	55	60	65	70	75	80	85 and over.	Colored.	Chinese.
	•••		6.4												
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26	2 26	28	23	18	25	I 23	17	2 I2	I I4	· 3	3				.:
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	2	••	1	I	••		1					••		••	
2	2	7	 5	5	2	5	6			••	2			1	
89	1 126			•••	125	•••	1 60	59		18			6	32	
6	120	137	132	120	6	91	2	2	44		19	9	2	2	
			••				1	I							
2	3.	5	5	10	I	5	4	5	5	2	I	• •		••	•••

Deaths of Males by Age, and Cause of Death, City of New

Cause of Death.	Total both Sexes.	All Ages.	Under 1 Year.	I	2	3	4	Total Under 5.	5	10	15
170. Freezing	5	r r									
171. Electrical shock	11	5 11	• •				::				· · ·
172. Accidental drowning.	467	433	1	1		• •	I	3	37	26	41
173. Inanition (starvation). 174. Inhalation of noxious (3	2				••		••	••		
gas, not suicidal (286	187	I			1		2	I	2	10
175. Other acute poisoning.	95	51	3	1	1	2	3	10	5	2	
176. Other external vio-	294	194	29	1	4	1	Ĭ	36	3	5	12
(Of which)								_			
a. Homicide, by blows.	36	29	1		••			I			1
b. Homicide, by sharp instru-	27	22							1	1	
ments.											
c. Homicide, by gun-	102	Sı				• • •			• •	2	10
d. Homicide, by poison	2	2									
e. Homicide, by other 1	15	6	1		1			2			
methods	-5										
XIV.—Ill-defined or Not								1			
Specified Causes.	1										
177. Dropsy 178. Sudden death, not }			•••		•••		•••				
puerberat		••		••	••		••	••		••	••
179. Ill-defined causes	555	294	269	22	1			292			
I.—General diseases						0			0		0
1.—General diseases	21,324	11,937	810	794	464	284	200	2,552	378	175	358
a. Tuberculous dis-	0.011	6 00"	182	165	0.7			-0.5	80	63	274
eases	9,911	6,295		-	93	51	40	531		6	274
b. Cancer	3,488	1,442	1	3	1	1	3	9	4		5
II.—Diseases of ner-)		_									
vous system and organs of sense	3,260	1,843	405	121	55	44	21	646	52	28	31
III.—Diseases of circu-1				8		8					
latory system 1	10,175	4,990	65	0	13	0	10	104	56	71	75
IV.—Diseases of respi- ratory system	12,746	6,817	1,999	939	349	122	65	3,474	124	53	63
V.—Diseases of di-)	0.01"	4.030	248	40*	112	48	0.7	0.720	60	46	48
VI.—Diseases of genito-	9,015	4,930	2,448	495	112	40	27	3,130	69	40	40
Urinary system	6,119	3,101	43	20	14	9	7	93	20	13	32
VII.—Pilerneral dispasses	719										
VIII.—Diseases of skin and cellular tis-	236	*20	22	0	ı	1			1	ī	3
SHE	230	132	33	9	1	,	•••	44	1	1	3
IX.—Diseases of loco-	203	119	26	11	6			43	11	6	4
	_	366		15	7	2		357	4	3	ı ı
X.—Malformations	1 0.tX	300	333 2,326	2	2		ī	2,331			
X.—Malformations	648	2,331	2,520								
X.—Malformations XI.—Diseases of infancy XII.—Diseases of old age	4,104	2,331				2:			*80		7.48
X.—Malformations XI.—Diseases of infancy XII.—Diseases of old age XIII.—External causes	4,104	2,331 206 3,267	68	43	69	54	42	276	182	107	148
Motory system. J X.—Malformations XI.—Diseases of infancy XII.—Diseases of old age XIII.—External causes	4,104 597 4,403 890	3,267 700	68		69	54				107	20
X.—Malformations XI.—Diseases of infancy XII.—Diseases of old age XIII.—External causes a. Suicide b. Homicide.	4,104 597 4,403 890 182	700 140	68	43	- 69 	54	42	3	·	107 1 3	20 11
X.—Malformations XI.—Diseases of infancy XII.—Diseases of old age XIII.—External causes a. Suicide b. Homicide c. Accident	4,104 597 4,403 890 182 3,331	3,267 700	68	43	69	54	42			107	20
X.—Malformations XI.—Diseases of infancy XII.—Diseases of old age XIII.—External causes a. Suicide	4,104 597 4,403 890 182	700 140	68	43	- 69 	54	42	3	·	107 1 3	20 11

Report of the Bureau of Records.

York, for the Year Ending December 31, 1909-Continued.

20	25	30	35	40	45	50	55	60	65	70	75	80	85 and over.	Colored.	Chinese.
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45	57	31	43	52 I	44	23	11	12	3	4	1			7	
12	14	18	18	17	16	16	12	17	10	4	12	4	2	2	• •
I	8	4	7 18	2	3	2	I	3	3	3	1		••	2	4
19	23	29	10	14	15	7	4	3	3	3					7
4		5	4	4	5	1		1	2	I	••	• •	••	I	• •
3	2	5	4	1	3	2				٠		••		••	• •
9	17	1.4	8	5	6	3	3	I	1	2				2	2
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698	894	1,015	1,148	1,082	957_	765	569	493	392	252	140	47	22	393	39
574	727	815	880	776	588	420	237	154	99	44	25	4	4	303	32
12	19	31	62	99	159	168	202	213	197	146	76	23	11	9	3
36	49	71	86	98	95	126	123	132	129	62	46	20	13	57	1
79	124	180	265	315	353	489	473	588	570	507	383	221	137	109	9
136	162	233	320	326	316	280	237	289	2 66	235	148	86	69	215	13
70	76	107	138	169	205	214	177	164	133	80	57	26	21	99	5
60	87	142	208	235	288	328	298	372	314	260	196	101	54	79	4
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10	7	4	7	4	6	2	ı	6	5	2			1	6	
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228	317	313	314	309	300	244	158	3 149	19	24 47	50 42	38	71	75 75 63	5
52 17 159	68 22 227	66 25 222	"73 16 225	82 11 216	88 14 198	90 6 148	56 3 99	46 2 101	38 3 68	14 3 30	5 37	13		7 4 52	1 2 2
159		I				140								16	
				1	1	-									=

Deaths of Females by Age, and Cause of Death, City of

	es.	ar.					5.			
Cause of Death.	All Ages	Under r Year.	I	2	3	4	Total Under	5	10	15
I.—General Diseases.										
I. Typhoid fever	188	2	1	2	2		7	8	14	22
2. Typhus fever			}							
3. Kelapsing lever		٠: ا	{	• • •	• • •	• • •	••	• •		• •
4. Malarial fever	13	I	I	::		I	3	::		
6. Measles	493	136	201	°72 67	39	19	467	21		
7. Scarlet fever	384	17 110	51 60	67	59 19	36	230 215	102 7	27 1	
8. Whooping cough. 9. Diphtheria and croup. 10. Influenza	223 811	83	227	19 136	125	76	647	129	20	4
10. Influenza	184	11	3	2	2	I	19	3	5	4
11. Miliary fever		::	• • •		••	••		• • •		• • •
13. Cholera nostras					• • •					
14. Dysentery	49	6	2		• •	• •	· 8	1		
13. Cholera nostras 14. Dysentery 15. Plague 16. Yellow fever 17. Leprosy.		••	••	::						• • •
17. Leprosy.										
	7	76	6	2	•••	I	85	••	I	4
19. Other epidemic diseases. 20. Pyæmia septicæmia. 21. Glanders.	39	8	3 2	1		2	13		2	
21. Glanders.	I				••					
22. Malignant pustule	2	••	• •	• •				••		
24. Actinomycosis	3									
24a. Trichinosis		• •			••	•••	• •		• •	••
25. Pellagra 26. Tuberculosis of larynx 27. Tuberculosis of lungs 28. Tubercular meningitis.	1 14	• •		::						
27. Tuberculosis of lungs	3,084	33 83	35	11	*8	11	98	29	74	27 I
28. Tubercular meningitis	339	83	72 8	46	28 1	16 1	245	47	12	13 3 1
30. Potts' disease	74 20	7	ı	3	ī	ī	4	3	5 1	3
31. Cold abscess	2	I				1	2			
32. White swelling	16 31	2	I 2		I	I	3 6	3 2	6	4
34. General tuberculosis	36	ī	ī	3			5	5	3	5
35. Scroima	168		• •			• •			.:	
36. Syphilis		103	7	I	I	••	112	••	I	3
37. Gonorrhea (adults) 38. Gonorrhea (children)	7 6	6					6			
	15 668		• • •	• •	• •	• •	· · I	1		
AL Cancer of intestines rectum	236		• • •	• •	• • •					2
42. Cancer of female genital organs.	557					• •		••		3
43. Cancer of the breast	314									
45. Cancer of other organs and)	225						II	2	2	4
unspecified	223	4	I	3	3			_		
genital organs	39	2	1	1	1	••	5	2	1	1
47. Acute articular rheumatism 48 Chronic rheumatism and gout	214		I		4	2	7	30	. 28	18
48 Chronic rheumatism and gout 49. Scurvy	58	3	• •		• •	· · I	5	I	I	1
50. Diabetes	408	3		2			3	1	5	6
51. Exopthalmic goitre	46	• •			••	••	• •		• •	2
53. Leukemia	35	2	2	1		· · · I	7	3	• •	3
54. Anemia, chlorosis	77	4	2			I	7	3 3	2	3 2
55. Other general diseases	102	••	2	•••	• • •	• •	2	•		
56. Alcoholism, acute and chronic 57. Lead poisoning	102	::	• •	• •	• • •	• •	••			
58. Other chronic poisonings of										
occupation	2					••				
11.—Diseases of Nervous System and Organs of Sense.										
60. Encephalitis	14	::	::	2 28		10	.3 178	2	**	::
										11
60. Encephalitis	279 135	75 38	50 21	11	15 7	7	84	25 19	11	8

New York, for the Year Ending December 31, 1909.

20	25	30	35	40	45	50	55	60	65	70	75	80	and over.	olored.	inese.
30 30 30 30 30 30 30 30 30 30 30 30 30 3	27	30 23 2 1 5 2 4 3 433 433 435 2 10 15 28 11 4 10 10 11 13 6 17	35 26	40 7	45 6	50 5 	55 3	60 4	65 I	70 2	75 2 1 15 6 13 11 140 141 112 2 144 2 14 2 14 2 14 2 14 2	So II	\$\frac{\text{8}}{\text{over.}}\$	Part of the state	Chinese.
·· 6 4	2 5 2	4 2	 6 1	1 10 4	2 6 1	3	1 2	2	2 3 1	5	 I			9 3	

Deaths of Females by Age, and Cause of Death. City of

	- :	-								
Çause of Death.	All Ages	Under 1 Year.	I	2	3	4	Total Under 5.	5	10	15
62. Locomotor ataxia 63. Other diseases of spinal cord 64. Apoplexy, congestion of brain 65. Softening of brain 66. Paralysis, unspecified 67. General paresis 68. Other forms of insanity 69. Epilepsy 70. Convulsions (not puerperal) 71. Convulsions of infants 72. Tetanus, trismus 73. Chorea 74. Other nervous diseases 75. Diseases of the eyes 76. Diseases of the ears	22 91 439 13 71 51 27 53 190 12 3 86 2 64		6 2 25 6	3 2 4 2	3		22 I 190 111 9	2 1 		 1 1 5 2
III.—Diseases of Circulatory System	24 419 3,534 84 966 101 14 9	2 11 11 1 3 4 20	3 2	2 2		5 10	2 22 38 1 3 7 25	1 9 55	1 19 65 2 	2 12 77 1
IV.—Diseases of Respiratory System. 87. Diseases of nasal fossæ	4 16 7 533 151 2,613 2,283 142 41 10 84 18	5 316 7 1,063 288 20 6	618 202 36 	 19 147 85 14	1 9 81 50 4	2 3 37 222 1	 10 428 7 1,946 647 75 7 	3 53 53 9	1 2 2 8 25 2 1	2 7 18 39 7
V.—Diseases of Digestive System. 100. Diseases of mouth and adnexa. 101. Diseases of pharynx. 102. Diseases of esophagus. 103. Ulcer of the stomach. 104. Other diseases of stomach (cancer excepted). 105. Diarrhea and enteritis (under two years). (Of which) chronic diarrhea. 106. Uiarrhea and enteritis (two years and over). 107. Intestinal parasites. 108. Hernia. intestinal obstruction. 109. Other diseases of intestines. 110. Acute yellow atrophy of liver. 111. Hydatid tumor of liver. 112. Cirrhosis of liver. 113. Biliary calculi. 114. Other diseases of liver.	13 32 65 152 2,361 340 1 274 36 9 2 382 74 89	1,959 31 7 1 3	1 6 6 1 402 2 1	1 2 75 2 I	1 2 3 22 I I I	I I 8	6 17 1 50 2,361 105 105 37 10 2 2 5	2 2 2	1 4 1 I 8 3	3

New York, for the Year Ending December 31, 1909—Continued.

