

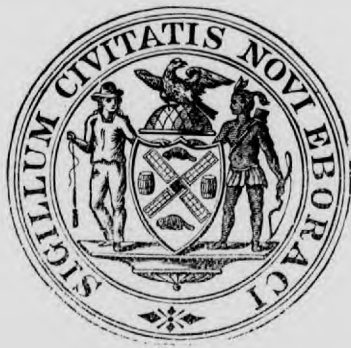
THE CITY RECORD.

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HEALTH DEPARTMENT.

Report for the Year ending December 31, 1890.

HEALTH DEPARTMENT,
NEW YORK, March 5, 1891.

Hon. HUGH J. GRANT, Mayor :

SIR—In accordance with the provisions of section 533 of the New York Consolidation Act, the Commissioners of Health have the honor to present this their report of the operations of the Board of Health of the Health Department of the City of New York for the year ending December 31, 1890. Under the provisions of the Consolidation Act, the organization of the Health Department is divided into two bureaus, namely, the Sanitary Bureau and the Bureau of Records.

SANITARY BUREAU.

The Sanitary Bureau is under the charge of William A. Ewing, M. D., Sanitary Superintendent, who, as its chief executive officer, is charged with the general supervision of the sanitary work of the Department, the enforcement of the provisions of the several sections of the Sanitary Code, and the laws and ordinances relating to tenement and lodging-houses, and generally of the laws of the State relating to the Health Department of this city. This bureau is divided into four divisions, as follows :

- 1st. The Division of Contagious Diseases and Special Medical Sanitary Inspections.
- 2d. The Division of General and Special Sanitary Inspection.
- 3d. The Division of Plumbing and Ventilation.
- 4th. The Division of Offensive Trades and Food Inspection.

THE BUREAU OF RECORDS.

This Bureau is in charge of Roger S. Tracy, M. D., Register, and is intrusted with the registration of births, marriages and deaths, the granting of burial permits, the study of topographical causes of disease and circumstances of unusual deaths, and incidentally the classification and filing of vital statistics.

HOSPITALS.

There are also three hospitals under the control of the Board of Health, namely, the Willard Parker Hospital, the Reception Hospital and the Riverside Hospital (North Brother Island), which are devoted to the reception and care of those suffering from contagious diseases.

PUBLIC HEALTH.

The total number of deaths in the City of New York during the year 1890 was 40,103. The record of Vital Statistics, as found in the Bureau of Records, shows that, although with an estimated population of 1,631,232 in 1890, there were 424 more deaths than in 1889, still the death-rate was 24.58 per thousand, as against 25.06 in 1889. This gain to life and health will be more fully appreciated when the fact is considered that the death-rate for eleven months of the year, commencing with the first of February, was only 23.68 per thousand, the final increase in the rate of mortality (24.58) being caused by the epidemic, La Grippe, which prevailed during the month of January. The death-rate of the city is not excessive, considering the comparative density of the population in many localities, the fact that it is the chief point for receiving and distributing immigrants, and other unavoidable circumstances peculiar to its commercial and metropolitan character ; and New York City can justly claim to be pre-eminent as a healthy place for both residential and business purposes. The following table shows the estimated population, number of deaths and death-rate of this city for the past ten years :

YEAR.	POPULATION ESTIMATED.	DEATHS.	DEATH-RATE.	YEAR.	POPULATION ESTIMATED.	DEATHS.	DEATH-RATE.
1880.....	1,209,268	31,937	26.41	1886.....	1,447,166	37,351	25.81
1881.....	1,246,011	38,624	30.99	1887.....	1,491,137	38,933	26.11
1882.....	1,283,870	37,924	29.54	1888.....	1,536,444	40,175	26.15
1883.....	1,322,880	34,011	25.71	1889.....	1,583,120	39,679	25.06
1884.....	1,363,075	35,034	25.70	1890.....	1,631,232	40,103	24.58
1885.....	1,404,401	35,682	25.40				

From the foregoing it will be seen that there has been a gradual and well marked improvement in the health of the city during the past decade.

INFANT MORTALITY.

Although the total number of deaths from all causes during the past year was 40,103 as against 39,679 for 1889 and 40,175 in 1888, the mortality of infants under one year of age was only 10,288, as against 10,527 in 1889 and 10,411 in 1888, and of those between one and five years of age 6,017, as against 6,625 in 1889 and 6,947 in 1888. This remarkable gain to infant life may be ascribed to the improved sanitary condition of the city, attained by the constant and systematic inspections made under the direction of this Department, the careful and conscientious work of the Summer Corps of physicians and to the charitable efforts of the several societies and newspapers (among the best known of which are St. John's Guild, the King's Daughters, the Hebrew Sanitarium, the Tribune Fresh Air Fund, and the Summer Corps of the Evening World) in raising funds and providing rest and recreation for the children of the poor. The change of air and surroundings thus provided has undoubtedly raised the standard of health among these children, and thus done much to enable them to withstand the diseases incident to the summer months.

SUMMER CORPS.

Under the provisions of section 4, chapter 504 of the Act of 1879, the Board of Estimate and Apportionment is required to appropriate each year the sum of ten thousand dollars, to be known as the Tenement-house Fund, to be placed to the credit of the Health Department and to be by it expended. In the latter part of the month of June in each year, a special corps of physicians is appointed, whose duty it is to visit each and every tenement-house, especially in the poorer or more crowded districts of the city, prescribe for the helpless sick, give needful advice, distribute rules for

the care of infants, and search out and cause to be corrected all unsanitary conditions. On the 30th day of June, 1890, 48 physicians were appointed for service (as in preceding years) during the months of July and August, and the city was divided into 48 districts, to each of which one physician was assigned to duty. Occasionally an Inspector was detailed to attend and assist upon the trips of the Hospital Barge of St. John's Guild, the Hebrew Sanitarium and other excursions for the benefit of children. The following tabulated statement shows in detail the record of this corps for the past summer :

Number of tenement-house visitations	40,364
Number of families visited	321,012
Number of sick treated	20,449
Number of sick treated on boats of St. John's Guild	445
Number of minor nuisances abated by personal effort	5,413
Number of complaints of nuisances forwarded	551
Number of circulars for care of infants distributed	51,784
Number of tickets to the St. John's Guild excursions distributed	16,027

As a further evidence of the gradual and substantial gain that has been made in the chances of life of children under one year of age and those between one and five years, we submit the following statistical table showing the total number of deaths each year since 1875, the number of deaths of those under one year of age, also between one and five years of age, and over five years of age, with the percentage of each class compared to the whole :

YEAR.	NUMBER OF DEATHS.				PER CENT. OF TOTAL.		
	Total.	Over 5 Years.	Under 1 Year.	1 to 5 Years.	Over 5 Years.	Under 1 Year.	1 to 5 Years.
1875.....	30,702	15,861	8,540	6,308	51.65	27.81	20.54
1876.....	29,152	14,942	8,170	6,040	51.26	28.03	20.72
1877.....	26,203	13,896	7,419	4,888	53.03	28.31	18.66
1878.....	27,008	14,598	7,100	5,310	54.05	26.29	19.66
1879.....	28,342	15,565	7,570	5,207	54.92	26.70	18.37
1880.....	31,937	17,287	8,725	5,925	54.13	27.32	18.55
1881.....	38,624	20,887	9,691	8,046	54.08	25.09	20.83
1882.....	37,924	20,404	9,867	7,653	53.80	26.02	20.18
1883.....	34,011	20,155	8,668	5,188	59.26	25.49	15.25
1884.....	35,034	19,762	9,636	5,636	56.41	27.50	16.09
1885.....	35,682	20,415	9,303	5,964	57.21	26.08	16.71
1886.....	37,351	21,230	9,830	6,291	56.84	26.32	16.84
1887.....	38,933	22,167	10,083	6,683	56.94	25.90	17.16
1888.....	40,175	22,817	10,411	6,947	56.79	25.91	17.29
1889.....	39,679	22,527	10,527	6,625	56.77	26.54	16.70
1890.....	40,103	23,798	10,288	6,017	59.34	25.66	15.00

From an examination of the foregoing table, it will be observed that from a percentage of 48.35 in children under five years of age in 1875 to the whole number of deaths a substantial gain has been made to 1890, when the percentage was only 40.66 to the whole number of deaths.

CONTAGIOUS DISEASES.

A remarkable decrease, both in the number of cases and deaths from contagious and infectious diseases, is noticeable, and may be attributed in a great degree to the efforts of the Health Department in maintaining a stringent sanitary supervision by its medical officers, in securing proper isolation and care of the sick, the disinfection of the premises where contagious diseases occur, and the destruction or disinfection of infected clothing. The reported cases of scarlet fever for the past year were 3,087, as against 8,849 in 1889, with 408 deaths, as against 1,242 in 1889. The number of cases of diphtheria was 4,350, as against 6,443 in 1889, with 1,262 deaths, as against 1,686 in 1889. During the past year the number of cases of typhoid fever were 1,105, as against 1,414 in 1889, with 352 deaths, as against 397 in 1889. The number of cases of small-pox (all of which were received from Quarantine) were 5 in 1890, as against 2 in 1889, with 2 deaths, as against 1 in 1889. Measles shows an increase ; there were 9,544 cases in 1890, as against 6,443 in 1889, with 730 deaths, as against 470 in 1889. In carrying on the work of the service of this division, the city is divided into 11 districts, each of which is under the immediate charge of a medical sanitary inspector. His special duty requires him to be familiar with the symptoms, treatment and causes of contagious and infectious diseases. When a report is made to the Board of a case of contagious disease, the Inspector is charged not only with the duty of ascertaining the truth of the same, but he is also, if time will permit, required to make a thorough examination of the premises and ascertain its defects and to recommend whatever remedy may be necessary, upon which an order is issued by the Board directing that the proper repairs and changes be made. During the past year the number of inspections of premises made by these inspectors in connection with the investigation of contagious disease, was as follows :

Number of inspections.....	9,859
Number of complaints made	3,533

In addition to which the following table shows in detail other work performed by them :

Cases of Contagious Diseases Reported to this Division and Referred to the Medical Sanitary Inspectors.

Typhus fever.....	4	Cerebro-spinal meningitis	133
Leprosy	1	Small-pox.....	5
Typhoid fever.....	1,100	Varicella.....	253
Scarlet fever.....	3,087		
Measles.....	9,544	Total.....	18,477
Diphtheria.....	4,350		

Other Diseases Referred to Inspectors for Report.

Phthisis	3,144	Malarial fever.....	77
Tubercular meningitis.....	270	Tabes mesenterica	12
Croup.....	254		
Dysentery.....	61	Total.....	3,818

Other Work Performed by the Medical Sanitary Inspectors.

Number of cases of contagious and other diseases visited.....	22,186
Number of houses inspected on account of contagious and other diseases occurring in them	19,598
Number of complaints and reports made by Inspectors for orders by the Board of Health.....	7,031
Houses examined in which no cause for orders by Board of Health could be found.....	12,567
Number of visits to physicians and undertakers to secure observance of sections of Sanitary Code relating to contagious diseases.....	475
Number of notices sent to principals of schools to effect exclusion from school of children exposed to contagious diseases.....	9,776
Number of miscellaneous inspections, schools, etc.....	1,749
Days Inspector attended Law Court.....	47
Number of cow stalls inspected	1,087
Number of cows examined.....	2,246
Number of cows found suffering from tuberculosis.....	.....

VACCINATION.