											-				
20	25	30	35	40	45	50	55	60	65	70	75	80	85 and over.	Colored.	Chinese,
	333	I II I 3 3 3 3	55 51 11 1 2 4 2 3 3 	1 3 23 1 5 2 2 1 1 4	3 6 5 4 	2 4 65 1 8 4 4 2 3 	6 7 55 1 4 3 1 1 	3 17 79 1 14 4 1 	4 9 76 1 12 5 5 2 3 3 ··· ·· · · · · · · · · · · · · ·	29 28 55 1 1 	 4 34 4 10 4 1 	4 11 5 1 		1 20 1 6 1 2 II I J	
13 100 1 1 3 	11 141 1 2 1 2	2 24 142 4 8 .2	2 26 1777 1 11 13 2 1 3	28 204 4 27 9 2	30 242 9 35 4	3 23 291 8 57 8 1	1 36 278 8 8 80 6 1	2 42 417 10 112 14 	2 38 427 12 126 12 1	3 40 359 14 165 9 2	21 260 5 161 8 1	17 149 4 111 4 1	1 8 103 3 69 4 	1 10 100 2 18 4 3	
1	1 6 25 74 7 3 I	 I 2 2 13 97 4 	 I 3 32 1333 5 2 1 2 2	 I 6 I 7 I 13 6 2 I 1 3 3		 1 4 9 42 128 2 2 I	 1 1 7 8 8 33 142 2 2 8 1	 1 10 11 85 1833 5 6 1 15 3	 16 21 65 169 4 5	 14 19 77 141 2 6 16 3	 1 11 17 66 91 2 3 14 4	13 13 56 53 1 4 8	1 15 9 37 26 1 6	16 7 99 73 4 2	
2 3 I	1 1 7 4 8 1 9 2 3 3 12 5 7	2 4 9 9 8 I 17 3 4	11 7 12 13 3 3 1 40 8 6	1 6 9 13 13 23 2 1 59 4 10	 9 3 8 28 48 8 6	1 1 3 5 10 222 1 49 10 9	1 4 10 17 23 45 9 8	 3 6 16 23 45 12 13	 4 12 19 13 1 1 25 5 7	 4 9 26 24 5 19 2	6 6	18 	6 9 4 1 1 2	1 1 1 2 5 5 55 7 6 1 7 1 3	

Deaths of Females by Age, and Cause of Death, City of

	1	1				-				
Cause of Death.	All Ages	Under 1 Year.	ι	2	3	4	Total Under 5.	5	10	15
115. Diseases of spleen 116. Simple peritonitis (non-puer-(peral)	2 14				2		4			
116. Simple peritonitis (non-puer-toperal). 117. Other diseases of digestive system (except tuberculosis and cancer). 118. Appendicitis and iliac abscess.	13									I
Appendicitis and iliac abscess VI.—Diseases of Genito-urinary	226	2		1		4	7	23	27	25
System.	314	13	11	9	4	6	43	16	8	6
120. Bright's disease. 121. Other diseases of kidneys and adnexa	2,347	3	••	5	3	1	12 1	9	12 I	20
122. Urinary calculus	4									
123. Diseases of bladder	10	• • •			••	• •	••			• •
_ auscess, etc	2	••			**			•••	••	• •
125. Diseases of the prostate 126. Non-venereal diseases of male t	••		(••	• • •		•••	•:	••
genital organs (• • •			••	••	••	• • •	• •
127. Metritis 128. Uterine hemorrhage (non-) puerperal)	9					••			••	•••
puerperal)	90								••	•
130. Other diseases of uterus	27		1	1	- ::		2			Ι.
131. Ovarian cysts and tumors 132. Other diseases of female geni-	54	••	••					• • •	••	I
133. Diseases of breast (not puer-)	121									4
peral, nor cancer)		1					1			•••
134. Accidents of pregnancy	132 41		• •	::					••	I
136. Other accidents of labor	102				- ::				••	I
137. Puerperal septicemia	250	••					••		• •	10
convulsions	160	•••	••	••	• • •			• • •	••	13
convulsions	2		;	••			• •			••
140. Other accidents of parturition, sudden death	31									
141. Puerperal diseases of breast VIII.—Diseases of Skin and Cellular	1	••	••	• •		• •		••	••	
Tissue.	42	2			1		3			
142. Gangrene	10	3	I		• • •		4	••		
144. Phlegmon, acute abscess 145. Other diseases of skin and ad-	37	13	3	I	• •	••	17		1	3
nexa (15		2			••	9			
IXDiseases of Locomotory System. 146. Diseases of bones (non-tuber-tulous)	79	15	10	6	2	6	3 9	7	2	5
147. Arthritis, other diseases of joints (except tuberculosis)	5									
and rheumatism)) 148. Amputation										
149. Other diseases of organs of locomotion										
X.—Malformations.	282	262	9	4		I	276	4		
XI.—Diseases of Infancy. 151. Congenital debility, icterus and sclerema (of which)	1,642	1,636	5	1			1,642			
and sclerema (of which) {	163	163		• •			163			
152. Other diseases peculiar to in-	30	30		• • •	••		30			
153 Neglect	101	101	••	•••	•••	• • •	101			
XII.—Diseases of Old Age.	391									

New York, for the Year Ending December 31, 1909—Continued.

20	25	30	35	40	45	50	55	60	65	70	75	80	85 and over.	Colored.	Chinese.
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	1	I		2	3	1	2	1		I					
23	33	18	23	12	10	4	. 8	5	2	2	3	I		5	
17 49	28 68	30 104	26 135	14	18 201	22 177	19 22 9	18	17 266	14 222	8 176	4 96	6 67	11 67	
3	7	4	I	2	4	3	1	3		2		I		1	
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	I						I								
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3	5	3 7	7		2 6	4 4	2	5	I	Ι	2	. · ·		2 I	
22	38	22	16	12	3	2	••	2						ΙΙ	
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4 11 67	9 27 76	19. 56	32 24	11	I 2					••				 I	
41	27	37	34	7	2 I									10 5	
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4	8	12	4	3											
	r														
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	 I	2	2	3	1	I	2		:: 1		3				
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5	4	2	3	2	3	I	1	1	3	I				• •	
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	' 		••						••					7	•••
	1			•••		I	5	10	29	53	92	82	119	8	

Deaths of Females by Age, and Cause of Death, City of

Cause of Death.	All Ages.	Under r Year.	I	2	3	4	Total Under 5.	5	10	15
XIII.—External Causes.										
155. Suicide by poison	42									2
155. Suicide by poison	87 87					• •	••	••		7
ulation	13						• • •		•••	••
158. Suicide by drowning	3									I
160. Suicide by cutting instruments.										
161. Suicide by precipitation from height	22									
162. Suicide by crushing	3						::	.:		
164. Fractures	14	1					1			1
165. Dislocations	342	4	15	17	12	22	70	46	9	9
167. Burn, by fire, scald	254	12	15	21	2.4	23	95	45	10	5
168. Burning by corrosive substances. 169. Sunstroke	57	9	2			3	14			
170. Freezing										
172. Accidental drowning	34							2	2	I
173. Inanition (starvation)	99		2	•••	2	2	6	3	3	4
suicidal	44	3	3		2	ī	9	4		
176. Other external violence (Of which)	100	12		2	1		15	2	1	8
a. Homicide, by blows b. Homicide, by sharp instru-)	7							• •		I
ments (5		• •	• •	• •		•••	• •	1	2
c. Homicide, by gunshotd. Homicide, by poisone. Homicide, by other methods				• •						
XIV.—Ill-defined or Not Specified	9	1 2		•••	•••					
Causes.	1	1					1			
178. Sudden death, not puerperal 179. Ill-defined causes	261	222	31	4	2	 I	260			
I.—General diseases	9,387	705	694	375	296	181	2,251	408	216	388
a. Tuberculous diseases b. Cancer	3,616	128	120 I	63	40	32	383 13	94	104	298
II.—Diseases of nervous system)	1,417	279	89	43	21	16	448	43	25	27
and organs of sense (III.—Diseases of circulatory system	5,185	52	14	7	10	15 66	98	67	88	92
IV.—Diseases of respiratory sys'em V.—Diseases of digestive system.	5,929 4,085	1,706 2,058	940	265 82	145 34	66 19	3,122 2,607	127 70	41 45	73 39
VI.—Diseases of genito-urinary)	3,018	18	12	15	7	7	59	26	21	35
VII.—Puerperal diseases	719			• • • • • • • • • • • • • • • • • • • •						26
VIII.—Diseases of skin and cell-	104	25	6	ī	1		33		1	3
IX.—Diseases of locomotory system	84	15	10	6	2	6	39	7	2	5
X.—Malformations	282	262	9	4		ī	276	4		
XI.—Diseases of infancyXII.—Diseases of old age	1,773 391	1,767	5	1			1,773	• •		
XIII.—External causes	1,136	41	37	40	41	51	210	102	25	43
a. Suicide	190						• •			11
b. Homicide	42 904	39	37	40	41	51	20S	101	24	2Š
XIV.—Causes ill-defined	262	223	31	4	2	1	261			
Total females	33,772	7,151	2,261	843	559	363	11,177	854	464	731

New York, for the Year Ending December 31, 1909-Continued.