For the prevention of small-pox, this Department has an organized corps of physicians who are known as Permanent Inspectors of Vaccination, in addition to which other physicians, who are known as Temporary Inspectors of Vaccination, are appointed in the early spring and fall months, all of whom are clothed with the specific duty of offering, by house to house visitation, free vaccination to all persons needing it, thus preventing the laying of the foundation for the occurrence and spread of small-pox. Under the provisions of section 97 of the sanitary regulations of the Board of Education, no pupil is allowed to attend any school, nor can any teacher be employed in the same, unless such pupil or teacher has been properly vaccinated; and as a prerequisite for the admission, employment or attendance of a pupil or teacher, the principal of the school must be furnished with a certificate of a physician in good standing, as evidence of such vaccination, and is required to co-operate with such agents of the Board of Health as may be authorized to visit the schools for the purpose of examining and vaccinating the pupils, and must require revaccination of all pupils ascertained by the agents of the Board of Health not to be fully protected by a former vaccination, and no pupil refusing to be so revaccinated, either by the agent of the Board of Health or by the physician of the family to which he or she belongs, shall be permitted to attend any public school until such requirement is fully complied with. In accordance with the above regulation, pupils of the various schools are vaccinated by special inspectors of vaccination, who visit the schools during teaching hours and vaccinate all pupils, except some good reason for non-vaccination be presented by the teacher, pupil or parent. The vaccine virus used is produced by a branch of the Department known as the "Vaccine Laboratory," and all surplus virus is sold to applicants from this and other cities at a fixed price, the proceeds thereof being turned into the City Treasury, to be used in paying the salaries of the Temporary Inspectors of Vaccination. In the case of primary vaccinations, strict supervision is made of the work. Each Inspector is required to report his primary vaccinations, and the persons so vaccinated are visited by another Inspector of Vaccination, whose duty it is to report whether or not they were successfully done. During the past year 30,329 primary vaccinations were made, as against 26,336 in 1889, and 61,718 revaccinations as against 48,206 in 1889, an increase of 17,505 in primary and revaccinations. The net cost per vaccination to the Department for each person vaccinated was seventeen cents in 1890 as against twenty-two cents in 1889 and thirty-four cents in 1886. The following table shows by comparison the vaccinations performed by the Vaccinating Corps for the past five years, the sale of vaccine virus, the salaries of Inspectors, the cost of virus, and also the cost per vaccination to the Department for each person vaccinated:

	1886.	1887.	1888.	1889.	1890.
Cash received for virus.....	\$1,549 38	\$2,239 36	\$2,791 06	\$2,459 22	\$1,622 51
Salaries, regular vaccinators.....	\$9,449 19	\$10,650 00	\$12,733 79	\$10,599 92	\$11,043 25
Salaries, temporary vaccinators.....	6,202 07	10,292 46	4,008 80	3,987 21	3,523 46
Total salaries.....	\$15,651 26	\$20,942 46	\$16,742 59	\$14,587 13	\$14,566 71
Cost of calves and cattle.....	\$2,444 74	\$2,637 68	\$2,621 00	\$2,925 00	1,857 00
Cost of feed.....	537 05	574 61	476 95	368 60	264 00
*Other supplies.....	554 71	941 85	1,029 78	1,033 86	799 85
Total cost of supplies.....	\$3,536 50	\$4,154 14	\$4,127 73	\$4,327 46	\$2,920 85
Number of vaccinations.....	51,849	89,270	83,063	74,542	92,047
Cost of each vaccination.....	\$0.34+	\$0.25½-	\$0.21¾	\$0.22+	\$0.17+

* Ice, coal, quills, ivory points, needles, etc.

The following miscellaneous work was performed by the Chief Inspector of Vaccination:

Certificates of vaccination issued.....	38,111
Number of animals vaccinated for collection and propagation of virus.....	148
Number of quill slips collected.....	194,200
Number of ivory points collected.....	12,750
Number of tubes of virus collected.....	312

DISINFECTION.

There is, in connection with the Division of Contagious Diseases, a corps of Disinfectors (each of whom is assigned to a specified district) whose duty it is, when possible, to visit all houses in which contagious diseases have been reported, fumigate and disinfect, leave disinfectants and circulars (instructions for disinfection) when necessary. From time to time they are required to do ambulance duty by removing those afflicted with contagious diseases who cannot be properly isolated, or whose friends desire such removal to the hospitals under the charge of this Department. Immediately after the removal of each case of contagious disease, the premises are fumigated and all infected portable material is removed to the disinfecting station of the Department at East Sixteenth street, near the river, where it is thoroughly disinfected by the agency of hot air and steam in an apparatus especially constructed for that purpose, and then it is returned to the owner. During the past year the following amount of work was performed by this corps:

Number of visits to infected houses for purposes of disinfection and fumigation.....	22,778
Number of rooms fumigated after occurrence in them of contagious diseases.....	20,055
Number of infected and contiguous rooms for which disinfectants have been distributed by disinfectors.....	64,360
Number of sick with contagious diseases removed to the hospitals of the Department.....	751
Number of bodies dead from contagious diseases removed to Reception Hospital for interment at Hart's Island.....	9
Number of street openings disinfected on account of offensive emanations.....	1,195
Number of culverts disinfected.....	112
Number of water-closets disinfected.....	37
Number of sewers disinfected.....	137
Number of vacant lots disinfected.....	3
Number of cellars disinfected.....	7
Number of miles of subway trenches disinfected.....	77
Number of times ambulances and coupés of the Department were fumigated.....	542
Bedding, clothing and miscellaneous articles removed from houses and disinfected (number of pieces).....	24,063
Number of times blankets used in ambulances were fumigated.....	1,173
Number of times wagons were fumigated.....	249
Number of miscellaneous infected articles removed and destroyed.....	523

SANITARY INSPECTION.

The several sections of the Sanitary Code are enforced by general orders of the Board, or in extreme cases by peremptory orders of the Sanitary Superintendent or his assistant, or by arrest through the medium of the Sanitary Police. For the purpose of special sanitary inspection the city is divided into twenty-five districts, one Inspector being detailed for work in each district, his duty consisting in the investigation and the making of reports and recommendations to the Board on citizens' complaints referred to him, and of the frequent inspection of and report upon special places which are likely to become dangerous to life or detrimental to health. Each inspector is required to be thoroughly familiar with his district, and, when time is afforded, to make a general inspection of his district, also forwarding as before complaints of any sanitary defect he may discover. He also attends to all matters relating to the Division of Plumbing and Ventilation that occur in his district (See Plumbing and Ventilation). He is also required to reinspect premises upon which orders and requirements are made, to see that the same have been complied with. During the past year the number inspections and reinspections made by the Sanitary Inspectors was 39,202, resulting in 9,536 complaints and orders for the abatement of nuisances. The subjects of the orders referred to are as follows:

Air shafts cleaned, disinfected, graded, paved, connected with sewer.
 Alleys cleaned, disinfected, graded, paved, connected with street gutter or sewer.
 Apartments cleaned, disinfected or ventilated.
 Areas connected with sewer, cleaned, disinfected, pavements of, graded and repaired.
 Balusters of stairs repaired.
 Basements cleaned and disinfected.
 Business of lard-rendering, slaughtering, gut-cleaning, fat-rendering, storing bones, manufacturing fertilizers, smoking sausages, or storing rags discontinued.

Buildings cleaned or inclosed.
 Ceilings cleaned, whitewashed, or repaired.
 Cellars cleaned, made water-tight, cemented, connected with sewer, ceilings plastered, doors repaired.
 Cellars vacated as places of living or sleeping.
 Cesspools disinfected, emptied, cleaned, filled, constructed, repaired, or covered.
 Chimneys repaired, extended, cleaned, or obstructions removed.
 Cisterns disinfected, emptied, cleaned, or covered or provided.
 Clothes-poles reset.
 Coops cleaned, disinfected or removed.
 Cows removed.
 Dogs removed.
 Drains cleaned, constructed, covered, repaired, removed, obstructions in removed, or connected with sewer.
 Excavations cleaned, repaired, relaid, graded, or connected with sewer.
 Fences repaired, or constructed.
 Fire-escapes cleaned, or obstructions removed.
 Fixtures trapped, and waste-pipes therefrom connected on outlet side of water-closet traps.
 Flashings provided over woodwork of sinks.
 Floors cleaned, repaired, relaid, graded, cemented, or connected with sewer.
 Fowls removed.
 Gas-mains and pipes repaired, and gas provided in dark halls and rooms.
 Garbage and ash receptacles provided, removed, cleaned and disinfected.
 Gutters (house or street) provided, repaired, cleaned, disinfected, obstructions in removed, connected with street sewer, street gutter, or cesspool.
 Halls cleaned, and filthy or defective floor coverings removed.
 House drains provided with running traps and fresh-air inlets.
 Hydrants repaired, constructed, removed.
 Housekeepers provided for tenements.
 Ice-boxes connected with properly trapped, water supplied, open sinks.
 Joints closed or calked with lead.
 Leaders repaired, provided, extended, adjusted, connected with sewer, street gutter, or privy vault.
 Lodging-houses discontinued.
 Lots (vacant) cleaned, disinfected, inclosed, filled, graded, connected with sewer or street gutters.
 Manure vaults, boxes or receptacles disinfected, emptied, cleaned, covered, filled, constructed, or lined.
 Manholes covered and repaired and removed.
 Offensive trades and business discontinued, or removed.
 Pigeons removed.
 Pipe (soil, supply, vent, waste, sewer, or iron) provided.
 Pipe (soil, waste, or supply) repaired, trapped, removed, extended, graded, cemented, ventilated or repaired, and openings closed and obstructions removed.
 Privy vaults disinfected, emptied, cleaned, ventilated, lined with brick, repaired, cemented, constructed, filled, or removed.
 Privy-houses cleaned, disinfected, repaired, constructed, removed, adjusted to vaults, or seats of, provided with cover.
 Pumps provided, or repaired.
 Rabbits removed.
 Railings provided, or repaired.
 Roofs repaired or cleaned, and roof bulkheads repaired.
 Roof tanks provided, cleaned or covered.
 School-sinks, provided, cleaned or repaired.
 Sewer-pipes provided, repaired, obstructions in removed, trapped or openings inclosed.
 Sinks provided, repaired, cleaned, removed, flushed, connected with street sewer or street gutters.
 Sidewalks cleaned, repaired, graded, flagged, or obstructions in removed.
 Skylights repaired and provided.
 Slaughter-houses cleaned, repaired, or connected with sewer.
 Smoke-pipes extended, or repaired.
 Soil-pipes discontinued as rain leaders.
 Spaces cleaned, disinfected, graded, cemented, filled or connected with sewer.
 Stables cleaned, removed, repaired, or connected with street sewer.
 Stagnant water removed.
 Stairways cleaned or repaired.
 Trees removed.
 Urinals cleaned, disinfected, repaired, flushed, connected with sewer, removed, or floor covered with zinc.
 Walls cleaned, whitewashed or repaired.
 Wash-rooms repaired.
 Wash-trays trapped, provided.
 Water-closets repaired, cleaned, disinfected, flushed, constructed, ventilated, or connected with street sewer.
 Water-closet pans adjusted to preserve water-seal, bowls burned out and re-tarred, cisterns provided, window sashes repaired and glazed.
 Yards cleaned, disinfected, filled, graded, paved, grade of pavements repaired, relaid in cement, or connected with street sewer.

TENEMENT-HOUSE INSPECTION.

A tenement-house, under the statute, includes every building or portion thereof which is rented, leased, let or hired out, to be occupied as a home or residence of three or more families living independently and doing their cooking upon the premises, or by more than two families upon any floor so living and cooking, but having a common right in the halls, stairways, yards, water-closets, or some of them. Under the provisions of chapters 84 and 288 of the Act of 1887, it became the duty of the Board of Health to inspect, semi-annually, all of this class of houses, and, for the purpose of enforcing the provisions of these acts and the several sections of the Sanitary Code in relation thereto, the Board of Police have detailed to the service of the Board of Health one Sergeant, one Roundsman and forty-three Policemen (men of long experience in the Police Force of this city), who are known as the Sanitary Company of Police. For the purpose of this inspection the city is divided into 31 districts, and a Sanitary Policeman assigned to each, who is directed to make an inspection of each of the tenement-houses within his district at least twice in each year, the first inspection commencing in the early part of January and the second in August. Each officer is furnished with a memorandum book in which to enter the street and number of each house, date of inspection, and whether or not any cause for complaint was found. He is also instructed to secure, by personal direction, the abatement of all minor nuisances he may discover. Upon the event of failing to do so, he is to make a written complaint of the same, which is forwarded to the Board for an order. If the subject-matter indicates that he does not possess the technical knowledge to comprehend a nuisance existing or the remedy for it, then the report is referred to a Sanitary Inspector who makes an investigation and returns a complaint, upon which an order is issued by the Board.

The improvement of the tenement-houses of this city, and thereby the condition of those residing therein, is regarded by the Board as one of the most important subjects that has engaged its attention for a number of years. During the year a large number of tenement-houses were found to be in such a condition from a sanitary point of view as to be almost unfit for human habitation, and extensive orders were issued to remedy this state of affairs. In most cases these orders were complied with, but in others (twenty-nine in all) on account of the failure of the owners to obey the orders, proceedings were taken to vacate the premises, but before their enforcement the owners had concluded to make the necessary improvements required. In their inspections the Sanitary Police are instructed to ascertain the following facts in connection with each house:

Location.

Number of families.	Housekeeper on premises.
Number of occupants.	Owner on premises.
Privy accommodations—number of sittings.	

Cellars if Occupied for Dwelling Purposes.

Whether the floor is water-tight.	Whether the ceiling is plastered.
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Yards.

Whether properly graded.	Whether sewer connected.
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Front Areas.

Whether graded.	Sanitary condition.
Whether sewer connected.	

Waste Pipes.

Whether joints are connected with cement or lead.	Whether trapped.
	Whether ventilated two feet above the roof.

Milk Inspection.

General Inspection.

Leaders.
Eaves-gutter.
Chimneys.
Fire-escapes.
Water-closets. Whether trapped and trap
ventilated.
Privy-vaults.
School-sinks.
Privy houses.
Cesspools.
Urinals. Whether properly flushed.
Clothes-poles.
Fences.
Hydrants in yard.
Air-shafts.

Whether kept within stoop-line.

Whether sufficient.
In sanitary condition.

The entire number of inspections of tenement-houses made by the Sanitary Police during the year was 85,023. This regular and frequent inspection has resulted in the improvement of the sanitary condition of this class of dwellings. According to the inspections made during the past year there were 37,316 of tenement-houses in the city, and it is estimated, based upon an actual count taken in the latter part of the year 1888 of 32,390 of these houses, containing 237,972 families consisting of 1,093,701 persons, that there are at the present time not less than 1,259,788 of the inhabitants of this city residing in these houses. In addition to this duty the Sanitary Police are required to make night inspections of tenement-houses for the purpose of ascertaining whether they are overcrowded. A memorandum is made of the number of persons found in each apartment at the time of inspection, but the measurements are made the following day, so as not to disturb the occupants any longer at night than is necessary. 23,855 inspections were made during the past year and 891 orders issued to reduce the number of occupants in overcrowded apartments, the number so reduced being 1,555 in all.

LODGING-HOUSES. ●

During the past year 583 inspections at night were made of lodging-houses for the purpose of examining the beds and bedding as to their cleanliness, also as to the water-closet accommodations, and to ascertain generally whether the premises were kept in a proper sanitary condition. At the close of the year there were outstanding permits issued by the Board for 146 of these houses, with a capacity of 14,736 lodgers.

SLAUGHTER HOUSES.

The total number of permits outstanding for the business of slaughtering in this city at the close of the year were as follows :

For cattle and sheep.	66
For hogs	8

In all..... 74

The buildings used for this purpose, 39 in all, are situated between Forty-third and Forty-sixth street, from First avenue to the East river, and west of Eleventh avenue to the North river, between Thirty-ninth and Forty-first streets, and at Fifty-eighth street and North river, and there are three places for the slaughtering of chickens. Stringent rules and regulations have been adopted with reference to the care of these slaughtering houses, resulting in daily inspections by the Sanitary Police, under the supervision of Edward W. Martin, the Chemist of the Board, to ascertain their condition and whether or not these buildings are thoroughly cleansed and purified, and if all offal, blood, refuse and offensive matter be not removed therefrom, and reports are made thereon to the Board. In the case of any defect being found as to their sanitary condition orders are at once issued to remedy the same. Slaughter houses are at present conducted in a manner as free from objection from a sanitary point of view as the nature of the business will permit.

STABLES AND STABLE MANURE.

It is estimated that there are in the City of New York about 6,000 stables containing 60,000 horses, producing within the stables about 900,000 pounds or 450 tons daily of manure. The removal of manure in an offensive manner has for a long series of years been one of the most difficult problems the Board has had to contend with. The first effort at regulating this matter was the requirement of permits for dumping, the next is the regulation for the construction of manure vaults for the storing of manure, then the prescribing of hours within which it could be removed. About 1873 the dumping of manure was confined to a few locations on the east and west sides of the city. Manure vaults were required to be made water-tight, and when there was no sewer in the street, the drainage from the stable was conducted into the vault. On the 8th day of July, 1890, section 100 of the Sanitary Code was amended as follows :

"Whenever there shall be a cartload of unbaled manure on any premises, it shall be immediately removed as herein directed, the carts or wagons being loaded within the premises and not upon the street or sidewalk. It shall not be lawful to remove manure from any stable or premises, or to cart the same within the city limits without a permit from the Board of Health, unless the manure be pressed and baled in a manner satisfactory to the Board of Health, or be in tightly covered carts or wagons of a construction approved by the Board of Health, and be removed in a manner not in any way offensive or to cause any nuisance. Every such manure cart or wagon must have a permit in writing from the Board of Health, and be used in accordance with the conditions of such permit, and not otherwise. All manure when transported through the streets must be covered and secured so as to prevent offensive odors escaping, and drippings upon the streets, or be baled or enclosed in tightly covered barrels or receptacles approved by the Board of Health. The bales, barrels or other receptacles above mentioned shall not be opened, or the carts and wagons unloaded, within the city limits, except upon the conditions of a permit in writing from the Board of Health, and at such docks or places remote from dwellings as shall be approved by the Board of Health, and to which a permit in writing for such use shall have been previously granted by the Board of Health. When baled, manure shall be removed every ten days, or sooner, if required by the Board of Health. No manure shall be allowed to be thrown upon or to fall or remain in any street, sidewalk or ground near such stable. No manure-vault under the sidewalk shall be built or used. No manure-vault or receptacle outside of a stable shall be built or used on any premises, except pursuant to the terms of a permit granted therefor by the Health Department."

Since the adoption of this amendment the Board has succeeded in causing to be discontinued the use of manure-vaults outside of stables, and those in the yard of stables wherever reported objectionable, as well as the practice of loading loose manure in front of stables, and the removal of manure from vaults through openings in the sidewalk and from areas. It has enforced the regulation requiring all manure carts to be tight and tightly covered, and caused the arrest of persons in charge of the same for violating this rule, by the revocation of permits for such carts.

PLUMBING AND VENTILATION.

This division is charged with the inspection of the plumbing and drainage of all new and reconstructed buildings, and of the light and ventilation of tenement-houses. For the purpose of inspection the city is divided into 25 districts (as mentioned under the head of Sanitary Inspection), one Inspector being assigned to each district. Under the provisions of chapter 908 of the Laws of 1867, as amended in 1879 and 1887, no tenement-house can be erected in this city until the plans for light and ventilation have been approved of by this Board, nor can the plumbing and drainage (see chapter 450, Act of 1881,) of any building in the city be executed until the plans have had the approval of this Department. The duty of the Inspectors of this division is to carefully inspect, from time to time during its progress, each building in his district, and see that the work is being executed according to the plans and specifications approved of by the Department, and also to attend to the special sanitary work of the district. This constant and careful supervision by the Inspectors of this division in respect to light and ventilation of tenement-houses and the plumbing and drainage of all new buildings, has insured improved conditions conducive to the health and comfort of the people. During the past year the work performed by these Inspectors was as follows :

Inspections under plumbing law.....	45,195
Inspections under tenement-house law (light and ventilation).....	12,613
Inspections of lodging-houses (for permits).....	97
Inspection and re-inspection on citizens' complaints.....	371

FOOD AND OFFENSIVE TRADE INSPECTIONS AND CHEMICAL ANALYSIS.

This division is in charge of the Chief Chemist and Assistant Chemists, and is charged with the inspection of milk, fish, fruit and other food supplies in this city, the analytical work of the Department and the inspection of offensive trades. For this purpose there are three Chemists—seven Milk, four Meat, two Fruit, one Fish, and two Inspectors of Offensive Trades employed.

There is no article of food upon which human life is more dependent than upon milk, and consequently a careful inspection to ascertain the purity of the same is important and necessary. For the purpose of milk inspection, the city is divided into seven districts, to each of which one Inspector and one Sanitary Officer is assigned, whose duty it is to make weekly inspections of each store in their district where milk is sold (about 5,000 stores in the city), and also to make early morning inspections from time to time at the several ferries and depots where milk is received. Permits for the keeping of milch cows within the city limits are only issued when the premises occupied for this purpose are reported upon inspection to be properly drained and cared for, and so situated as to be inoffensive to the public. During the year all cows have been inspected as to their health and physical condition, for the purpose of preventing the sale of milk from diseased animals, so far as the jurisdiction of this Board extends. In the past year an improvement is noticed in the quality of the milk sold and used in this city, which is due in a large measure to the constant inspections and the prompt punishment by the Courts of violators of the provisions of the Sanitary Code in respect to this subject. During the year 58,721 inspections have been made, and 97,040 specimens of milk tested, resulting in the arrest of 299 dealers for violation of the sanitary ordinances relating to adulteration :

Of these there were tried and convicted	244
Of these there were discharged	14
Of these there are cases pending	41

In all..... 299

The fines imposed upon those convicted amounting in all to the sum of \$7,400 00

Meat, Fish, Fruit and Food Inspection.

During the past year the Department has endeavored, as far as lay in its power, to watch over the food supply of this city ; daily inspections being made in the markets, commission houses and stores where meat, fish, fruit, vegetables and other food supplies are offered for sale to ascertain the condition thereof. On account of the limited facilities at its disposal, much food that was unfit for use, no doubt, found its way into consumption, but as an evidence of the great good accomplished by the Department, we desire to call your attention to the following statement of the amount of work of the several Inspectors charged with the inspection of meat, fish, fruit and food and the result thereof :

Number of inspections of meat and fish	66,309
Number of inspections of fruit and food	35,888
Number of pounds of meat and fish condemned and seized and sent to the offal dock	1,200,541
Number of pounds of fruit and food condemned, seized and sent to the offal dock	1,056,076

Offensive Trades.

Inspectors of Offensive Trades are charged with the daily inspection of slaughter-houses and gas-houses, and the semi-weekly inspection of rendering and fertilizing manufactories. All citizens' complaints in connection with nuisances arising from offensive trades are investigated at once and frequent inspections have been made of manufacturing establishments likely to become nuisances, and whenever necessary, changes have been made in the manner of conducting business. During the year 22,200 inspections were made, resulting in 1,382 complaints, 4 arrests and convictions.

Croton Water.

Weekly analysis of Croton water is made by the chemist to ascertain whether or not impurities are therein contained which are likely to injure the public health. The following shows the analysis for the weeks ending October 27, November 24, and December 29, 1890 :

Analysis of Croton Water for Monday, October 27, 1890. Results Expressed in Grains per U. S. Gallon of 231 Cubic Inches.