													-	5	
20	25	30	35	40	45	50	55	60	65	70	75	80	85 and over.	Colored.	Chinese.
7 13	7 13 1 5 5 2 5 16 9 9 4 3 14	11 8 2 4 1 9 9	4 7 1 2 2 2	5 2 3 4 16 13 3 5 5 9 1 9 4 4	4 10 3 3 1 1 1 1 2 1 1 1 3 6 6 6 6 4 2 4 4 1 1 2	1 6 2	55	6 	1 4	3 1 16 4 18 8	2 I	1			
. · · · · · · · · · · · · · · · · · · ·	2	 I	4	3		•••	2	••	• •	••	**	••			••
-::				I		<u></u>							-:-	11	<u>.:</u>
573	633	627	688	597	591	525	503	467	367	270	170	79	34	329	
457 13	495 36	453 68	425 130	288 219	212 262	134 259	100 277	69 265	52 183	31 151	15 94	6 44	17	213 34	-
32 128 85 53 99 143	30 158 117 95 158 189	36 182 126 89 183 179	51 236 181 126 211 126	62 275 153 142 256 49	73 321 157 125 256 6	99 391 101 116 220	85 411 206 128 259 1	126 597 322 125 339 	120 618 291 89 289	55 593 279 98 241	62 456 200 73 191 	22 286 151 42 102	21 188 98 23 73	53 138 203 94 100 19	
5	6	2	3	3	5	I	I	J	3	1	••				
::						,			 29		92	 Š2	119	63	
92	80	65	80	71	61	48	45	58	44	53 43	28	31	10	26	I
25 7 60	33 4 43	32 2 31	6 60	14 8 49	23 3 35	37	36	52	38	5 1 37	3 25	30	10	3 2 2I	
				I		••					<u> </u>			11	<u></u>
1,211	1,467	1,493	1,705	1,612	1,600	1,598	1,652	2,052	1,851	1,641	1,293	Soi	570	1,051	I

Recapitulation—Total Deaths

~	TY	77	0	TO
L	Li	. 1	0	r

	All Ages.	Under I Year.	ī	2	3	4	Total Under 5.	5	10	15
Total Males Total Females Total both Sexes	40,333 33,772 74,105	8,825 7,151 15,976	2,479 2,261 4,740	1,093 843 1,936	572 559 1,131	373 363 736	13,342 11,177 24,519	897 854 — 1,751	503 464 967	763 731 1,494

BOROUGH OF

Total Males	20,961 17,002	4,894	1,328 1,212	577 424	282 285	180 184	7,261 6,125	432 398	254 222	349 328	
Total both Sexes	37,963	8,914	2,540	1,001	567	364	1 3,386	830	476	677	

BOROUGH OF

Total Males Total Females	3,597	561	135	74	37	27	834	76	52	100
	2,827	430	140	66	40	38	720	65	50	95
Total both Sexes	6,424	991	281	140	77	65	1,554	141	102	195

BOROUGH OF

Total Males	12,899 11,466	2,743 2,180	869 755	379 294	213	134 115		328 310		254 251
Total both Sexes	24,365	4,923	1,624	673	416	249	7,885	638	315	505

BOROUGH OF

Total Males	1,992 1,846	461 390	104 114	48 44	34 21	25 17	672 586	45 66	28 29	47 45	
Total both Sexes	3,838	851	218	92	55	42	1,258.	III	57	92	

BOROUGH OF

Total Males Total Females	884 631	166 131	43	15 15	6	7 9	237 199	16 15	11	13
Total both Sexes	1,515	297	77	30	16	16	436	31	17	25

from All Causes by Age-Groups.

NE	W	YORK.	

20	25	30	35	40	45	50	55	60	65	70	75	80	85 and over.	Colored.	Chinese
1,320	1,721	2,070	2,490	2,544	2,525	2.459	2,044	2,204		1,476	1,069	558	403	1,125	76
1,211	1,467	1,493	1,705	1,612	1,600	1,598	1,652	2,052		1,641	1,293	801	570	1,051	1
2,531	3,188	3,563		4,156	4,125	4,057	3,696	4,256		3,117	2,362	1.359	973	2,176	77

MANHATTAN.

628 398	895 734	1,039 755	1,320 836	1,374 840	1,377 830	1,275 790	1,077	1,139 994	945 872	699 740	457 553	250 334	170 238	699 627	69 I
1,226	1,629	1,794	2,156	2,214	2,207	2,065	1,912	2,133	1,817	1,439	1,010	5S4	408	1.326	70

THE BRONX.

172 131	- 233 166	258 163	296 184	282 158	237 137	233 137	181 126	187 182	158 148	131	98 112	44 71	25 55	100	
303	399	421	480	440	374	370	307	369	306	258	210	115	So	191	

BROOKLYN.

					1					1						
	422	482	6.46	724	741 506	737	770	647	707	669	506	412	200	158	272	7
	411	474	489	568	506	520	543	589	729	668	631	510	342	221	262	
ı	833	956	1,135	1,292	1,247	1,257	1,313	1.236	1,436	1,337	1.137	922	542	379	534	7
					1											

QUEENS.

69 62	84 68	77 69	100 79	100 87	122 85	124 94	88 92	113	120	83	61 80	33 35	26 37	36 54	
131	152	146	179	187	207	218	180	218	238	192	141	68	63	90	

RICH MOND.

															_
29 9	27 25	50 17	50 38	47 21	52 28	57 34	31	58 42	53 45	57 34	41 38	31 19	24 19	18 17	
38	52	67	88	68	80	91	61	100	98	91	79	50	43	35	

Actual Number of Deaths from Zymotic and

BOROUGH OF

Wards.	Area in Acres.	Population by Census of 1900.	Number of Persons to the Acre.	Typhoid Fever.	Malarial Fevers.	Small-pox.
First Second Third Fourth Fifth Sixth Seventh Eighth Ninth Tenth Eleventh Twelfth Thirdeenth Fourteenth Fifteenth Sixteenth Sixteenth Seventeenth Timeteenth Timeteen	154.0 \$1.0 \$5.0 \$3.0 168.0 183.0 183.0 183.0 196.0 196.0 197.0 96.0 198.0 349.0 331.0 450.0 444.0 441.0	9,516 1,488 1,797 10,554 8,290, 20,004 89,337 29,059 59,650 71,879 99,144 476,602 64,117 34-035 24,006 52,808 130,796 61,325 257,448 89,798	61.8 18.4 18.9 235.7 49.4 232.7 450.7 158.8 185.2 653.4 505.8 86.6 599.2 354.5 121.5 121.5 121.5 121.3 173.8 202.2	3 1 4 1 3 8 10 10 6 6 14 74 4 4 4 6 7 9 43 7 7	3	
Twenty-second	1,529.0	1,850,093	147.2	262	7	2

BOROUGH OF

Twenty-third	4,267.0	132,413 43,009	31.0	39 24	1 2	::	
Total	26,522.8	175,422	6.6	63	3		

Certain other Preventable Diseases, by Wards.

MANHATTAN.

Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Cerebro-spinal Meningitis.	Pneumonia.	Broncho- Pneumonia.	Diarrhœal Diseases.	All Causes.	Deaths in Institutions.	Deaths of Children under 5
3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4	2 3 2 2 2 3 7 7 4 9 62 6 6 2 1 10 13 5 5 3 13 9 9 9 9 13 13 13 13 13 13 13 13 13 13 13 13 13	6 15 3 14 54 22 43 35 65 198 23 8 21 67 59 121 36 38 101	45 7 11 81 28 86 103 63 205 1,009 54 63 222 190 704 222 190 704 253 227 442	3 2 3 10 6 3 8 9 49 49 5 3 2 4 4 14 7 7 15 8 6 6	30 2 3 62 19 43 101 43 97 750 48 69 92 159 97 310 101 114 259	23 51 101 13 52 134 77 102 83 146 80 176 30 57 294 91 431 119 83 246	29 1 57 67 9 36 118 56 104 68 '37 661 62 97 24 60 180 104 035 110 65 229	350 37 81 621 223 458 1.252 597 1,500 832 1,411 10,616 659 754 385 968 1,627 6.331 1,627 1,597 1,562 3,767	54 16 29 244 9 767 42 587 2 48 3,327 16 17 181 2,038 5,078 141 2,816 659	93 18 276 44 177 565 261 410 349 639 3.233 326 416 111 220 1,010 590 2,078 3,88 1,094
388	358	220	963	4,205	184	2,575	3,133	2,857	37,963	16,071	13.386

THE BRONX,

41	28	24	77	1,153	17	240	190	230	4,126	1,898	1,009
17	22	10	25	470	17	142	94	118	2,298	748	546
58	50	34	102	1,623	34	382	284	348	6,424	2,646	

Actual Number of Deaths from Zymotic and

BOROUGH OF

Wards.	Area in Acres.	Population by Census of 1900.	Number of Persons to the Acre.	Typhoid Fever.	Malarial Fevers.	Small-pox.
First Second Third. Fourth Fifth Sixth Seventh Eighth Ninth Tenth Eleventh Twelfth. Thirteenth Fourteenth Fifteenth Sixteenth Seventeenth Eighteenth Twenty-first Twenty-first Twenty-first Twenty-first Twenty-fifth Twenty-sixth Twenty-sixth Twenty-sixth Twenty-sixth Twenty-sixth Twenty-sixth Trenty-seventh Twenty-sixth Trenty-seventh Twenty-sixth Trenty-seventh Trenty-sixth Trenty-seventh Trenty-sixth Trenty-seventh Trenty-sixth Trenty-sighth Trenty-sixth 233.0 97.7 161.4 111.3 119.4 302.9 458.5 1,843.2 262.6 663.1 230.3 282.6 641.1 230.3 282.6 244.8 823.3 873.0 413.8 461.4 483.2 1,361.6 736.0 1,198.5 567.8 400.7 884.4 400.7 884.4 1,380.0 1,3	20,507 8,565 17,949 12,568 18,862 42,485 40,471 52,414 42,976 39,100 22,668 30,334 42,1029 21,029 25,446 56,550 57,309 25,143 37,045 22,446 58,957 66,575 61,813 31,767 48,328 66,086 43,961 77,1912 27,188 24,700 14,609 8,243	87.2 87.7 111.2 158.0 140.2 88.3 28.4 68.8 122.7 89.5 104.3 111.4 123.0 231.0 24.8 91.0 48.8 91.0 48.8 85.1 122.7 48.8 122.7 48.8 123.0 48.8 123.0 48.8 89.6 24.8 89.6 25.1 122.0 48.8 89.6 89.6 26.5 89.6 89.6 89.6 89.6 89.6 89.6 89.6 89.6	2 2 2 3 11 9 18 13 15 1	I		
Total	38,977.8	1,166,582	29.9	191	24	

BOROUGH OF

Wards.	Area in Acres.	Population by Census of 1900.	Number of Persons to the Acre.	Typhoid Fever.	Malarial Fever.	Small-pox.
First Second Third Fourth Fifth Total	4,650 14,700 22,000 36,600 3,770 81,720	48,272 40,903 25,870 30,761 7,193	10.4 2.8 1.2 .8 1.9	7 4 5 20 1 	3	::

Certain Other Preventable Diseases by Wards-Continued.

BROOKLYN.

Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Cerebro-spinal Meningitis.	Pneumonia.	Broncho- Pneumonia.	Diarrheal Diseases.	All Causes.	Deaths in Institutions.	Deaths of Children under 5 Years.
1 2 7 7 1 1 20 7 9 6 10 3 11 4 12 10 6 3 2 2 5 12 2 6 6 2 3 11 3 5 5 5 5 3 3 509	4 3 1 1 13 5 20 3 4 1 1 7 7 9 2 2 5 18 10 7 12 9 8 8 17 13 3 3 17 11 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18		3 3 12 23 31 12 23 31 15 17 9 6 14 21 11 20 14 17 14 17 17 17 17 17 17 17 17 17 17 17 17 17	48 28 39 44 40 107 119 104 59 70 49 70 62 72 72 96 49 50 42 101 113 69 70 82 142 156 80 63 33 16	1	21 15 22 49 84 58 107 69 86 35 68 55 68 58 58 32 73 73 66 74 77 76 77 77 77 77 77 77 77 77	17 16 18 14 14 88 44 44 85 55 56 68 87 55 56 68 75 56 68 75 75 75 75 75 75 75 75 75 75 75 75 75	22 16 9 23 59 54 47 115 55 94 33 39 117 68 73 89 92 27 38 89 89 48 48 187 80 84 48 48 48 48 48 48 48 48 48 48 48 48	415 194 300 268 453 925 773 1,273 787 865 479 597 466 687 619 789 996 621 1,019 1,241 932 900 813 1,950 813 1,293 1,353 440 440	122 1 25 1 774 8 196 297 1 239 260 1 9 297 37 273 3 317 195 525 77 98 27 274 2,283 38 69 5	83 59 72 57 77 168 311 171 426 190 310 136 329 223 321 350 263 131 100 300 328 24 140 27 18 8 28 28 28 28 28 28 28 28 28 28 28 28
309		110	556	2,347	90	1,910	1,593	2,047	24,365	6,452	7,885

QUEENS.

Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Pulmonary Tuberculosis.	Cerebro-spinal Meningitis.	Pneumonia.	Broncho- Pneumonia.	Diarrhwal Diseases.	All Causes.	Deaths in Institutions.	Deaths of Children under 5 Vears.
10 8 1 2 	18 12 4 8 	4 6 4 8 1 	15 27 . 8 19 4	78 127 42 56 6	4 2 2 8	72 96 32 69 10	91 17 38 14 275	88 135 31 108 34 396	992 1,211 482 907 246	232 12 119 158 78	334 434 128 293 69

Actual Number of Deaths from Zymotic and

BOROUGH OF

Wards.	Area in Acres.	Population by Census of 1900.	Number of Persons to the Acre.	Typhoid Fever.	Malarial Fevers.	Small-pox.
First Second Third Fourth Fifth	3,340 4,130 10,050 8,180 10,900	21,441 13,200 13,701 9,516 9,163	6.4 3.2 1.4 1.2	3 2 4 2	 	
Total	36,600	67,021	1.8	11	1	

Deaths According to Nativity of

	Nativity of Deceased.				
Country.					
	Manhattan,	The Bronx.	Brooklyn .		
nited States	23,381	3,854	15,657		
eland	4,428 2,860	690 834	2,622 2,263		
ermanyalv	1,587	236	2,203		
ussia	1,710	206	818		
ngland	620	120	589		
ustro-Hungary	1,294	146 .	319		
cotland	201	34	196		
ritish America	198	32	157		
vitzerland	108	33	47		
rance	22I 166	30	47 58 5 43 38 8		
ohemia	163	19	5		
oumania		23 15	43		
oland	44 13	15	30		
yrią	166	40	217		
weden	56	15	165		
orwayenmark	43	15	53		
	41	13	22		
inlandolland	40	5	29		
uba	34 98	38	6		
ther West Indies	98	8	54		
elgium	15	4	16		
Dain	27	I			
reece	43	4	11		
hina	71		7		
ustralia	S8		2		
ther Foreign		22	51 87		
nknown	245	21	07		
fixed nationalities					
	37,963	6,124	24,365		

Certain Other Preventable Diseases by Wards-Continued.

RICHMOND.

Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Pulmonary Tuberculosis,	Cerebro-spinal Meningitis.	Pneumonia.	Broncho- Pneumonia,	Diarrhoal Diseases.	All Causes,	Deaths in Institutions.	Deaths of Children under 5 Years.
3 4 4 1	5 1 2 1 1	2 1 2 1	6 4 3 5 2 20	73 28 24 21 13	I I 2 4	39 12 18 14 17	22 10 12 26 5 75	21 18 37 35 8	536 265 316 252 146	433 33 16 51 14 547	114 64 111 111 36 436

Deceased and Parents of Deceased.

Nat	ivity of Dece	ased.		Nativi	ty of Parent	s of Decea	sed.		
Borough of— City of			Borough of—						
Queens.	Richmond.	New York.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	New York	
2,490 293 569 116 32 78 50 27 19 17 19 28 26 8 4 3 2 1 3 2 1 2 7 22	981 177 119 54 10 37 24 14 20 5 9 6 12 16 7 5 1 2 4 2 1	46,363 8,210 6,645 2,824 2,776 1,444 1,833 472 210 337 218 229 122 22 22 451 260 122 84 77 46 167 23 48 60 60 78 61 69 383	6,169 7,502 4,030 5,226 4,030 5,226 3,597 643 2,543 2,543 2,543 2,543 2,543 2,543 2,543 2,78 6,78 6,78 6,78 6,78 6,78 6,78 6,78 6	1,249 1,355 1,234 666 346 129 215 39 20 34 33 26 1 70 20 14 16 6 1 10 7 1 6	5,681 4,595 3,436 2,578 2,100 665 700 242 97 47 66 7 82 90 21 318 256 64 55 76 48 111 7	1,032 501 837 338 97 89 102 36 14 17 20 34 17 75 30 13 2 7 1	442 296 173 36 173 36 51 57 20 12 5 9 1 19 26 7 7 1 1 4 3 1 1 76	14,52 9,77 8,9,9 6,1,1 1,5,5 3,2 2,2 6,6,6 3,0 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1	
3,838	1,515	74,105	37,963	6,424	• 24,365	3,838	1,515	74,10	

*Deaths by Suicide in

	Austria-	Hungary.
	М.	F.
Cuts and Stabs Drowning. Gunshot Hanging Leaps. Railroads. Arsenic Belladonna Bichloride of Mercury Carbolic Acid Chloral Chloral Chloride of Potassium Chloride of Potassium Cyanide of Potassium Hydrochloric Acid Hydrocyanic Acid Iodine Illuminating Gas Lysol Muriatic Acid Morphine Nitric Acid Morphine Nitric Acid Opium Oxalic Acid Paris Green Rough on Rats Strychnine Sulphuric Acid Unknown Poison	3 	2
Total by Sexes	37	8

^{*} The 890 suicides occurred in the boroughs as follows: Manhattan, 488;

The City of New York.

_																						
	Бонетія.	England	- Sugarna	2	rance.	Common	Oct many.	Trealcased	Herina.	- Italy		- C	Mussild.	Other Foreign	Countries.	Traited Caston	Omea States.	11.1	- CHRISTIN	Todal lan Savon	Total by sears.	Total both Sexes.
М.	F.	м.	F.	м.	F.	М	F.	м.	F.	М.	F.	М.	F.	М.	F.	м.	F.	М.	F.	М.	F.	Tota
		2 1 9 2 2 2 1 1 1 6 6	I	2		10 1 46 20 1 12 1 1 12 7 7 3 1 170	1 1 4 4 2 4 4	1 2 5 1 5 5 2 1		2 IO I I I I I 2	1 2	2 17 6		4 18 3 I 2 2 2 2 I	1 2 1	19 2 8 9 16 15 3	36 I I I I I I I I I I I I I I I I I I I	1 17 7 4 4		44 60 230 61 30 41 3 45 11 2 2 1 2 3 2 3 1 1 2 2 1 1 1 2 1 1 1 2 1 1 1 1	6 4 14 12 21 3 1 1 5 22 1 1 89 1 2 1	50 10 2444 733 51 7 2 1 8 67 1 1 2 2 1 1 319 2 1 4 1 4 2 6 3 1 1 5 5
	7	3	3		9	20	6	3	31	2	29	2	ī	6	, 4	3	11	-	ī	Si	90	

The Bronx, 84: Brooklyn, 260; Queens, 44; Richmond, 14.

Deaths by Suicide in the

	Aust Hung		Boher	mia.	Engla	and.	Fran	ice.	Germ	any.
	М.	F.	М.	F.	м.	F.	М.	F.	М.	F.
Cuts and stabs. Drowning Gunshot. Hanging Leaps Railroads. Arsenic Bichloride of mercury. Carbolic acid. Cyanide of Ammonia Cyanide of potassium Hydrochloric Acid. Hydrocyanic acid Illuminating gas. Lysol. Morphine. Nitric acid.	2 9 4 6 	I			I 55 II II II II II II II II II II II II				3 1 26 9 1 66 2 1 32 1	1
Opium. Oxalic acid. Paris green. Rough on rats. Strychnine. Unknown poison. Total by sexes.	23	i 1 16	3		 	6	7	:: :: :: 	83	23

Borough of Manhattan.

Irela	ınd	Ital	ly.	Rus	sia.	Other I Coun	Foreign tries.		ited ites.	Unkı	nown.	t	tal. by tes.	Total both
M.	F.	М.	F.	М	F.	М.	F.	м.	F.	М.	F.	М.	F.	Sexes.
2 3 1 3 2 4 		1	I 2	1 110 1 2		I	 I	3 1 3 3 7 12 3 3 1 7 7 4 31 2	1 3 2 2 2 5 1 1 15 1	1 9 2 3 3 3 15 15 1 1		15 4 119 26 24 4 1 1 2 2 2 5 1	3 1 6 6 3 7 7 7 3 1 1 1 5 1 1 1 2	21 5 125 29 41 7 2 3 41 1 10 0 2 1 183 3 1
	••	••			I 			· · ·	••			2 I	I I	2 I 2
17	6	15	_+	35	14	27		115	32 47	36	+	375	113	488

Deaths by Accident and Negligence.

		Во	rough o	f —		City
	Man- hattan.	The Bronx.	Brook- lyn.	Queens	Rich- mond.	of New York.
Fractures and Contusions— Crushed by boats. by diving. by derricks. by elevators. by explosions by explosions by stones. by stones. Other causes. Not specified by Coroners.	5 1 4 29 2 11 5 32 20 56	 4 1 4 2 9	2 I 3 2 II 4 12 19 5	I	· · · · · · · · · · · · · · · · · · ·	9 1 9 33 9 25 13 56 65 68
Falls— Down air-shafts. " areaways. " elevator shafts. " stairs. From buildings. " fire-escapes. " scaffolds. " windows On ships. On streets and sidewalks. Others. Not specified by Coroners	1 5 30 75 59 34 20 99 10 42 110 36	2 2 1 9 2 1 3 10 7 19	58 16 6 14 31 5 23 60	 4 2 17 8	 2 3 2 1 1	3 7 33 148 77 41 37 145 17 74 207 55
Street Vehicles— Run over by wagons, trucks, etc. Falls from wagons, trucks, etc. Run over by automobiles. Thrown from automobiles. Not specified by Coroners	1 76	16 3 6	34 21 20 	5 2 4 1	4 I	161 43 84 6 5
Railroads— Electric surface roads. Steam roads Elevated roads. Horse cars Subways. Not specified by Coroners.	93 15 3	8 26 2	65 3 1 	30	38	181 82 4 1 17 4
Wounds— Gunshot Incised Lacerated Others Not specified by Coroners	4 1 15	1 2 4	4 5 6 4	4 1 1		12 5 8 26 5
Burns— Stoves, coal, gas or oil Lamps Playing with matches. Other causes. Not specified by Coroners.	31 2 10 35 51	6 1 1 13 	27 7 27 34 12	2 1 8 6	I I I . 4	67 11 40 94 69
Scalds— Hot fluids. Steam. Conflagrations. Sunstroke Freezing. Electric current. Drowning. Starvation. Illuminating gas. Other gases.	40 71 1 2 212	7 38 II 2 37 8	39 5 32 39 3 146 1	3 1 7 9 3 41 19	1	94 19 82 130 3 11 467 5 244 13
Poisons— Acetanilid Alcohol Ammonia Arsenic Bay rum and hair oil Belladonna	4	 I 	1 6 1	··· ··· ··· I	2	I IO I 2 I I

Deaths by Accident and Negligence-Continued.

-		В	orough of			City
	Man hattan	The Bronx.	Brook- lyn.	Queens	Rich- mond.	New York.
Poisons— Bichloride of mercury. Bichromate of potash. Camphorated oil. Carbolic acid. Caustic potash. Chloral Chloral Chloral Chloral hydrate. Chloroform. Cholera drops. Cocaine. Irritant poison. Laudanum and menthol Lysol. Morphine. Morphine and chloral Muriatic acid. Nitric acid. Opium Ptomaines. Soda bromide. Stromonium. Uraemic (during foetal life). Wood alcohol. Not specified by Coroners. Suffocation— Caving in of embankment. Food in larynx. Foreign body in larynx. Overlying. Others Not specified by Coroners. Criminal abortion.	hattan		Iyn. 1 1 2 1 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1			
Circumcision Surgical operations. Hydrophobia Tetanus.	25 5 3 3	3	7 3 			30 8 6 6 24

Recapitulation.