Appearance	Slightly turbid.
Color	Light yellow brown.
Odor (heated to 100° Fahr.)	Faint marshy.
Chlorine in Chlorides	0.1149.
Equivalent to Sodium Chloride	0.1895.
Phosphates	None.
Nitrites	None.
Nitrogen in Nitrates and Nitrites	0.0187.
Free Ammonia	0.0005.
Albuminoid Ammonia	0.0052.
Hardness equivalent to Carbonate of Lime	{ Before boiling
	{ After boiling
Organic and volatile (loss on ignition)	1.1663.
Mineral matter (non-volatile)	4.0822.
Total solids (by evaporation)	5.2486.

Analysis of Croton Water for Monday, October 27, 1890. Results Expressed in Parts by Weight in One Hundred Thousand.

Appearance	Slightly turbid.
Color	Light yellow brown.
Odor (heated to 100° Fahr.)	Faint marshy.
Chlorine in Chlorides	0.197.
Equivalent to Sodium Chloride	0.325.
Phosphates	None.
Nitrites	None.
Nitrogen in Nitrates and Nitrites	0.0321.
Free Ammonia	0.0010.
Albuminoid Ammonia	0.0100.
Hardness equivalent to Carbonate of Lime	<div> <div>Before boiling</div> <div>After boiling</div> </div>
Organic and volatile (loss on ignition)	4.12.
Mineral matter (non-volatile)	4.12.
	2.00.
Mineral matter (non-volatile)	7.00.
Total solids (by evaporation)	9.00.

Analysis of Croton Water for Monday, November 24, 1890. Results Expressed in Grains per U. S. Gallon of 231 Cubic Inches.

Appearance.....	Somewhat turbid.
Color.....	Very light yellowish brown.
Odor (heated to 100° Fahr.).....	Marshy.
Chlorine in Chlorides.....	0.115.
Equivalent to Sodium Chloride.....	0.189.
Phosphates.....	None.
Nitrites.....	None.
Nitrogen in Nitrates and Nitrites.....	0.0096.
Free Ammonia.....	Trace.
Albuminoid Ammonia.....	0.0040.
Hardness equivalent to Carbonate of Lime	{ Before boiling..... 2.403.
	{ After boiling..... 2.403.
Organic and volatile (loss on ignition).....	0.991.
Mineral matter (non-volatile).....	4.549.
Total solids (by evaporation).....	5.540.

Analysis of Croton Water for Monday, November 24, 1890. Results Expressed in Parts by Weight in One Hundred Thousand.

Appearance.....	Somewhat turbid.
Color.....	Very light yellowish brown.
Odor (heated to 100° Fahr).....	Marshy.
Chlorine in Chlorides.....	0.197.
Equivalent to Sodium Chloride.....	0.325.
Phosphates.....	None.
Nitrites.....	None.
Nitrogen in Nitrates and Nitrites.....	0.0165.
Free Ammonia.....	Trace.
Albuminoid Ammonia.....	0.0070.
Hardness equivalent to Carbonate of Lime	
} Before boiling.....	4.12.
} After boiling.....	4.12.
Organic and volatile (loss on ignition).....	1.70.
Mineral matter (non-volatile).....	7.80.
Total solids (by evaporation).....	0.50.

Leaving a balance of.....	\$1,990 25
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During the year permanent improvements were made at the Riverside Hospital (North Brother Island), as follows :

Four hundred feet of sea-wall, costing eleven thousand six hundred and ninety dollars, and four thousand and fifty-eight cubic feet of dirt filling behind new sea-wall, costing \$871.16, in addition to which the several pavilions were connected with the boilers for the purpose of heating them by steam, thereby avoiding the use of stoves. At the disinfecting station on East Sixteenth street the disinfecting plant has been completed and is of such capacity as to enable the Department in case of emergency to handle all the material which it may find necessary to disinfect and fumigate. Herewith we append statement showing the amount of money appropriated and amounts expended during the year for specific purposes :

FUND FOR	AMOUNT APPROPRIATED.	ADDITIONAL APPROPRIATION.	TOTAL APPROPRIATION.	AMOUNT EXPENDED.	BALANCE.
Salaries.....	\$222,000 00	.....	\$222,000 00	\$221,846 45	\$153 55
Contingent expenses.....	10,000 00	.....	10,000 00	9,961 32	38 68
Disinfection.....	14,000 00	.....	14,000 00	13,526 66	473 34
Law expenses.....	2,000 00	.....	2,000 00	1,916 59	83 41
Sanitary Police.....	54,800 00	*\$200 00	55,000 00	55,000 00	.....
Removal of night soil, etc.....	36,000 00	.....	36,000 00	36,000 00	.....
Night medical service.....	1,200 00	.....	1,200 00	1,200 00	.....
Rents.....	3,200 00	.....	3,200 00	3,066 68	133 32
Hospitals.....	49,000 00	†2,026 50	51,026 50	49,918 55	1,107 95
	\$392,200 00	\$2,226 50	\$394,426 50	\$392,436 25	\$1,990 25

* Chapter 188, Laws 1889, salaries of two Roundsmen.

† Amount received for care and maintenance of sick immigrants at Riverside Hospital, North Brother Island.

In conclusion the Commissioners desire to express their thanks for the prompt and efficient co-operation and support which this Department has received at the hands of the public-spirited members of the Academy of Medicine of this city. The honorary pathologists of the Department have rendered the city signal service in matters relating to their special line of investigation. To-day the inmates of the hospitals of the Department are blessed with the same kindly medical supervision at the hands of the profession that characterizes all other hospitals of this city; in fact, it is this attention and forethought that does so much to make New York City synonymous with Charity itself. When it is recalled that these and other services, requiring high professional attainment and much personal sacrifice, are cheerfully given for the asking, then, indeed, is offered additional emphasis to the truism, "In unity there is strength." Finally, while expressing alike our gratitude for the aid already received from the profession and others, we desire to invite the co-operation of all such as contemplate well studied, just and legal measures for sanitary advancement.

Respectfully submitted,

CHARLES G. WILSON, President,
JOSEPH D. BRYANT, M.D.,
WM. M. SMITH, M.D.,
C. F. MACLEAN,

Commissioners.

HEALTH DEPARTMENT OF THE CITY OF NEW YORK,
SANITARY BUREAU,
NEW YORK, March 2, 1891.

To the Board of Health of the Health Department :

GENTLEMEN—I have the honor to forward the annual report of the transactions of the Sanitary Bureau for the year 1890, with a statement in detail from each of the Divisions into which the Bureau is divided, to wit :

- 1st. The Division of Contagious Diseases and Special Medical Sanitary Inspection.
- 2d. The Division of General and Sanitary Inspection.
- 3d. The Division of Plumbing and Ventilation.
- 4th. The Division of Offensive Trades and Food Inspection.

HEALTH DEPARTMENT—SANITARY BUREAU,
DIVISION OF CONTAGIOUS DISEASES,
NEW YORK, January 10, 1891.

To W. A. EWING, M.D., Sanitary Superintendent :

SIR—I have the honor to submit the following report of the work of this Division, and the means taken to accomplish it.

The Division of Contagious Diseases comprises :

- The Inspectors of Contagious Diseases (Diagnosticians).
- The Inspector of Schools and Institutions for Children.
- The Corps of Medical Sanitary Inspectors.
- The Vaccinating Corps.
- The Summer Medical Corps.
- The Disinfecting Corps, and
- The Veterinarian.

The work of these several classes of officials will be described in the order given above.

THE INSPECTORS OF CONTAGIOUS DISEASES.

Three physicians, whose abilities and experience qualify them specially for the duty of diagnosticians, examine and pass upon the cases of contagious diseases that are sent to the hospitals of the Health Department for care and treatment. Two of these Inspectors serve every twelve hours alternately, and visit, while on duty, all cases reported for hospital treatment, situated in that part of the city south of One Hundred and Twenty-fifth street.

The cases that occur in the city north of this boundary are referred to the third Inspector for the purpose in question. A comparatively few cases necessitating hospital treatment occur in the latter district. This Inspector is consequently on duty at all times, and, in addition, acts as Medical Sanitary Inspector for part of the Twenty-third and Twenty-fourth Wards.

The services of the Inspectors of Contagious Diseases have been found very necessary in order to prevent the removal of persons to the Contagious Disease Hospitals who are afflicted with non-contagious ailments simulating contagious diseases.

Their work will be found in table "A" appended.

INSPECTOR OF SCHOOLS AND INSTITUTIONS FOR CHILDREN.

This Inspector has in charge all sanitary matters relating to schools and institutions for children. He makes daily inspections of these, reporting the unsanitary conditions that are found. The contagious diseases occurring in them receive particular attention. Investigation of the causes of such outbreaks is carefully made, and isolation of children sick with contagious disease is supervised by him. He examines the monthly reports made in accordance with chapter 633, Laws of 1886, by resident physicians in charge of institutions for children, and supervises the enforcement of the provisions of that act. During the summer he also has charge of the Summer Corps of Physicians, and from time to time has been detailed to perform other important sanitary duty not connected with this Division.

THE MEDICAL SANITARY INSPECTORS.

The efforts of these physicians are directed towards preventing and suppressing contagious and other so-called preventable diseases by removal of conditions that favor their development and spread. An ordinance of the Sanitary Code compels physicians in this city to report to the Health Department all cases of contagious or infectious diseases that are seen and diagnosed by them during the preceding twenty-four hours. When the report of such a case is received, it is referred to the Medical Sanitary Inspector in whose district it has occurred.

Eleven Medical Sanitary Inspectors have in charge as many districts into which the city has been divided.

Each of these Inspectors visits the houses in his district in which the cases referred to him exist, and carefully inspects the plumbing, ventilation, and other surroundings that have a recognized hygienic bearing upon the disease, or upon the health of the occupants. Unsanitary conditions found are reported by him through his superiors to the Board of Health, and are removed by order of the latter served on the owner, or one who is responsible. The private physicians in attendance on cases of contagious diseases are held accountable for the maintenance of proper isolation. If the latter cannot be secured, or the patient is too poor to employ the services of a physician, or if it is desired by the patient, its parents or guardians, the case is removed to one of the hospitals of the Department.

When a case of contagious disease is found in an apartment where business of any kind is conducted it is removed to one of the Department hospitals, or to a place where isolation can be safely secured, or the business is stopped until the case has terminated and disinfection has been thoroughly performed.

Children exposed to contagious diseases are excluded from the schools they are attending, public or private. The following is the form of notification sent to principals of schools by the Medical Sanitary Inspector :

HEALTH DEPARTMENT—DIVISION OF CONTAGIOUS DISEASES,
No. 309 MULBERRY STREET,
NEW YORK, 1890.

The attendance at your school of the following-named children, who are in contact with contagion of _____ exposes your other scholars to danger.

SECTION 150.—That no parent, master or custodian of any child or minor (having power and authority to prevent) shall permit any such child or minor to be unnecessarily exposed, or to needlessly expose any other person, to the taking, or to the infection of, any contagious disease.

Respectfully,

Reported by _____, Inspector. CYRUS EDSON, M.D., Chief Inspector.

This form is on the back of a postal card, and is filed in as soon as possible after seeing the children or ascertaining their names. The rules governing the exclusion of children from schools on account of exposure to contagious diseases enforced by the Medical Sanitary Inspectors are those adopted by the Board of Education and are printed on page 164 et seq. of the Manual of that Board.

When a case of contagious disease is found in a building, part of which is used for a school, the alternative of permitting removal of the case to a hospital of the Department or of closing the school until the disease has terminated is offered those in charge.

In either event, thorough disinfection is performed as soon as conditions permit it. The work of the Medical Sanitary Inspectors is directed also towards preventing the spread of tubercular diseases. To this end a list of persons who die from these diseases is furnished this Division daily by the Registrar of Vital Statistics.

These cases are distributed among the Inspectors in the same manner as are the cases of contagious diseases.

The Inspectors visit the cases and make the inspection of the houses in which they exist, as previously described.

The following facts obtained by the Medical Sanitary Inspectors indicate the line upon which investigation of tuberculosis cases is made.

1. Name, age, occupation, nationality. Time of residence in New York City.
2. Exciting causes. Direct and continued exposure.
3. Predisposing causes. Give any evidences of hereditary predisposition. State if deceased have had any previous attack of pulmonary disease, pleurisy, pneumonia, etc.
4. Manner of living.
5. Cleanliness, overcrowding, etc.
6. Condition of premises.
7. Source of milk supply. Give name of New York retailer.

The following hygienic rules for the care of persons suffering from tuberculosis were adopted by the Board in June, 1889, and issued in July of that year. They are distributed by the Medical Sanitary Inspectors, and are also mailed from the office to all who apply for them :

HEALTH DEPARTMENT—CITY OF NEW YORK,
No. 301 MOTT STREET,
NEW YORK, July 1889.

RULES TO BE OBSERVED FOR THE PREVENTION OF THE SPREAD OF CONSUMPTION.

Pulmonary tuberculosis (consumption) is directly communicated from one person to another. The germ of the disease exists in the expectoration of persons afflicted with it.

The following extract from the report of the Pathologists of the Health Department explains the means by which the disease may be transmitted :

"Tuberculosis is commonly produced in the lungs (which are the organs most frequently affected) by breathing air in which living germs are suspended as dust. The material which is coughed up, sometimes in large quantities, by persons suffering from consumption, contains these germs, often in enormous numbers." * * * "This material, when expectorated frequently, lodges in places where it afterwards dries, as on the street, floors, carpets, handkerchiefs, etc. After drying in one way or another, it is very apt to become pulverized in the air as dust."

By observing the following rules the danger of catching the disease will be reduced to a minimum :

- I.—Do not permit persons having consumption to spit on the floor or on cloths, unless the latter be immediately burned. The expectoration of persons suspected to have consumption should be caught in earthen or glass dishes containing the following solution: Corrosive sublimate, seven grains; water, one pint, and finally thrown into the sewer or burned.
- II.—Do not sleep in a room occupied by a person who has consumption. The living room of a consumptive patient should have as little furniture as practicable. Hangings should be carefully avoided. The use of carpets and rugs ought always to be avoided.
- III.—Do not fail to wash thoroughly the eating utensils of a person who has consumption as soon after eating as possible, using boiling water for the purpose.
- IV.—Do not mingle the unwashed clothing of a consumptive person with similar clothing of other persons. The soiled clothing of a consumptive person should be removed at once, put in boiling water for forty-five minutes, or otherwise disinfected.
- V.—Do not fail to catch the bowel discharges of a consumptive person with diarrhoea in a vessel containing corrosive sublimate seven grains to water one pint.
- VI.—Do not fail to consult the family physician regarding the social relations of persons suffering from suspected consumption.
- VII.—Do not permit mothers suspected of having consumption to nurse their offspring.
- VIII.—Household pets (animals or birds) are quite susceptible to tuberculosis, therefore, do not expose them to persons afflicted with consumption; also, do not keep but destroy at once all household pets suspected of having consumption, otherwise they may give it to human beings.
- IX.—Do not fail to cleanse thoroughly the floors, walls and ceilings of the living and sleeping rooms of persons suffering from consumption at least once in two weeks.

By order of the Board.

CHARLES G. WILSON, President.

EMMONS CLARK, Secretary.

The following is the report of the Pathologists of the Health Department, upon which action against tubercular diseases was based :

HEALTH DEPARTMENT, May 28, 1889.

REPORT ON THE PREVENTION OF TUBERCULOSIS TO THE BOARD OF HEALTH OF NEW YORK CITY.

The disease known as tuberculosis and, when affecting the lungs, as pulmonary tuberculosis (consumption), is very common in the human being and in certain of the domestic animals, especially cattle. About one-fourth of all deaths occurring in the human being during adult life is caused by it, and nearly one-half of the entire population at some time in life acquires it. The disease is the same in nature, in animals and in man, and has the same cause.

It has been proven beyond a doubt that a living germ, the tubercle bacillus, is the cause and the only cause of tuberculosis. It does not seem necessary to state the facts upon which this assertion is based, for the observation first made by Robert Koch in 1882 has been confirmed so often and so completely that it now constitutes one of the most absolutely demonstrated facts in medicine.

Tuberculosis may affect any organ of the body, but most frequently first involves the lungs. When the living germs find their way into the body they multiply there, if favorable conditions for their growth exist, and produce small new growths or nodules (tubercles) which tend to soften. The discharges from these softened tubercles, containing the living germs, are thrown off from the body. In pulmonary tuberculosis these discharges constitute, in part, the expectoration. The germs thus thrown off do not grow outside the living human or animal body, except under artificial conditions, although they may retain their vitality and virulence for long periods of time, even when thoroughly dried. As tuberculosis can only result from the action of these germs, it follows from what has just been said that when the disease is acquired it must result from receiving into the body the living germs that have come from some other human being or animal affected with the disease.

It has been abundantly established that the disease may be transmitted by meat or milk from tubercular animals. The milk glands in milch cows often become affected with the disease when their lungs are involved, and the milk from such animals may contain the living germs and is capable of producing the disease. Among stall-fed dairy cows twenty per cent. or thirty per cent. are sometimes found to be affected with the disease. Tubercular animals are also frequently killed for food; their flesh sometimes contains the germs, and if not thoroughly cooked is capable of transmitting the disease. Boiling the milk or thoroughly cooking the meat destroys the germs. Although the meat and milk from tubercular animals constitute actual and important sources of danger, the disease is acquired, as a rule, through its communication from man to man.

Tuberculosis is commonly produced in the lungs (which are the organs most frequently affected) by breathing air in which the living germs are suspended as dust. The material which is coughed up, sometimes in large quantities, by persons suffering from consumption, contains these germs, often in enormous numbers. This material, when expectorated frequently, lodges in places where it afterwards dries, as on the streets, floors, carpets, clothing, handkerchiefs, etc. After drying, in one way or another, it is very apt to become pulverized and float in the air as dust.

It has been shown experimentally that dust collected from the most varied points, in hospital wards, asylums, prisons, private houses, etc., where consumptive patients are present or have been present, is capable of producing tuberculosis in animals when used for their inoculation. Such dust may retain for weeks its power of producing the disease. On the other hand, dust collected from rooms in institutions or houses that have not been occupied by tubercular patients does not produce the disease when used for the inoculation of animals.

These observations show that where there are cases of pulmonary tuberculosis, under ordinary conditions, the dust surrounding them often contains the tubercle bacilli; and persons inhaling the air in which this dust is suspended may be taking in the living germs. It should, however, be distinctly understood that the breath of tubercular patients and the moist sputum, received in proper cups, are not elements of danger, but only the dried and pulverized sputum. The breath and moist sputum are free from danger, because the germs are not dislodged from moist surfaces by currents of air. If all discharges were destroyed at the time of exit from the body, the greatest danger of communication from man to man would be removed.

It then follows, from what has been said, that tuberculosis is a distinctly preventable disease. It is a well known fact that some persons, and especially the members of certain families, are particularly liable to tuberculosis and this liability can be transmitted from parents to children. So marked and so frequent is this liability, and so frequent is the development of the disease in particular families, that the affection has long been considered hereditary. We now know that tuberculosis can only be caused by the entrance of the germ into the body; and that this transmitted liability simply renders the individual a more easy prey to the living germs, when once they have gained entrance. The frequent occurrence of several cases of pulmonary tuberculosis in a family is then to be explained, not on the supposition that the disease itself has been inherited, but that it has been produced after birth by transmission directly from some affected individual. Where the parents are affected with tuberculosis the children from the earliest moments of life are exposed to the disease under the most favorable condition for its transmission, for, not only is the dust of the house likely to contain the bacilli, but the relationship also between parents and children, especially between the mother and the child, are of that close and intimate nature especially favorable for the transmission by direct contact.

If, then, tuberculosis is not inherited, the question of prevention resolves itself principally into the avoidance of tubercular meat and milk, and the destruction of the discharges, especially the sputum, of tubercular individuals.

As to the first means of communication, those measures of prevention alone answer the requirements which embrace the governmental inspection of dairy cows and of animals slaughtered for food, and the rigid exclusion and destruction of all those found to be tubercular.

For the removal of the second means of communication, i.e., the sputum of tubercular individuals, the problem is simple when the patients are confined to their rooms or houses; then wooden or pasteboard cups with covers should always be at hand for the reception of the sputum. These cups are supported in simple racks, and at least once daily or more frequently if necessary, should be removed from the racks and thrown with their contents into the fire.

The disposition of the expectoration of persons who are not confined to their rooms or homes is a far more difficult problem. The expectoration certainly should not be discharged on the street, and the only practicable means for its collection seems to be in handkerchiefs, which when soiled should at the earliest moment be soaked in a solution of five per cent. of carbolic acid, and then boiled and washed. Handkerchiefs thus soiled are exceedingly dangerous factors in distributing tubercle bacilli; for when the sputum becomes dry it is easily separated in flakes from the cloth, and then soon becomes pulverized and suspended as dust.

It becomes evident from what has been said that the means which will most certainly prevent the spread of this disease from one individual to another, are those of scrupulous cleanliness regarding the sputum. These means lie largely within the power of the affected individual. It is furthermore to be remembered that consumption is not always, as was formerly supposed, a fatal disease, but that it is in very many cases a distinctly curable affection.

An individual who is well on the road to recovery may, if he does not with the greatest care destroy his sputum, diminish greatly his chances of recovery by self inoculation.

While the greatest danger of the spread of the disease from the sick to the well is in private houses and in hospitals, yet, if this danger is thoroughly appreciated, it is, for the most part, quite under control, through the immediate destruction of the sputum and the enforcement of habits of cleanliness. But in places of public assembly, such as churches and theatres, particularly the latter, the conditions are different, and the safety would seem to depend largely upon a dilution and partial removal of the floating and possibly dangerous dust by means of adequate ventilation.

Rooms in private houses and hospital wards that are occupied by phthisical patients should from time to time be thoroughly cleaned and disinfected, and this should always be done after they are vacated before they are again occupied by other individuals.

Steamship companies should be obliged to furnish separate apartments for consumptive persons, so that no person in the exigencies of travel need be forced to share his room with one who might be a source of active danger to him.

We desire to especially emphasize the following facts:

1st. That tuberculosis is a distinctly preventable disease;

2d. That it is not directly inherited; and

3d. That it is acquired by the direct transmission of the tubercle bacillus from the sick to the healthy, usually by means of the dried and pulverized sputum floating as dust in the air.

The measures, then, which are suggested for the prevention of the spread of tuberculosis are:

1st. The security of the public against tubercular meat and milk, attained by a system of rigid official inspection of cattle;

2d. The dissemination among the people of the knowledge that every tubercular person may be a source of actual danger to his associates, if the discharges from the lungs are not immediately destroyed or rendered harmless; and

3d. The careful disinfection of rooms and hospital wards that are occupied or have been occupied by phthisical patients.

HERMAN M. BIGGS, M. D.,
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Pathologists to the Health Department of New York City.

Deaths from malarial fevers are also investigated by the Medical Sanitary Inspectors for the purpose of discovering and removing conditions that may have acted as direct or indirect causes of the disease.

The duties of these officials necessitate visits to physicians and undertakers in order to effect the observance, on their part, of the several sections of the Sanitary Code governing their action in the case of contagious or infectious disease.

THE VACCINATING CORPS.

The Vaccinating Corps was organized under Act of Legislature passed in 1874. A permanent corps of eight physicians is employed for the purpose of effecting gratuitous vaccination. One of these physicians has charge of the laboratory for the propagation of vaccine virus. This laboratory is situated at No. 326 East Forty-fourth street.