		В	orough o	f—		City
	Man- hattan.	The Bronx.	Brook- lyn.	Queens	Rich- mond.	of New York
Fractures and contusions. Falls Street vehicles Railroads Wounds Burns and scalds Conflagrations Sunstroke Freezing Electric current Drowning Starvation Illuminating gas. Other gases Poison Suffocation Criminal abortion Circumcision Surgical operation.	165 521 182 130 233 186 40 71 1 2 212 212 212 3 102 111 43 33 25 5	31 56 25 36 7 28 37 2 37 8 6 2	59 226 75 70 19 151 32 39 3 146 111 113 36 20 7	24 32 12 42 7 21 7 9 3 41 19 	9 9 5 11 8 3 1 1 31 1 4 1 5	288 844 299 289 56 394 82 130 3 11 467 5 244 13 95 59 38 6
Total deaths from accident and negligence	1,778	255	999	230	89	3,331

Deaths in Institutions, Year of 1909.

BOROUGH OF MANHATTAN.		BOROUGH OF BROOKLYN.	
Babies' Hospital. Bellevue Hospital. Beth Israel Hospital City Hospital. Columbus Hospital. Columbus Hospital. Flower Hospital. Flower Hospital. Foundlings' Hospital General Memorial Hospital German Hospital Gouverneur Hospital Habneman Hospital Habneman Hospital	382	Angel Guardian Home	21
Bellevue Hospital	2,721	Bethany Deaconess Hospital	20
Beth Israel Hospital	274	Angel Guardian Home	16
City Hospital	310	Brooklyn Eve and Ear Hospital	23
Columbus Hospital	5 1	Brooklyn Hospital Bushwick Hospital. Cumberland St Hospital.	228
Daughters of Jacob	29	Bushwick Hospital	77
Flower Hospital	342	Cumberland St Hospital. Eastern District Hospital. German Evangelical Home. German Hospital. Home for Aged, Little Sisters of the Poor Home for Consumptives. Infants Hospital. Jewish Hospital. Kings County Hospital. Kingston Ave. Hospital. Long Island College Hospital. Long Island State Hospital.	265
Foundlings' Hospital	1,375	Eastern District Hospital	104
French Hospital	75	German Evangelical Home	41
General Memorial Hospital	27	German Hospital	213
German Flospital	278	Home for Aged, Little Sisters of the Poor	93
Gouverneur Hospital	426	To forte Transital	123
Hanneman Hospital	45 746	Tarrish Transital	228
Harlem Hospital. Har Moriah Hospital. Home for Aged, Little Sisters of the Poor Home for Aged and Infirm Hebrews	69	Vince County Hospital	1,033
Home for Aged Little Sisters of the Poor	42	Vingston Ave Hospital	697
Home for Aged and Infirm Hebrews	43 36	Long Island College Hospital	284
House of Calvary	45	Long Island State Hospital	129
House of Relief	244	Lutheran Hospital	70
House of Relief	45	Lutheran Hospital	225
Italian Hospital J. Hood Wright Memorial Hospital Lying-in Hospital Lying-in Hospital Manhattan Eye and Ear Hospital Manhattan State Hospital	42	New York City Home for Aged and Infirm	414
I. Hood Wright Memorial Hospital	140	Norwegian Hospital	157
Lving-in Hospital	213	Norwegian Hospital	43
Manhattan Eve and Ear Hospital		Samaritan Hospital	39
Manhattan State Hospital	37 385	St. Catherine's Hospital	291
Metropolitan Hospital	1,078	St. Catherine's Hospital	98
Miss Alston's Sanitarium	42	St. John's Hospital	123
Montifiore Home	126	St. John's Hospital. St. Mary's Hospital. St. Peter's Hospital.	301
Mount Sinai Hospital	656	St. Peter's Hospital	478
Misericordia Hospital	127	Swedish Hospital Williamsburg Hospital Other Institutions	74
New York City Home and Hospital	479	Williamsburg Hospital	155
New York Hospital	484	Other Institutions	367
New York Eye and Ear Hospital	42		
New York City School and Flospital	158	Total	6,452
New York Infant Asylum	224		
Miss Alston's Sanitarium. Montificre Home Mount Sinai Hospital. Misericordia Hospital. New York City Home and Hospital. New York Hospital. New York Ety and Ear Hospital. New York City School and Hospital. New York City School and Hospital. New York City School and Hospital. New York Infant Asylum. New York Infant Asylum.	41		
dren Nursery and Child's Hospital.	36	BOROUGH OF QUEENS,	
Polyclinic Hospital	57		
Post Graduate Hospital	415	Combes Sanitarium	12
		Flushing Hospital	107
Reception Hospital	133	Hebrew Sanitarium	12
Pre-byterian Hospital Reception Hospital Red Cross Hospital Roosevelt Hospital St. Francis' Hospital St. Gregory's Hospital St. Luke's Hospital St. Mark's Hospital St. Mary's Hospital St. St. St. St. St. St. St. St. St. St.	32	Compes Samuarum Flushing Hospital Hebrew Sanitarium Jamaica Hespital. River Crest Sanitarium St. John's Hospital. St. Toseph's Hospital. St. Mary's Hospital. Other Institutions.	51
Roosevelt Hospital	32 248	River Crest Sanitarium	21
St. Francis' Hospital	69	St. John's Hospital	208
St. Gregory's Hospital	45	St. Joseph S Hospital	62 100
St. Luke's Hospital	378	Other Institutions	26
St. Mark's Hospital	* 79	Other institutions	20
St. Mary's Hospital	63	•	
		Total	599
St. Vincent's Hospital	540		
Skin and Cancer Hospital	3° 78		
Sloane Maternity Hospital	70	BOROUGH OF RICHMOND.	
Sydennam Hospital Hospital	174 69	35- / T	
Washington Heights Hospital. Willard Parker Hospital.	656	Mount Loretto. New York City Farm Colony. Sailors' Snug Harbor. St. Vincent's Hospital	11 16
Worldhouse Hospital	50	Callers' Cour Herber	
Workhouse Hospital. Other Institutions.	614	Ca Vincent's Hospital	75 203
Other Institutions		Sea Side Hospital	51
Total	16,071	S R Smith Infirmary	153
10(a)		II S Marine Hospital	30
BOROUGH OF BRONX.		S. R. Smith Infirmary. U. S. Marine Hospital. Other Institutions.	8
Fordham Hospital	289	T	
Hebrew Infant Asylum	20	Total	547
Home for Aged	82		
Home for Aged	340	RECAPITULATION.	
Leganon Hospital	322	KECATITULATION.	
Odd Fellows' Home	. 328	Almshouses	915
Riverside Haspital	356	Almshouses	
St Francis' Hospital	241	Hospitals	21,759
St. Joseph's Hospital	609	Institutions for Children	2,000
Seton Hospital	. 287	Hospitals Institutions for Children Institutions for Insane	555 108
Work House Hospital	. 24	Prisons	100
Home for Incurables. Lebanon Hospital. Lincoln Hospital. Odd Fellows' Home Riverside Hospital. St. Francis' Hospital. St. Joseph's Hospital. Work Hospital. Other Institutions.	. 39	Other Institutions	367
	2.546	Total	26 27 5
	2 6 16	1 10131	20.215

Disposition of the Dead and all Still-born Infants of The City of New York.

	imber of terments.		umber of terments.
Borough of Manhattan-		Borough of Queens— Mount Zion New Union Fields.	
Marble St. Paul's Church Vault	3	Nount Zion	3,903
Trinity	28	Prospect	45
Trinity Churchyard		Paulus	2
m		Springfield	42
Total	32	Springfield St. George's	I
To 1 f my To		St. James	
Borough of The Bronx-	- 6	St. John's St. Mary's	8
City Pelham Bay	5,655	St Vichael's	2015
St. Peter's	38	St. Monica's Union Fields United States Crematory.	89
St. Raymond's	2,406	Union Fields	575
Woodlawn	2,213	United States Crematory	
m . 1		Zion	10
Total	10,341	Total	48,326
Parauch of Prochlus			401,320
Borough of Brooklyn— Canarsie	51	Paraugh of Pichmand	
County Farm	1,819	Borough of Richmond— A. M. E. Zion	4
Cypress Hills	612	Baron Hirsch	537
Evergreen	956	Bethel	36
Flatlands	5	City Farm Colony	70
Friends	1.5	Fairview	
Gravesend	12	First Presbyterian	1
Greenwood	3,838	Fountain Hillside	
Holy Cross	1,691	Lake	6 67
Maimonides	120	Merrill	1
Maimonides Mount Hope	115	Moravian	329
National	102	Mount Loretto	5
New Lots	7	New Springville	I 2
Salem Fields	211	(Ocean View) Mount Richmond Sailors' Snug Harbor	1,186
Washington	51 2,723	St. Andrew's	55
washington	2,/2,5	St. John's Lutheran	4 8
Total	18,347	St. Toseph's	16
	57	St. Joseph's St. Luke's	11
Borough of Ourses		St. Mary's	6
Borough of Queens—	185	St. Mary's, Third Ward	70
Aqueduct	6	St. Mary's St. Mary's St. Mary's, Third Ward St. Mary's, Fourth Ward. St. Michael's St. Peter's	152
Bayside	340	St. Michaels	308
Calvary	22,096	Silver Lake	436
Cedar Grove	440	Silver Mount	59
Cedar Grove Cypress Hills	1,595	Staten Island	1.2
Evergreen First Presybterian	3,131	Sylvan	8
Flushing	200	United Hebrew	130
Grace Church	12	Vaughn West Baptist	11
Lawrence	1	Woodland	5 178
Linden Hill	2,107	Woodland Woodrow's Church	9
Little Neck	1		
Lutheran	5,249 188	Total	. 3,830
Manle Grove	231		
Montifiore	354	Summary-	
Montifiore Mount Carmel Mount Hebron	279	Borough of Manhattan. Borough of The Bronx Borough of Brooklyn. Borough of Queens.	32
Mount Hebron	21	Borough of The Bronx	10,341
Mount Nebo	222	Borough of Brooklyn	18,347
Mount Olivet	1,917	Borough of Pichmond	48,326
Mount St. Mary's	303	Borough of Richmond	3,830

Deaths of Persons 100 Years of Age and Over.

			lge.			•		Bor	ough	of—	•	York.
Date of Death.	Name.	Years.	Months.	Days.	Nativity.	Cause of Death.	Manhattan.	The Bronx.	Brooklyn.	Queens.	Richmond.	City of NewYork
Igog. Feb. 5 Mar. 25 4 29 4 30 4 13 4 19 May 10 4 20 June 17 Nov. 4 Dec. 4 Dec. 4 4 31	Simon H. Zlas Anna Adams Mary Bowman Michela Shelotsky, Fanny Feldman. Elizabeth Hunt. Rose Aaronwald John Cassidy. Yetta Schulman Joseph Brous. Gaston Pettijean. Samuel Epstein Charles Levin Morris Miller	101 107 106 106 108 108 100 105 100 104 107 100		 27 13 	Russia United States. Russia United States. United States. Ireland Ireland France Russia Austria Austria	Myocarditis Senility Chr. nephritis Senility Bronchitis Senility Intest. obstruc tion Arterio sclerosis Erysipelas Nephritis Scalds Scalds Senile atrophy Chr. nephritis Total	1 1	· · · · · · · · · · · · · · · · · · ·	··· ·· · · · · · · · · · · · · · · · ·	 		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



Deaths and Death Roles Under One Year in Former City of New York (Manhattan and The Bronx), Per 1,000 Population Under 1 Year of Age.