In the spring and fall of each year additional physicians are appointed for temporary service on the vaccinating corps. The city is divided into as many districts as is found necessary to effectively perform vaccination, and a vaccinator is allotted to each.

One or two of these men, as circumstances may require, are detailed to vaccinate persons who request it at the office of this Division. It is very remarkable that not a single case of small-pox occurred in this city, from contagion acquired here, since June 14, 1889. This must be ascribed largely to the thoroughness with which the people have been vaccinated.

A word here upon the value of vaccination is of great interest.

Small-pox is fatal to a very large proportion of those whom it attacks. It kills from thirty to forty per cent. of its victims. It has been described with great accuracy by very early writers; nevertheless, its history previous to the seventeenth century is obscure, and must be regarded defective on account of its having been confounded with measles and other forms of eruptive disease.

During the seventeenth and eighteenth centuries not a decade passed without an occurrence of fearful epidemics of small-pox. In England from seven to nine per cent. of all the deaths were due to it. It was one of the most destructive diseases, attacking, as it did, persons in every station of life. In Berlin one-twelfth of all the deaths were caused by small-pox during the years 1783 to 1794. In France, during the same period, 30,000 perished annually from it. During the sixteenth century, in Mexico, 3,500,000 persons died of small-pox. In 1734 nearly two-thirds of the population of Greenland were swept away by an epidemic of the disease; and in Iceland 18,000 persons died out of a population of 50,000.

Its ravages among savage nations are not less disastrous than among the civilized. Whole tribes have been exterminated. Washington Irving, and other writers, have graphically described the horrors it wrought among our North American Indians.

One of the most vivid pen-pictures of the devastation wrought by small-pox before the introduction of vaccination is given by Professor Wernher in his work entitled "Zur Impfrage." It is as follows:

"Before the introduction of vaccination small-pox had become a permanent disease which never entirely ceased in any one year, and every three or five years became a great epidemic.

"In non-epidemic years, one-tenth of all mortality was from variola; in epidemic years, one-half.

"Very few men escaped small-pox till old age; almost every one sickened at least once in his life of this horrible, murderous disease.

"Countless mortals were maimed by loss of sight. Of new-born children one-third died of small-pox before their first year; one-half before their fifth year of life.

"There was no family which had not heavy losses to deplore.

"In the country the mortality was greater than it was in the city.

"Physicians and Government possessed no means against this abominable evil. Isolation was impracticable, from the widespread nature of the disease. Men accepted the pest as an unavoidable fate.

"The loss which Europe suffered from this one disease amounted to many millions. It was the principal factor which deterred or kept back the population from progress; and to lead us back to these conditions are the efforts of many ignorant mortals directed."

Comparing the present conditions with those just stated, the author goes on to say:

"We now find no child mortality among vaccinated children. Also among adults, whenever vaccination and revaccination are maintained, mortality from small-pox is at an end."

The following table is compiled from the "Report of the Epidemiological Society of London," and shows the mortality from small-pox during periods before and after the introducing of vaccination. The periods are not in each case the same, but they are those of which it was possible to obtain reliable information.

Approximate Average Annual Death-rate by Small-pox per Million.

PERIOD RELATIVE TO WHICH DATA ARE GIVEN.	COUNTRY OR CITY.	BEFORE VACCINATION.	AFTER VACCINATION.
1777-1806 and 1807-1850.....	Lower Austria.....	2,484	340
1776-1780 and 1810-1850.....	Prussia, Eastern.....	3,321	56
1780 and 1810-1850.....	Prussia, Western.....	2,272	356
1781-1805 and 1810-1850.....	Berlin.....	3,422	176
1774-1811 and 1810-1850.....	Sweden.....	2,050	138

In the table, of which the foregoing is a part, twenty-one other cities or states are given, each of which shows the same remarkable reduction. I would call your attention particularly to Berlin. The death-rate from small-pox there was 3,422 per million living inhabitants during the twenty-four years before the introduction of vaccination, and 176 per million in the forty years after that time.

In the City of New York the following table, compiled from the yearly records of the Health Department, shows the death rate from small-pox from 1869 to 1888, inclusive:

Deaths from Small-pox.

YEAR.	DEATHS.	POPULATION.	RATE PER 100,000.	YEAR.	DEATHS.	POPULATION.	RATE PER 100,000.
1869.....	263	927,728	21.50	1880.....	31	1,206,499	2.57
1870.....	805	942,262	31.08	1881.....	453	1,243,533	33.30
1871.....	805	954,636	84.32	1882.....	259	1,279,560	20.34
1872.....	929	967,142	96.16	1883.....	12	1,317,691	0.91
1873.....	117	979,811	11.94	1884.....	0	1,356,958	0.00
1874.....	484	992,646	48.75	1885.....	26	1,397,395	1.86
1875.....	1,280	1,041,886	122.85	1886.....	31	1,439,037	2.15
1876.....	315	1,072,924	29.36	1887.....	99	1,481,920	6.68
1877.....	14	1,104,907	1.27	1888.....	81	1,526,081	5.31
1878.....	2	1,137,833	0.18	1889.....	1	.....	.....
1879.....	25	1,171,740	2.13	1890.....	0	.....	.....

The result of the work of the Vaccinating Corps did not become apparent until 1876.

The death rate from small-pox previous to 1876 was 59.57 per 100,000. Since that year it has been only 8.38 per 100,000.

In Paris, where vaccination is not energetically enforced, the death rate from small-pox ranges from 136 to 10.1 per 100,000 inhabitants.

In the principal German cities, where vaccination laws are enforced with rigor, the death rate from small-pox is 1.44 per 100,000 inhabitants.

In London, where compulsory vaccination is rigidly enforced, the death rate from small-pox is only 0.6 per 100,000.

In the Canton of Zurich, Switzerland, since the compulsory vaccination law was repealed, the mortality from small-pox has risen from 8 to 85 per 100,000 inhabitants.

When small-pox prevails in a community where some are protected by vaccination and others are not, the influence of vaccination is strikingly exhibited.

In observations shown for twenty-one years on 4,000,000 people in Bohemia, it was discovered that the death rate among vaccinated persons, in whom the protective power had diminished by reason of age, was 5 $\frac{1}{2}$ per cent., while among those who had never been vaccinated it was 20 $\frac{1}{2}$ per cent. Illustrations of this kind could be multiplied, as almost countless authentic statistics exist.

In New York the first question asked by the Inspector of Contagious Diseases of a person sick with a doubtful case of small-pox is, "When were you successfully vaccinated?" and if the answer indicates it was done a period of five or six years before, the disease is believed not to be small-pox.

During over nine years of service in the Health Department of New York I have never seen a case of small-pox in a person who had been vaccinated successfully within five years, and the number of cases I have seen mount into the hundreds.

During that period, I have seen only one Inspector of Contagious Diseases contract small-pox, and he was the only Inspector who disbelieved in vaccination, and refused to have it performed on himself.

All vaccine virus of the Health Department of New York is produced from carefully selected heifers or young cows inoculated with the best virus obtainable. Each animal is examined by the Department Veterinarian, and only those that show normal vesicles are utilized for charging points.

The animals are kept under conditions of the most scrupulous cleanliness; the result of our efforts is the production of a large number of points of virus per year that never cause any of the diseases alleged to have been the result of vaccination.

The following is a detailed statement of the amount of vaccine virus produced at the laboratory connected with the Division and its distribution during the past year:

Production.

Animals vaccinated.....	147
Animals returned to contractors.....	148
Good.....	93
Fair.....	17
Imperfect.....	27
Quill slips collected.....	194,200
Ivory points collected.....	12,750
Tubes collected.....	312
On hand January 1, 1890, points.....	7,400

Total points.....214,300

General Distribution.

Used by Vaccinators.....	94,903
For office vaccinations.....	9,930
Gratuitous.....	15,395
From cash sales.....	27,058
From credit sales.....	9,494
Returned and washed points.....	51,920
On hand January 1, 1891, points.....	5,600

Total points.....214,300

Total number of vaccinations performed.....92,047

* NOTE.—A cheap and efficient cup answering this purpose is now on the market, and is supplied by the druggist.

SUMMER MEDICAL CORPS.

The appointment of the Summer Corps of Medical Inspectors (forty to fifty), is for the special duty of visiting and prescribing for the sick poor of the tenement-houses during the heated terms of the summer months of July and August.

The portions of the city assigned to the Inspectors are selected in those sections of the city bordering on the east and west sides, where the population is most densely packed in the tenement-houses, and where the most ignorant and impoverished dwell.

Through ignorance and neglect, here are found the sick, suffering children, who swell the mortality records during this period of each year.

Each Inspector is charged with the duty of visiting the people of every domicile in each tenement-house in his district, inquiring for the sick, and, whenever they are without proper medical attendance, prescribing for them, and at the same time enforcing household sanitation wherever found necessary; distributing the circulars (printed in three languages) to each domicile, embodying the Board's directions for the care of infants and children.

These Inspectors report to the Chief Inspector semi-weekly the houses and families visited, and the kind of service performed. These reports are tabulated weekly and forwarded to the Board, and the whole finally tabulated when the term of service has expired, and presented to the Board.

These results may be found in the tabulated form in the appendix herewith, showing the work performed during the past year, 1890. The service is arduous and exhausting, but faithfully performed to the saving of many infants lives that would otherwise perish from neglect, ignorance and poverty.

The tables of mortality of children under five years of age show a marked and rapid decrease in number soon after the work of this corps commenced, vividly illustrating its value in saving and protecting this infantile life during the most trying and exhausting season of the year.

THE DISINFECTING CORPS.

Twelve men do the work of this corps. The city is divided into eight districts for the purpose of disinfecting houses during and after the occurrence in them of contagious diseases.

Each case of contagious disease is visited by the disinfecter in whose district it occurs. Disinfectants are left and instructions how to use them given to the person or persons in charge of the case. A printed circular on the subject of disinfection is also given. After the termination of cases of contagious diseases infected rooms are fumigated by means of sulphur dioxide, generated in the manner recommended by the American Public Health Association. Two wagons are used by members of this corps; one to carry and distribute disinfectants, the other to remove infected material to the disinfecting station, at the foot of East Sixteenth street, for the purpose of disinfection by heat. At this place an elaborate apparatus has been erected, into which all infected articles can be put and disinfected with hot air or steam.

A citizen desiring to have his house or rooms disinfected has only to write to this office requesting it; then all such requests are complied with at the expense of the City.

During the summer, when street excavations are offensive, two disinfectors are detailed to disinfect them by means of bromine solutions, and to instruct contractors of subway constructions in the use of bromine for this purpose. These men also enforce the rule of the Board of Health compelling contractors to properly disinfect the offensive earth from trenches opened by them in the streets. Six members of the disinfecting corps are detailed for ambulance service in order to remove to the hospitals of the Department persons sick with contagious diseases.

This service necessitates the constant employment of two men, consequently the six are divided into three watches of two each. Each watch is on duty from eight A. M. until the same hour on the following day, and the three watches serve in regular rotation.

During their hours of duty they remove to the hospital all cases ordered to be sent by the Inspectors of Contagious Diseases under the rules of the Board of Health. Two ambulances, two coupés and four horses are used in this service. After the removal of the case disinfection is performed of the room from which the case was removed by one of the men effecting the removal. Immediately after leaving each case at the hospital the ambulance man disinfects his vehicle and leaves the bedding and blankets used in it at the disinfecting station, replacing them with a set that have been previously disinfected.

WORK OF THE VETERINARIAN.

The veterinarian visits the slaughter-houses of the city daily, except Sundays and holidays, and inspects many animals before and after they are killed. He has also to inspect the stock yards and the animals contained in them. The object of the work is to prevent the consumption of meat from animals that are sick at the time of slaughtering.