																			_													_							
	1900		1 91				1 18	13			1845.		1806.		12.7		1898		1800		100		IOOI		1902				100		10		1906.		10.		10		
	Deaths.	20	Deaths	Rate	Death.	. ste	Deaths.	Rate	Unioths.	1 42	Deaths.	Rate.	Deaths.	Rate.	Death	Rate.	Deaths.	Rate 1	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate. I	Deaths.	Rate.	Deaths.	Rate	Deaths.	Rate.	i ths	Late.	Deaths	Rate	Deaths.	R		RILLY	with I Sale
									18.			2.66	120		201	0.06	3	0.22 (0.7				64									. 60	.04						
Scarlet fever.	220	4 57	66	3 79 1	68	5 4º	47	95	31	61	28	.53	20	3.38	25	47	16	68	18	1.01	28	.53	20	1 13	35	63	19	1.77	145	2 40		. 26	150	2 97 1	133	2111	42	2 13	44
Whooping cough Diphtheria and croup	248	5.40	191	4 11	175	3.66		5 04		2.63	24 I	4 60	225	4.20	160	3 05	221	4 22 1 00	173	3.30	3.47	2.81	74	1 18	210	3 89	98	1.71	59	1 02	121	1.99	105	1.08	114	1.00	24	1 11	1.94
Diphtheria and croup Erysipelas	170 S4	1.86	82	1 76	388	1.84	59	1.20	68	1.34	62	1.28	57	1 08	63	1 22	42	So	68	1.30		3.59	61	1.13	01	1 10	50	.87	92	1 56	100	1.75	83	1 33	86	1.3	102		1,60
Septicemia	3	0.2	4	. 68	7	.11		.10	15	.30	2.2	-42	20	38	16	30	11	21	20	.38	25	-47	14	. 26	31	00		44	23	.39	43	.71	19	.30	35	- 54	38		28
Fubercular diseases (excluding tuberculosis pulmonalis)	369	8 17	353	7.60	385	8 05	377	7 110	322	6 36	345	6.58	281	5 36	305	5.82	278	5 31	255	4 87	243	4 65	216	4.01	193	3.48	219	3 83	237	4 02	1.25	2. oS	160	2.56	140	2.17	145	2.18	(11) - 01
Syphilis	. 86	7 55	68	1.46	97	2.03	.70	9 47	92	1 82		I 30 7 34	92	1 76 6 83	110	2.10	355	5.05	70	I 34	67	1.86	68	4.61	99 250	1.82	~1	1 24 3,78	85	7 02	94	1.55	132	2.11	162	2.31	117	1.7	
Meningitis, simple	341	7 55	375	0.07	397	1.01	90	1.83	36	1.11	05	1 24	55	1.00	57	1 09	73	1 39	73	1.39		I. 24	52	96	48	4.86	45	3.70	178			4.04	115	1 84	SS	1.36	67	1 112	74 1.08
Convulsions	462	10 23	485	10 44	519	10 8	58s	11 82	602	11.88	473	9.02	458	8.74	36S	7 02	472	9.01	373	7.12	415	7.95	414	7.69	370	6.67	358	6 26	353	5 44	30×	5.93	391	6 25	304	4-71			-25 3.28
Bronchitis	945	21.80	1,213	20.75	1.328	27.27	1,312	26 00	1,150	22 82	1,411	23 90	1,422	27.14	1.331	25:40	1,366	26.0S	1,437	27.44	1,042	31.44	1,414	26.26	1,587	28 62	1.537	20 90	1,040	27.85	1.545	25.45	1,851	29-52		29.05	1,066		1 20 82
Gastntis	. 49	1.08	3,307	3 10	40	96		6- 14	47	61.42	3,249	2 21 67 05	69	58.58	2,953	7 26 56.36	5,048	58.18		44.61	2 713	1.17	2,586	1.16	2,365	1 21	25	-44 30.51	2,762	25	20	-33	10	. 16	13	.20			60 8"
Diarrheas.	3.077	.01	31307	.58	3,350	. 6	3,222	-51	35	.69	38	.72	29	155	30	57	39	-74	43	. 82	41	.78	50	-92	4I	-74	38 1	.06	33	, 56		.96	60	44-32	2,990	.84	2,015	.00	- 24 34.27
Malformations and preternatural.		11 80	619	13.32		13 74	6hc	13 41	627	12.38	711	13-56	701	13 37		11 93	001	16.11	574	10.96	054	12.52	398	7.40	355	33.62	382	6.69		6.23	455	7 99	456	7.28	538	8 33	518		110 7.52
Congenital debility	1,272	28 17	7,542	33 18	1,500	31-56	1,53	31 13	1,812	35- 77	1,414			25.34	1.295	24 72	1,270	24.25	1,224	23.33	1,467	28.00	1,253	23.30	503	9.07	561	9 82		10.15	507	9.34	521	8.32	401	7.61	497	7.47	395 5.75
All other causes	774	17.14	711	15.30	848	17 "4	\$ 583	11.83	485	9.58	619	11 80	715	13 64		II OI	545	10 40	567	10.83	602	11.53	694	12.90	594	10 71	432		308	5 23		8.27	523	8 36	550	8.12	534	8 3	715 10.42
Total	10.288	227 50	11.241	241.93	11 390	238 30	11,106	225 70	10.824	213 70	11,267	214.80	10,677	202 90	10,014	191.12	10,163	194.00	9,155	174.80	10,008	193 00	9.348	173.70	9.481	171 00 1	8,922	156.10	10,127	172.00	10.318 1	69.90	10,403		10,040	10u go	10,074 1	1.30	9.905 144 29
7111111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				-	_	_	====				===			-			-			-		=====										-							
General death rate		24.87		26.31		25 99		25 30		22.75		23.18		21 84		20.03		20 46 1		19 81		21 03		20.45		19 11		18.57		21 02 1		(8,91		18 71		18 77		10.51	15 42
								-																			3												

Births by Nativities of Parents.

	1				D 1							
					Borough	n ot—					City	of
	Manh	attan.	The	Bronx.	Broo	klyn.	Que	ens.	Richi	mond.	New	York.
Country.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.	Nativity of Both Parents.	Nativity of Mother Only. Mixed Parentage.
Austria-Hungary Bohemia British America England France Germany Ireland Italy Russia and Poland Scotland Sweden. Switzerland United States Other Foreign Unknown	7,570 500 168 291 131 1,439 3,635 13,854 11,736 94 260 36 11,704 1,623 8	1,569 1444 98 509 121 730 1,500 220 841 131 159 69 3,871 585 3	382 17 17 56 8 437 417 1,752 1,036 29 94 11 3,153 216	163 10 43 94 15 254 215 20 89 28 35 22 851 104	1,269 16 155 8 1,081 1,345 8,092 10,778 82 377 12 13,177 824	96 34 234 15 398 580 41 68 70 16 2,576 72	164 33 12 34 7 428 167 857 401 13 36 9 2.766 71	75 18 22 70 9 209 118 8 40 24 10 675 28	81 1 8 31 8 109 84 327 138 8 70 2 809 7	3 15 19 2 39 45 2 4 5 2 	9,466 551 221 567 162 3,494 5,648 224,882 226 837 70 31,609 2,741	1,906 172 212 926 162 1,630 2,458 291 1,042 266 276 117 8,147 790 3
Total	53,049	10,550	7,631	1,943	37,216	4,278	4,998	1,316	1,683	311	104,577	18,398

Report of Births for the Year

CITY OF

Month.	Total.	Wh	ite.	Colo	red.	Chir	iese.	Na Pare	tive ents.
,		М.	F.	М.	F.	м.	F.	М.	F.
January February March April May June July August September October November December Total	10,322 9,397 10,463 9,645 8,675 9,812 10,813 10,162 9,932 9,889 13,188 13,677	5,195 4,746 5,312 4,814 4,504 4,917 5,368 5,213 5,068 5,035 5,121 6,851	4.946 4,486 4,963 4,676 4,027 4.742 5,287 4,782 4,700 4,693 4,932 6,641	92 85 90 81 72 78 81 89 83 80 71 98	\$8 77 96 74 71 74 76 78 77 79 62 86	1 1 1 1	2 I I I I 2 I I	1,341 1,203 1,369 1,270 1,197 1,304 1,479 1,327 1,382 1,252 1,261 1,786	1,311 1,126 1,289 1,261 1,110 1,281 1,458 1,268 1,268 1,24 1,184 1,183 1,743

BOROUGH

Month.	Total.	White.		Colored.		Chinese.		Native Parents.	
		М.	F.	М.	F.	М.	F.	М.	F.
January February March April May June July August September October November December Total	5,334 5,179 5,475 4,970 4,516 5,290 5,505 5,208 5,178 5,149 5,151 6,644	2,659 2,632 2,751 2,440 2,321 2,683 2,689 2,695 2,579 2,586 2,558 3,245	2,547 2,429 2,596 2,424 2,084 2,487 2,698 2,416 2,435 2,503 3,261	69 60 57 54 60 63 59 45 62 63 50 71	58 55 69 55 56 56 58 52 49 63 38 66	I I I I I I I I I I I I I I I I I I I	2 I I I 2 I I	455 529 545 465 465 465 502 510 478 508 488 485 562	500 433 495 4469 442 489 535 457 423 449 443 577

Ending December 31, 1909.

NEW YORK.

For Pare	eign ents.	Mi: Parer	xed ntage.		nown ntage.	Attended by Physicians	Attended by Midwives	Apparently Illegitimate,	is.	ets.
М.	F.	М.	F.	М.	F.	Atter b Phys	Atte	App Illegi	Twins	Triplets.
3,338 3,059 3,413 3,071 2,831 3,136 3,347 3,322 3,154 3,275 3,402 4,309	3,114 2,895 3,184 2,914 2,474 2,993 3,327 2,946 3,031 3,039 3,269 4,182	573 531 584 517 512 491 593 621 577 556 505	558 512 459 550 471 498 554 619 496 513 519 764	36 39 37 37 37 64 30 32 40 33 25 48	51 32 28 25 43 45 25 27 28 37 24 38	6,411 5,509 6,153 5,639 4,968 5,807 6,447 6,054 5,880 5,708 5,708 9,078	3,911 3,888 4,310 4,006 3,707 4,005 4,366 4,108 4,052 4,181 4,483 4,599	161 159 178 145 171 191 146 157 132 99 100	91 72 82 74 83 65 88 76 70 71 86	5 2
39.657	37,368	6,867	6,613	458	403	73,359	49,616	1,772	970	13

OF MANHATIAN.

	eign ents.	Mix Paren		Unkı Parer	nown itage.	nded	nded y rives.	Apparently Illegitimate.	s,	ets,
М.	F.	М.	F.	M.	F.	Attended by Physiciar	Attended by Midwives	Appa Illegit	Twins.	Triplets.
1,984 1,883 1,984 1,748 1,632 1,935 1,931 1,939 1,838 1,889 2,401 23,058	1,806 1,791 1,891 1,734 1,448 1,797 1,960 1,690 1,831 1,787 1,855 2,419	.255 243 247 246 257 251 280 294 263 242 209 314	251 230 255 249 206 217 243 296 261 231 223 297	35 38 33 35 28 58 27 29 34 31 21 40	48 32 25 24 38 41 19 25 20 32 21 34 359	3,440 3,055 3,211 2,864 2,709 3,220 3,291 3,168 3,077 2,866 2,866 4,295	1,894 2,124 2,264 2,106 1,807 2,070 2,214 2,040 2,101 2,283 2,285 2,349	137 129 140 118 127 158 111 119 106 82 84 108	58 46 58 49 59 42 64 50 44 50 58 62	3 i

Marriages Reported During the

CITY OF

		Wh	ite.	Bla	ck.	Chir	nese.	Sin	gle.
Month.	Total.	М.	F.	М	F.	М.	F.	М.	F.
January. February. March. April. May. June. July. August. September October. November. December.	3,392 3,370 2,870 2,981 2,811 4,702 3,552 2,760 3,897 4,113 3,696	3,275 3,281 2,802 2,801 2,746 4,636 3,462 2,701 3,291 3,777 4,044 3,608	3,275 3,279 2,803 2,891 2,750 4,638 3,463 2,701 3,292 3,775 4,043 3,608	117 88 67 89 64 62 89 59 78 120 69 88	117 91 67 89 61 62 89 59 76 122 70 88	I I I I I I I I I I I I I I I I I I		3,144 3,104 2,622 2,716 2,551 4,347 3,282 2,498 3,112 3,589 3,806 3,404	3,182 3,140 2,684 2,772 2,580 4,434 3,320 2,541 3,139 3,638 3,638 3,879 3,455
Total	41,513	40,514	40,518	990	991	9	4	38,175	38,770

BOROUGH OF

		W	nite.	Bla	ick.	Chi	nese.	Sin	gle.
Month.	Total.	М.	F.	М.	F.	М.	F.	М.	F.
January February March April May June July August September October November December	2,279 2,233 1,882 2,004 1,763 2,936 2,181 1,742 2,205 2,408 2,556 2,500	2,190 2,163 1,836 1,938 1,715 2,887 2,122 1,697 2,141 2,322 2,507 2,437	2,190 2,161 1,836 1,938 1,718 2,888 2,122 1,697 2,142 2,321 2,507 2,437	89 69 46 66 47 46 59 45 64 86 49	89 72 46 66 45 46 59 45 62 87 49 63	: : : : : : : : : : : : : : : : : : :		2,119 2,049 1,720 1,829 1,599 2,708 2,017 1,577 2,035 2,220 2,367 2,305	2,124 2,068 1,766 1,849 1,593 2,741 2,020 1,596 2,033 2,213 2,318
Total	26,689	25,955	25,957	729	729	5	3	24,545	24,718

Year Ending December 31, 1909.