A section of the Sanitary Code compels persons who are called to treat cases of glanders or farcy to report them to the Health Department. A number of such reports were received during the year and referred to the veterinarian, who caused the destruction of fifty-nine horses afflicted with glanders, and the disinfection of the premises in which they were at the time of the disease.

Respectfully submitted,

CYRUS EDSON, M. D., Chief Inspector.

APPENDIX.

The following tables show in detail the work of the Division of Contagious Diseases performed during the year 1890:

TABLE A.

Work of Inspectors of Contagious Diseases (Diagnosticians).

Total number of cases of diseases examined.....	1,418
" cases of contagious diseases ordered to hospitals of the Department.....	759
Total number of bodies dead from contagious diseases ordered to Reception Hospital for interment at Hart's Island.....	9

TABLE B.

Work of Inspector of Schools and Institutions for Children.

Total number of inspections made.....	1,749
" applications for permits for care of children investigated.....	23
" cases of contagious diseases examined—	
Diphtheria.....	45
Typhoid fever.....	1
Purulent Ophthalmia.....	921
Scarlet fever.....	108
Measles.....	138
Tinea capitis.....	68
	1,281

TABLE C.

Work of the Medical Sanitary Inspectors.

CONTAGIOUS DISEASES REPORTED AND REFERRED TO THE MEDICAL SANITARY INSPECTORS DURING THE YEAR 1890.

Cases.	Cases.
Typhus fever.....	4
Typhoid fever.....	1,100
Scarlet fever.....	3,087
Measles.....	9,544
Diphtheria.....	4,350
Spinal meningitis.....	133
Small pox (contracted out of city).....	5
Varicella.....	253
Leprosy.....	1
Total.....	18,477

DISEASES OTHER THAN THE ABOVE REFERRED TO INSPECTORS.

Phthisis.....	3,144	Dysentery.....	61
Tubercular meningitis.....	270	Tabes Mesenterica.....	12
Croup.....	254		
Malarial fever.....	77	Total.....	3,818

Total number of cases of contagious and other diseases visited.....	22,186
Total number of houses inspected on account of contagious and other diseases occurring in them.....	19,598
Total number of complaints and reports made by Inspectors for orders by Board of Health Houses examined in which no cause for orders by Board of Health could be found.....	7,031
Reinspections of houses for enforcement of Board and Attorney's orders.....	12,567
Total number of weekly reports made.....	8,378
" miscellaneous reports made on the performance of daily duties.....	742
Total number of visits made to physicians and undertakers to secure observance of sections of Sanitary Code relating to contagious diseases.....	1,442
Total number of notices sent to principals of schools to effect exclusion from school of children exposed to contagious diseases.....	475
Total number of days Inspectors attended law courts.....	9,776
Number of cow stables inspected.....	47
" cows examined.....	1,087
" cows found suffering from tuberculosis.....	2,246

TABLE D.

Work Performed by the Disinfecting Corps.

Total number of visits to infected houses for purposes of disinfection and fumigation.....	22,778
" rooms fumigated after occurrence in them of contagious diseases.....	20,955
Total number of infected and contagious rooms for which disinfectants have been distributed by disinfectors.....	64,360
Total number of persons sick with contagious diseases removed to the hospitals of the Department.....	751
Total number of bodies dead from contagious diseases removed to Reception Hospital for interment at Hart's Island.....	9
Total number of street openings disinfected on account of offensive emanations.....	1,195
" miles of subway trenches disinfected on account of offensive emanations.....	77
" culverts disinfected.....	112
" water-closets disinfected.....	37
" sewers disinfected.....	137
" cellars disinfected.....	7
" vacant lots disinfected.....	3
Miscellaneous infected articles removed and disinfected.....	24,063
" destroyed.....	523
Number of times ambulances and coupés of the Department were fumigated.....	542
" wagons were fumigated.....	249
" private carriages were fumigated.....	9
" blankets used in ambulances were fumigated.....	1,173

TABLE E.

Work Performed by Vaccinating Corps during Year 1890.

Total number of primary vaccinations.....	30,329
" re-vaccinations.....	61,718
Grand total.....	92,047

Total number of weekly and semi-weekly reports made by members of the Vaccinating Corps..... 977

Total number of visits to Central Office by members of Vaccinating Corps..... 1,147

" certificates of vaccination issued..... 38,111

TABLE F.

Work of Summer Corps, 1890.

Total number of houses visited.....	40,364
" families visited.....	321,012
" sick persons treated.....	20,449
" sick persons treated on boats, St. John's Guild.....	445
" circulars (care of infants) distributed.....	51,784
" tickets for St. John's Guild distributed.....	16,027
" minor nuisances abated by efforts of Inspectors.....	5,413
" complaints forwarded.....	551

TABLE G.

Work of Veterinarians Performed During Year 1890.

Total number of cattle examined.....	39,794
" horses sick with glanders destroyed.....	59
Total number of post mortem examinations of animals killed after being used for the propagation of bovine virus.....	147

HEALTH DEPARTMENT—DIVISION OF PLUMBING AND VENTILATION,
NO. 42 BLEECKER STREET,
NEW YORK, January 2, 1891.

W. A. EWING, M. D., Sanitary Superintendent:

DEAR SIR—In submitting the annual report of the operations of this Division for the year 1890, I respectfully venture to make brief allusion to the condition of tenement-houses in respect to light and ventilation, and of old houses generally in regard to plumbing and drainage antecedent to the adoption of existing laws on those subjects. I do this to make clear the advances made in house sanitation from time to time, advances maintained, and, where practicable, improved upon in that year. Also to supply in the Department records a brief resumé of the work of this Division, which has heretofore been lacking because of inability to secure publication of any but statistical information.

The Act of the Legislature (chapter 908, Laws of 1867, as amended in 1879) vests in the Board of Health control over the construction of new tenement-houses in respect to light and ventilation. Apartment houses and flats come within the legal definition of "tenement-houses," and are consequently subject to this control. The large number of families obliged to live in tenements, especially in those of the cheaper class, and the city's great prospective and crowded population makes the problem of securing the best lighted and ventilated rooms in new tenement-houses of paramount and increasing importance. It demands attention alike from law-makers, philanthropists and sanitarians. Nor is it devoid of interest even to that portion of the community not included in these terms, who can afford a choice of healthful homes; for but few of such homes are far distant from the humble tenements, and diseases engendered and nourished by foul air and insanitary conditions in these latter are easily communicable to houses where no sanitary precaution has been neglected, while the general commingling of the various elements of the population in public conveyances and highways increases the danger of disease diffusion.

But the problem presented to this Department has been especially difficult. When the law was passed there already existed many thousands of tenement-houses, built without legislative or other restriction, abounding in dark, unventilated rooms, with inadequate water-supply and wretched plumbing. Privy-vaults everywhere polluted the air. The dimensions of city lots (25 by 100 feet) were also unfortunate. They were too wide for profitable construction of single suites of rooms for the poor, and too narrow for satisfactory double suites on a floor. And lots had acquired high value in the distinctively tenement quarters, which led to overcrowding in order that landlords might get from the many, in the form of rent, the even ordinary commercial interest on the amount invested which the few could not afford to pay.

Another difficulty arose from the fact that much of the tenement-house population had come from rural districts of foreign countries, and, consequently, was uneducated in the sanitary regulations and restrictions necessary for the protection of populous communities. Its tendency, too, was to aggregation; and means of segregating the part of the population which wished it was lacking, for cheap and quick transit to the surrounding districts was not available.

Such were some of the principal obstacles to properly housing the tenement population of this city when this Department, so far as the law permitted, set out upon the accomplishment of the work. Naturally the progress made at first was slow. Builders, unaccustomed to restrictions, demurred to any improvements which increased the expense of construction, and salutary regulations, such as those limiting the percentage of lot to be covered, prohibiting rear tenements, or preventing privy-vaults, were often denigrated as starting innovations, alike unconstitutional and unpreventive. Attempts were made to omit the filing of plans, and each plan which was submitted was the subject of long and heated discussion. But every effort to escape the required improvements met with firm though courteous determination, and opposition to the constantly increasing exactions of better light and ventilation gradually yielded, not, however, before many houses, built in violation of approved plans, had been subjected to expensive alterations, and it was seen that the new movement had the unqualified support of public opinion and of the Courts. Thus fortified, the demands on architects and builders for still better lighted and ventilated houses were increased, and progress became more rapid, until finally it dawned upon builders that those who built the best lighted and ventilated tenement-houses were most successful in profitably disposing of them, or in finding desirable tenants at good rents. When this stage was reached all opposition finally disappeared, and the advice of the Department experts was even courted by many who before had heard it with contemptuous disregard.

In the past year the improvements secured have been firmly maintained, and where practicable new advances have been made. The plans on which tenement-houses are now built are in many particulars superior to the plan of a model tenement-house which was awarded first prize in the famous Plan Competition of 1879, although that plan at the time was generally regarded as too utopian ever to be equalled by tenement-houses erected by speculative builders in this city. The tenements now building for four families on each floor cover not more than seventy-eight per cent. of inside lots. They are permitted to extend to within ten feet of the rear lot line, as this secures larger courts to light interior rooms. These courts must in each house aggregate at least two hundred and sixty-five square feet; and inasmuch as a number of houses are usually built together, the rooms on each side of each of them are lighted by windows to a common court of that area. The end rooms of each of the four suites per floor have windows to the largest section of the courts. These enlarged sections also on one side light the stairs and halls, and on the opposite side light the water-closet compartments. Water-closet compartments are ventilated by means of a special shaft discharging foul odors above the roof. Fanlights are placed over each door where necessary to insure a cross current of air through each room. Two water-closets are required on each floor, flushed with a copious supply of water. A sink and set of wash-tubs are provided in each kitchen,

and in many cases a hot-water supply and even bath-tubs, one for every two families, are furnished. The light courts in houses of this grade, as well as of other grades, are as large as are consistent with rooms of suitable size for habitation. The ceilings of all new tenements are comparatively lofty, averaging over nine feet in height. Cellars have all the light possible from windows opening on yards, courts and areas; their floors are thoroughly concreted and the ceilings lathed and plastered. Finally, the value of the space required at the rear of all houses on inside lots for light and ventilation is materially enhanced by the open space of four feet which is required at the rear of corner houses, as a means of insuring circulation of air through the city blocks. Besides these and other improvements insisted on, every precaution is taken to secure absolute freedom from sewer gas, as will appear from the portion of this report dealing with plumbing and drainage.

A priori, there was reason to believe that dwellers in houses improved so much beyond the old type would enjoy, in addition to increased comforts, better health and greater longevity than those of corresponding means and similar employments residing in old tenements. No statistics, however, existed on the subject until recently supplied by the Register of Records, Dr. Roger S. Tracy, in a report to the Board. His painstaking examination of the record of deaths in a given number of both classes of houses made the surmise a demonstration. No severer or safer test of the sanitary value to the citizens of New York of the improvements resulting from supervision of tenement-house construction could be afforded or need be desired; and the inference seems but just that, while all obstacles to securing perfect tenement-houses have not disappeared, such of them as could be made to yield to the authority of this Department have been fairly met and fairly overcome.