NEW YORK.

Wide	owed.	Dive	orced.	Nat	ive.	Fore	eign.	R	eligious	Marriag	es.	
М.	F.	М.	F.	М.	F.	М.	F.	Cath- olic.	Protestant.	Jewish	Ethical Cul- ture.	Civil Marriages.
224 242 228 243 248 326 252 236 232 280 282 271	180 205 164 183 197 235 205 190 204 227 200 214	24 24 20 22 12 20 18 26 25 28 25 21	3c 25 22 26 34 33 21 29 26 32 34 27	1,119 1,173 846 1,186 908 1,760 1,462 902 1,195 1,465 1,490	1,249 1,256 1,007 1,316 1,025 1,952 1,583 963 1,323 1,619 1,603	2,273 2,197 2,024 1,795 1,903 2,942 2.090 1,858 2,174 2,432 2,623 2,389	2,143 2,114 1,863 1,665 1,785 2,750 1,969 1,797 2,046 2,278 2,510 2,262	851 1,161 561 861 1,035 1,236 1,236 798 1,263 1,277 1,419 1,011	868 876 773 994 766 1,635 1,119 759 886 1,288 1,283	1,1 o8 874 1,282 531 565 1,508 619 866 703 676 1,029 1,073	6 1 1 4 2 4 1 3 1	559 458 253 591 443 319 577 337 517 643 381 634
3,064	2,404	274	339	14,813	16.330	26,700	25,183	12,709	12,234	10,834	24	5,712

MANHATTAN.

Wide	owed.	Divo	rced.	Nat	ive.	Fore	eign.	R	eligious	Marriag	ges.	
М.	F.	М.	F.	М.	F.	М.	F.	Cath- olic.	Protes- tant.	Jewish	Ethical Cul- ture.	Civil Marriages.
141 169 147 161 155 206 151 146 151 170 174 178	127 146 96 132 143 169 144 120 152 166 130	19 15 15 14 9 22 13 19 19 18 15 17	28 19 20 23 27 26 17 26 20 29 29	695 712 475 681 495 928 754 524 705 705 791 765	773 761 582 762 560 1,055 565 787 848 860 849	1,584 1,521 1,407 1,323 1,268 2,008 1,427 1,218 1,500 1,652 1,765 1,735	1,506 1,472 1,300 1,242 1,203 1,881 1,356 1,177 1,418 1,560 1,651	493 715 308 576 537 721 733 493 740 728 758 609	463 448 406 481 407 790 475 358 471 579 655 457	822 674 964 403 410 1,146 429 60c 530 490 801 839	6 1 1 4 2 4 1 1 1	495 395 203 540 407 275 543 291 464 610 338 594
1,949	1,685	195	286	8,281	9,227	18,408	17,462	7,411	5,990	8,111	22	5,155

Summaries of the Thermometer Readings (Wet Bulb) for the Year 1909, and Also for the Past 41 Years, from 1868 to 1910, l'ahrenheit Degrees.

41 Years.	Minimum. Maximum. Minimum.	Degrees. Date. Date. Date.	\$ 3.00 A.M., 19th. 28.5 61 2.00 F.M., 23d, 1906. —6 7.00 A.M., 24t', 1882. 24 7.00 A.M., 19th. 34.6 63 3.00 F.M., 28th, 1903. —6 7.00 A.M., 10th, 1899. 32 7.00 A.M., 11th, 134.5 68 3.00 F.M., 17th, 1895. 30 F.M., 17th,
1909.	Maximum.	Date.	5.00 P.M., 5th. 1.00 P.M., 10th. 5.00 P.M., 10th. 5.00 P.M., 5th. 6.00 P.M., 5th. 6.00 P.M., 30th. 4.00 P.M., 30th. 4.00 P.M., 32th. 4.00 P.M., 9th. 4.00 P.M., 9th. 4.00 P.M., 9th. 4.00 P.M., 13th.
	Mean,	Degrees.	36.55
	MONTHS		lanuary February March April May June July September September October November

	Degrees. 47.9 88 -6	
innmaries.	Mean temperature. Maximum temperature at 4.00 P.M., June 24th, 1888 Minimum temperature at 9.00 A.M., Jan. 24th, 1882.	
Zinningt Situi	Degrees. 49.0 83	
	Mean temperature. Maximum temperature at 4.00 P.M., July 30th Minimum temperature at 3.00 A.M., Jan. 19th	

Summaries of the Rain and Snow Gauge Readings for the Year 1900, and also for the Past 41 Years, from 1868 to 1910 (Water from Melted Snow Included), Inches.

	.won	Depth of S	86.8 9.13 86.74 86.	1.52
.RS.	.tater.	Depth of //		3.74 3.18
OR 41 YEA		.esstunila	222272 22222 22222 22222 22222 22222 22222 2222	171 49 9
AVERAGE FOR 41 YEARS.	Duration.	Hours.	16 20 20 22 22 22 22 22 22 22 22	4 4 S T
Av		Days.	www.a.a. = a.a	1000
	Days Sain ell,	Yumber of Yumber	152666168	0000
	.won	S to htqsol	11.25	9.00
	ater.	Depth of //	64.80 1 8.88 4 8.87.1 4 6.4 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7	1.36
-60	1909- Duration.	Minutes.	300000000000000000000000000000000000000	888
61		Hours.	22 22 23 16 22 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	000
		Days.	W 0 W 4 = H 0 0	88
	Days Sain Fell,	Number of Victor I on Snow I	5 5 6 5 x 5 y x 2 x	~~~
	S. I. T. N. O. W.		anuary. ebruary If arch Arch May une une uly ingust ebruary	october Vovember Jecember

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	V

41 VEARS. 43.48 inches. 22.38 i. 117 33 days, 00 hours, 45 minutes.	16.85 inches.
Total water fall for the year	Maximum monthly rainfall was September, 1882. Minimum monthly rainfall was May, 1887. 31 Maximum daily rainfall was from 4,30 A.M. 10 12 P.M., Sept. 23d. 1882. 8.28 8.28
TT	

Summaries of Relative Humidity (Saturation Being 100), Aqueous Elastic Force of Vapor (in Inch of Mercury), and Ozone (10 Being the Maximum) for the Vear 1909, and Also for the Past 41 Vears, from 1868 to 1910 (except Ozone, Which is for the Past 32 Years).

		1909.			41 YEARS.	
MONTHS.	Mean Relative Humidity.	Mean Force of Vapor.	Mean Ozone.	Average Relative Humidity.	Average Force of Vapor.	Average Ozone for 32 Years.
January February March March Mayril May July August September October November	82222222	1.1.78 1.1.78 1.1.70 1.2.83 1.2.83 1.2.83 1.2.83 1.2.83 1.2.83 1.2.83 1.2.83 1.2.83 1.3.83 1.	2.1.6.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	87.2889883778	17.4 10.3 10.3 10.3 10.3 10.3 10.3 10.3 10.3	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Annual	Annual Summaries.				
1909,		_	32 A	32 AND 41 YEARS.		
Mean Relative Humidity Mean Force of Vapor. Mean Ozore	.339	Mean Relat Mean Force Mean Ozon	ive Humidity	Mean Relative Ilumidity. Mean Force of Vapor. Mean Force of Vapor.		347

Summaries of the Sun Thermometer Readings, Showing the Number of Hours of Sunshine in Fahrenheit Degrees and Number of Days on which no Clouds passed over the Sun for the Year 1909, and also for the past 27 Years, from 1883 to 1910.

	Number of Days on which no Clouds passed over the Sun,	1000010001000n	Degrees. 75.4 149. 8760. 4284. 2520. 71.
	Actual Number to Mours of Sunshine.	137 155 195 222 222 292 292 292 293 1189 1189 1199 1199	
27 YEARS.	DATE.	12 M., 12th, 1800. 11 A.M., 5th, 1800. 12 M., 22d, 1886. 12 M., 22d, 1884. 2 P.M., 2th, 1884. 2 P.M., 2th, 1884. 12 M., 22d, 1885. 12 M., 22d, 1895. 12 M., 22d, 1895. 12 M., 23d, 1895. 12 M., 23d, 1895. 12 M., 23d, 1895.	naries. 27 Years. Mean temperature. Maximum temperature at 2.00 r.m., July 26th, 1885. Number of hours in a year. Greatest possible hours of sunshine. Actual number of hours of sunshine. Number of days in which no clouds passed over the sun
	.tsəflgiH	122 122 123 133 133 143 144 145 146 146 147 146 147	27 YEARS. 1 at 2.00 1.M., J. 8 of sunshine 5 of sunshine 6 ho clouds pa
	Average for 21 Years.	1242 608 66 48 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	naries. Mean temperature
	Number of Days on which no Clouds passed over the Sun.	<u> </u>	tarics. dean tempedaximum to the control of the co
	Actual X mber of Hours of Sunshine.	135 147 147 175 176 176 175 175 175 175 175 175 175 175 175 175	l Sunni
	Greatest Possible Hours of Sun- shine.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	, –
1909.	DATE.	1 F.M., 6th. 1 F.M., 2181 2 F.M., 10th. 2 F.M., 10th. 1 F.M., 15th. 2 F.M., 34th. 2 F.M., 34th. 2 F.M., 34th. 1 I.A., 3d. 2 F.M., 2d. 1 F.M., 2d.	8th ver the sun.
	Highest.	87. 1111 1130 1330 1330 1330 1330 1330 133	i., August
	Mean.	1.000000000000000000000000000000000000	1909. at 2.00 P.M. ar. of sunshin of sunshin
	MONTHS	January. February March May June Juny Juny August. September November December	Mean temperature

Summaries of the Barometer Readings for the Year 1909, and Also for the Past 41 Years, from 1868 to 1910. Inches.

41 years.	Minimum. Mean, Maximum. Minimum.	Date. Inches. Date. Date. Inches.	4 A.M., 30th. 29,973 30,804 9 A.M., 2d., 1890. 28,669 9 A.M., 9th, 1886. 28,600 9 A.M., 6th, 1896. 28,600 9 A.M., 6th, 1896. 28,600 9 A.M., 5th, 1994. 28,774 2 P.M., 25th, 1909. 2 P.M., 5th, 1994. 28,774 2 P.M., 25th, 1909. 2 P.M., 17th. 29,889 30,452 12 M.M., 18th, 1884. 29,339 30,452 12 M.M., 18th, 1884. 29,339 30,452 12 M.M., 18th, 1884. 29,339 30,452 2 P.M., 2dth, 1904. 29,913 30,452 2 P.M., 2dth, 1904. 29,139 30,559 2 A.M., 2dth, 1894. 29,139 30,559 2 A.M., 2dth, 1894. 29,943 30,559 2 A.M., 19th, 1894. 29,943 30,559 3 A.M., 19th, 1894. 28,650 A.M., 13th, 19th, 19th, 19th, 18th, 1854. 28,945 30,800. 9 A.M., 18th, 19th, 18th,
1909.	Maximum.	Date. Inches.	11 A.M., 13th. 29,900 10 A.M., 14th. 25,994 0 A.M., 12th. 25,774 10 A.M., 20,530 11 P.M., 20,530 11 A.M., 21st. 29,590 10 A.M., 21st. 29,400 10 A.M., 19th. 29,710 10 A.M., 20th. 29,570 10 A.M., 27th. 29,570 10 A.M., 27th. 29,550 10 A.M., 27th. 29,550
	Mean.	nches. Inches.	30.031 29.849 29.734 20.734 20.734 30.735 30.230 29.855 30.156 29.942 30.156 30.053 30
	MONTHS.	П	January February April March April May June September September September September September September September September

Annual Summaries.

1	29.927 30.924 28.420
41 YEARS,	Mean pressure
Inches	29.922 30.600 28.720
1909.	Mean pressure

Table Showing the Mean Monthly Amounts of Ocone for the Past 32 Years. Taken by Schonbein Formula. NEW YORK METEOROLOGICAL OBSERVATORY, CENTRAL PARK, NEW YORK CITY.

	Mean for the Year.	- 7 -	1.01	27.1	2.03	2.2	1.72	2	2.17	1.49	1.19	1.16	1.1.1	98.	1.57	200	92.1	1.56	1.61	1.60	10.1	1.38	1.55	88.	1 07	.72	16.	1.13	10:	ić.	1.36	.49	70.1	1.41
	Dec.	6.	20.1	200	90.6	1.19	.71	SF.I	I	1.67	-7.4	.64	\$7.	. 32	.74	96.	.07	1.68	2.00	2.00	1.06	1.29	01.1	.87	503	- 20.	//.	1.04	. 22	1.54	90.	.33	2	1.08
	Nov.	0	1.00	1.00	50,0	1.73	1.7.2	0	2.00	.63	1.00	0.30	. 17	00.	I.Io	1,66	.63	06.	I.00	.26	1.60	96°I	96.	94.	1.03	02.	1.10	1.30	.30	0/.	- 40	01.	000	1.02
	Oct.	8,	04.1) Y	1.90	.67	1.00	2.03	.74	.61	14.	I . 32	.77	1.83	.67	00.1	.93	1.03	1.54	1.80	1.35	1.03	50.	.35	21.	- 93	.93	.32	. 25	06.	4.0		46.
	Sept		33.		2.20	96.1	1.00	%	I.30	1.23	1.03	1.16	1.53	.73	.47	%.	1.30	- 09.	1.13	I.70	1.86	%.	1.50	10.	00.	01.	9.0	50	02.	55.	. 45	1.30	cc.	86.
	Aug.	04	1.6.1	. 22	2.35	96.	1.82	.67	2.70	1.65	1.41	-74	2.23	1.19	1,16	1.22	96.1	1.16		1.41	1.93	1.45	•51	0,1	000	60.	7,5	00.	55.	777	1.30	1.22		1.16
SS	July	2 20	. 77	212	2.51	1.32	1.35	27.1	1.25	1.03		1.80	1.03	82	1.58	1.16	1.93	1.67	1.25	.77	96.	40	1.22	.35	77.	().	1 11	0000	4 .		67.	2000	1	1.12
10, an excess	June	90.6	1.83	2.60	3.10	1.60	1.07	%	2.16	1.63	96.	01.1	09.	.77	2.40	.43	01.I	1.72	I 10	1.16	2.53	60.	1.55	2,9	2 2 2 2	0.00	0 0	0,0	2,90	95	96.	1.76		1.25
none.	Мау	2.03	1.7.1	2.00	19.1	2.97	1.09	%	2.64	2.00	.25	1.03	Io.	1.00	3.03	1.77	1.48	2 00	.71	I.12	2.22		25.		1.00	200	91.	00	17	2.70	2,00	3.25)	1.52
o, n	April	2.16	3.16	2.73	3.10	3.23	2.00	1.80	2.73	1.10	1.03	.03	06.	10.1	2.50	2.10	3.00	3.00	2.30	01.10	2.10	2.23	90.1	200.5	1.00	1.96	1.40	1.56	1.23	3 06	1 52	2.60		2 02
	Mar.	2.03	2.25	4.09	2.86	3.64	3.84	1.48	3 77	1.00	2.04	2.51	1.95	2.03	2.09	2.07	2.77	06.	3.00	3.00	60.7	1.00	21.5	17.1	1.25	œ.	1.93	I - 45	1.67	2.100	. 32	3.22		2.27
	Feb.	1.67	2.57	2.32	2.53	3.32	2.5	.78	3.25	2.57	1.57	1. 10	1.35	40.	1.17	2.03	3.25	2.40	2000	60.7	7.02	2,05	2000	2.60	2,10	1.50	1.62	2.67	1.50	2.64	.27	1.64		2.10
	Jan.	12.	1.19	1.25	2.74	3.03	2.01	. I.45	. 57	40,1	04.1	1.55	1.10	/50	40.1	00.1	27.22	+/>	00.1	1.25	200	200	1.77	1.19	01.1	.83	2.16	2.45	7.	1.32	.20	1.22	c	I.48
		1878	1979	1000	1001	1882	188		1880	2000	1888	1880	1800	1801	1892	1802	1804	1808	1896	1897	1808	1899	1900	IgoIIopI	Igo2	1903	1904	1905		1907	1908	606I	Moon for a moon	Medii 101 32 years

NEW YORK METEOROLOGICAL OBSERVATORY.

Summaries of the Prevailing Direction of Wind, Horizontal Movement of Wind (in Miles), Maximum Force of Wind (in Pounds Per Square Foot) for the Year 1909, and Also for the Past 41 Years, from 1858 to 1910. SUMMARIES OF ANNUAL TABLES FOR THE YEAR 1909, AND COMPARISONS WITH THE PAST FORTY-ONE YEARS,

	Date.	3.15 P.M., 30th, 1884. 3.50 P.M., 26th, 1886. 2.15 P.M., 12th, 1888. 2.00 P.M., 11th, 1884. 5.30 P.M., 3th, 1885. 3.50 P.M., 3th, 1885. 5.40 P.M., 3tt, 1895. 5.40 P.M., 3tt, 1895. 5.40 P.M., 3tt, 1895. 5.40 P.M., 3tt, 1895. 5.40 P.M., 12th, 1895. 5.40 P.M., 13th, 1895.
	Махітит Force.	34,545 % % % % % % % % % % % % % % % % % %
41 VEARS.	Date.	23d, 1882, 27th, 1888, 2d, 1889, 2d, 1890, 184, 1889, 14th, 1889, 14th, 1889, 24th, 1880, 24th, 1880, 24th, 1880, 24th, 1880,
	Maximum Movement in 24 hours.	566 6736 6736 5745 774 776 776 8776 8776
	Hourly Mean.	*** **********************************
	Average Total Miles.	6,063 5,972 5,672 5,637 7,632 4,662 4,682 4,698 4,878 4,878 6,137
	Prevailnng Direction,	**************************************
	Date.	4.10 A.M., 28th. 3.50 P.M., 25th. 6.50 A.M., 4th. 6.50 A.M., 4th. 11.40 A.M., 22th. 0.30 P.M., 18th. 3.40 A.M., 30th. 3.40 A.M., 5th. 10.30 A.M., 24th. 10.30 A.M., 24th.
	Maximum Force.	201111 48 77 78 95 74 74 74 74 74 74 74 74 74 74 74 74 74
	Date.	28th 44th 13th 13th 13th 13th 17th 17th 29th 29th 29th 26th
	Maximum Movement in 24 hours.	393 340 340 350 377 377 377 427 427 500
1909.	Hourly Mean.	20000 4000 400 - V
	Total Miles.	0617.0 0617.0 0617.0 0617.0 0607.4 0608.0
	Prevailing Direction.	N S S S S N S S S S S S S S S S S S S S
	MONTHS.	January February March April April June July July August September November December

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	61.084 miles. 6.9 729 729 729 49% lbs.
	Prevailing Direction
	$^{\mathrm{w}}_{3,273}$ miles. $^{7.2}_{7.2}$ $^{515}_{15}$
, york,	Prevailing Direction Fotal for the Year Fotal for the Year Fotal for the Year Fotal for the Year Feb. 57 Feb. 54 Maximum Movement in 24 hours, Feb. 55th Feb. 55th Feb. 56th Feb

Summaries of the Thermometer Readings (in Shade) for the Vear 1909, and Also for the Past 41 Vears, from 1868 to 1910, Fahrenheit Degrees.

				1909.					41 YEARS.		
		Mean.		Maximum.		Minimum.	Mean.		Maximum.		Minimum
	MONTHS.	Degrees,	Degrees.	Date.	Degrees.	Date,	Degrees.	Degrees	Date.	Segrees.	Date.
302 	Amuary February March May Ilme Mugh Mugh My Waust Moder November December	888840 4 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8	7.5.48 % % % % % % % % % % % % % % % % % % %	12.00 M., 5th. 100 F. M. 10th. 3.00 F. M., 10th. 3.00 F. M., 19th. 5.00 F. M., 19th. 3.00 F. M., 26th. 4.00 F. M., 30th. 4.00 F. M., 30th. 4.00 F. M., 9th. 4.00 F. M., 9th. 4.00 F. M., 9th. 5.00 F. M., 6th.	23 24 1 20 20 20 20 20 20 20 20 20 20 20 20 20	3.00 A.M., 19th. 7.00 A.M., 5th. 6.00 A.M., 18th. 5.00 A.M., 10th. 5.00 A.M., 10th. 5.00 A.M., 19th. 6.00 A.M., 35th. 6.00 A.M., 29th. 12.00 P.M., 29th. 12.00 P.M., 30th. 5.00 A.M., 30th.	86.8240 7777744 80.8240 77777744 80.8240 748644 80.8240 74860 74864	8 2 4 2 6 9 9 9 2 7 2 8 6 7 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	4.00 P. N., 2d, 1876 2.00 P. N., 2dd, 1874 2.00 P. N., 2dd, 1874 3.00 P. N., 2dd, 1805 4.00 P. N., 2dd, 1876 5.00 P. N., 2dd, 1876 5.00 P. N., 2dd, 1876 5.00 P. N., 2dd, 1876 5.00 P. N., 141, 1881 3.00 P. N., 144, 1881 3.00 P. N., 144, 1881	1 99 88 7 4 9 8 8 4 9	9.00 A. M., 24th, 1882. 7.00 A. M., 10th, 1889. 9.00 A. M., 5th, 1874. 9.00 F. M., 6th, 1874. 5.00 A. M., 13th, 1885. 6.00 A. M., 24th, 1885. 6.00 A. M., 24th, 1885. 8.00 A. M., 31st, 1887. 8.00 A. M., 31st, 1887. 8.00 A. M., 30th, 1885.

		Degrees. 52.3 101
nnual Summaries.	41 VEARS,	3.3 Mean temperature at 3.00 p. M., Sept. 7th, 1881. Minimum temperature at 3.00 p. M., Sept. 7th, 1881.
	1909,	Mean temperature Maximum temperature at 3.00 r. M., July 30th Minimum temperature at 3.00 A. M., Jan. 19th.