Equally important and wise legislation (chapter 450, passed June 16, 1881), requires that the plumbing and drainage of all buildings, whether public or private, erected in this city after that date, be executed in accordance with plans previously approved in writing by the Board of Health. Prior to the enactment of this law the plumbing of buildings in this city was notoriously bad. A pretense was made of excluding sewer gas by means of traps, but as the traps were almost always siphoned, by reason of the absence of vent pipes or failure to extend soil or waste pipes above the roof, the pipes which were designed as conduits of foul and waste matter to the public sewers were likewise conduits of bacteria-laden air and dangerous gases from the sewers into living and sleeping-rooms. Other defects generally existed, too numerous to catalogue. Opinions may differ as to the generation of zymotic diseases by sewer gas, but no one will seriously contend that the population of a great city can breathe the contaminated air from its sewers without danger to health and increased mortality. Indeed, so great had become the apprehension of danger from this source, that many citizens removed plumbing fixtures entirely from their rooms, and the manager of a prominent hotel advertised the absence of plumbing as a special attraction to secure patronage. Another bad effect of this condition of the city's plumbing was that, in the discharge of its duty, the Health Department was obliged yearly to issue thousands of orders to property owners to abate nuisances resulting from it. Owners were thus subjected to great expense and annoyance in remedying defects of original construction of which they knew nothing when purchasing. Many of them were not sparing in censure of the authority which compelled the improvements. In order that this unsatisfactory condition of affairs should not be repeated indefinitely in the case of new houses, prominent citizens appealed to the Legislature, and the law above mentioned was promptly enacted. To this Division the Board also intrusted the general enforcement of its simple but beneficent and far-reaching requirements. From the outset the work of enforcing this law has been beset with difficulties and serious responsibilities. The first experienced was in securing proper plans and specifications, much of which still continues. The task of examining and determining from plans and specifications that the plumbing and drainage of the more than 2,600 houses annually built in this city is properly provided for and described is anything but easy; but, added to this, questions arising with the numerous architects, builders and plumbers in the execution of the work, require to be examined and decided. Neither is it easy to secure from the builders and plumbers of this large number of houses absolute compliance with approved plans and specifications, and work absolutely free from defects of material, workmanship and system.

In the enforcement of this law other difficulties arose similar in the main to those encountered in the enforcement of the tenement-house law, and already briefly described. Old builders and plumbers had to be guided into new ways. For years there was a constant struggle against defective plumbing and covering of pipes without inspection. Numerous open joints were found, many made with putty. Every ruse was employed to deceive. One builder erecting a block of houses even opened the entire roadway in front of them and closed it without laying a pipe, to give the impression that sewer connections had been properly made, when in fact the houses had been sewered by a box-drain laid through the cellars. Dummy vent pipes were also frequently discovered. But every such discovery led to the arrest and conviction of the offender. Defective plumbing was obliged to be perfected without regard to the expense imposed, and unscrupulous builders and plumbers at last began to realize, though slowly, that it was more expensive to violate the law than to comply with it. In this manner the work went on until in 1887 material began to show more defects than the workmanship, the iron pipes used at the time being of the kind designated in the trade as "light." The rules governing plumbing were in consequence amended to require the grade of pipe known as "extra heavy." The next important improvement was suggested by the difficulty of examining in detail each of the almost innumerable joints of iron pipes used in new buildings. It consisted of the application of the pressure test to all iron pipes after they had been put in place, the test being made by charging the pipes from front wall to roof, after all openings have been carefully plugged, with water or air, the exact pressure allowed being ten pounds to the square inch. This test is now invariably insisted on, and no work is passed until after the test has shown it to be perfect. The value of this and the wisdom of requiring it have been often demonstrated in the past year, for its use allows neither defective pipe nor defective jointing to escape undetected. Manufacturers have consequently been obliged to place on the market a superior quality of pipe, free from sand or blow holes, while plumbers by experience have learned that to make defective joints diminishes the profits on their labor, the cost of alteration far exceeding the cost of original good work.

Another important aid in securing satisfactory plumbing in new houses, which has been finally perfected in the past year, is embodied in the regulation which prevents the use of the water service until this Department has duly certified to the Department of Public Works that the plumbing has been finished in accordance with the approved plans. Many whose violations of law were habitual now do model plumbing in consequence of this regulation.

Many other improvements of system and detail have been enforced in the past year, such as having vent-pipes so connected as to prevent obstruction by accumulated rust, the substitution of screw covers for slip covers on cleaning outlets; improved connections for porcelain trapped water-closets; the substitution of short flushing rim water-closets for long hoppers with their unnecessary fouling space, and the abolition, where practicable, of cellar floor drains with their usually unsealed traps. Still further improvements are embodied in the suggested amendments to the rules and regulations governing plumbing and drainage which were recently submitted to the Board for adoption.

It is estimated that the dwellings and tenement-houses built last year will accommodate about 95,000 persons. This large number of citizens will therefore have the benefit in their homes for many years to come of the best plumbing which the sanitary knowledge of the time could procure by wise legislation and close supervision. Apprehension of ill health from sewer-gas by occupants of these houses will have no foundation. It is equally safe to predict that their owners will not be troubled by Health Board orders to abate nuisances arising from defective plumbing.

I have only to add that the effective sanitary work accomplished in this city under the plumbing regulations of this Department has led many of the other cities of this country and some of those abroad to adopt similar regulations.

The following is a statistical statement of the year's work of the Division:

Plumbing and Drainage of New Buildings.

Plans and specifications filed and reported upon.....	1,655
Buildings included in such plans and specifications.....	3,978
Tabled and disapproved plans re-examined and reported on.....	699
Total number of plans reported on.....	2,354
Amendments to plans examined and reported on.....	1,008
Buildings included in such plans and amendments.....	6,492
Buildings reported begun.....	2,914
Buildings reported finished.....	3,492
Buildings reported in course of construction.....	2,371
Buildings reported projected (in addition).....	876
Buildings reported containing plumbing.....	1,652
Notices of violation of the plumbing law issued.....	1,180
Buildings included in such violation notices.....	2,295
Violations reported removed.....	1,224
Buildings included in removed violations.....	2,426
Violation cases referred to the Attorney.....	485
Inspections under the plumbing law.....	45,195

Light and Ventilation of New Tenements.

Plans and specifications filed and reported upon.....	831
Tenements included in such plans and specifications.....	1,507
Tabled and disapproved plans re-examined and reported on.....	315
Total number of plans reported on.....	1,146
Amendments to plans examined and reported on.....	318
Tenements included in such plans and amendments.....	2,607
Tenements reported begun.....	1,267
Tenements reported finished.....	1,613

Tenements reported in course of construction.....	1,071
Tenements reported projected (in addition).....	295
Notices of violation of the tenement-house law issued.....	479
Tenements included in such violation notices.....	845
Violations reported removed.....	442
Tenements included in removed violations.....	843
Violation cases referred to the Attorney.....	457
Inspections made under the tenement-house law.....	12,613

Plumbing and Ventilation of Old Buildings.

Citizens' and other complaints received for inspection.....	104
Lodging-house permit cases received for inspection.....	97
Inspections on citizens' complaints and lodging-house cases.....	222
Re-inspections on orders under the Sanitary Code.....	149

Recapitulation.

Total number of plans filed.....	2,486
Total number of original plans and amendments, and tabled and disapproved plans re-examined and reported on.....	4,826
Total number of complaints, including violations of the tenement-house and plumbing laws, and complaints under the Sanitary Code (covering 3,244 houses).....	1,763
Total number of violations of law removed (covering 3,271 houses).....	1,666
Total number of inspections and re-inspections.....	58,550

Respectfully submitted,

JOHN C. COLLINS, Chief Inspector.

HEALTH DEPARTMENT OF THE CITY OF NEW YORK,
SANITARY BUREAU,
NEW YORK, January 1, 1891.

W. A. EWING, M. D., Sanitary Superintendent:

SIR—I have the honor to submit the following report of the work performed by the Division of Foods, Chemical Analyses and Offensive Trades for the year 1890:

The following is a summary of the work performed by the corps having charge of food and chemicals:

Number of inspections made.....	183,283
" complaints made.....	1,694

Milk Inspections.

Number of milk inspections made.....	58,721
" specimens examined.....	97,040
" analyses made by Milk Inspectors.....	28
" complaints.....	82
" days at Court and Central Office.....	835
" special day inspections made.....	454
" early morning inspections made.....	87
" nights special work.....	103
" quarts of adulterated milk destroyed.....	3,708
" days in country or at laboratory.....	529
" arrests made.....	299
Number held on bail.....	287

Amount of fines collected at Court.....	\$7,400 00
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Fruit and Food Inspections.

Number of inspections made.....	35,888
" complaints made.....	64
" days at Court and Central Office.....	393

Condemned and Seized.

	Pounds.
Pears.....	15,335
Peaches.....	30,610
Apples.....	38,105
Bananas.....	256,975
Oranges.....	85,695
Pineapples.....	195,250
Lemons.....	3,270
Plums.....	12,480
Dates.....	2,340
Grapes.....	12,645
Pomegranates.....	1,875
Strawberries.....	7,969
Cranberries.....	1,000
Cherries.....	3,900
Assorted fruits.....	4,800
Cocoanuts.....	17,100
Melons.....	49,235
Egg plants.....	250
Tomatoes.....	3,410
Potatoes.....	125,000
Turnips.....	10,150
Onions.....	15,000
Asparagus.....	500
Okra.....	1,500
Kale.....	1,950
Lettuce.....	11,220
Peas.....	1,050
Squash.....	900
Cucumbers.....	1,720
Vegetables, assorted.....	102,060
Canned goods.....	10,507
Canned tomatoes.....	1,050
Sauerkraut.....	1,650
Apple Butter.....	22,000
Pickles.....	400
Chestnuts.....	2,375
Nuts, assorted.....	3,200
Cheese.....	250
Flour.....	300
Sardines.....	100
Tea and coffee.....	950

Total number of pounds of fruit and food condemned and seized.....	1,056,076
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Number of inspections of commission houses.....	6,542
" auction houses.....	1,105
" stores.....	9,670
" licensed vendors.....	4,821
" vessels.....	2,353
" railroad depots.....	868
" stands.....	9,300
" markets.....	1,229

Meat and Fish Inspections.

Number of inspections made.....	66,309
" complaints made.....	166
" days at Court and Central Office.....	341
" arrests made.....	8
Number held on bail.....	8
Amount of fines collected at Court.....	\$460 00
Number of inspections made of commission houses.....	11,625
" butcher shops.....	13,110
" slaughter-houses.....	11,242
" packing-houses.....	581
" stock yards.....	472
" railroad depots.....	1,295
" vessels.....	597
" markets.....	1,812

Mineral water apparatus	Composition of fittings, pipes, etc.
Mineral water syrups	Poisonous metals.
Soaps	Deleterious ingredients.
Shell fish	Metallic contamination.
Sugar	Poisonous ingredients.
Soda, bi-carbonate of	Deleterious ingredients.
Tea	Adulteration.
Viscera, animal and human	Metallic poisons and alkaloids.
Water	Sanitary purity.
“	Character.
“	Metallic contamination.
Wall paper	Arsenic.
Wines	Adulteration.

1st. *Examination of Candies for Terra Alba*—Samples, 108 in all, of the cheaper grades of candy were obtained from different dealers throughout the city and examined for terra alba. The results, however, were negative, save in seven cases, where traces only of terra alba were found. In all of the samples of candy examined no poisonous coloring matter was detected.

2d. *Examination of Ice Cream for Tyrotoxicosis and Poisonous Metals*.—During July of the past year a number of persons, some 40 in all, were poisoned by eating the ice-cream purchased from a certain dealer. The symptoms, as reported in each case, closely resembled those of tyrotoxicosis poisoning, as described by Vaughan and Newton. Samples of the different sorts of ice-cream made by the dealer, 10 in all, were examined for poisonous ingredients. They all contained traces of copper, entirely insufficient, however, to produce the symptoms reported. No other added poisonous ingredients were detected. One of the samples, that flavored with vanilla, was found to exhibit an acid reaction even while still frozen. A portion of this, given to a kitten, did not produce any marked effect, beyond slight uneasiness and attempts to vomit, followed by drowsiness. An attempt was made to isolate tyrotoxicosis from this sample by the method proposed by Vaughan, but with negative results, the extract obtained having no effect when administered to animals. Further investigation showed that all those poisoned by eating ice-cream had partaken of this vanilla cream, and that this cream had been prepared and allowed to stand in a dirty cellar for twenty-four hours before being frozen. Tyrotoxicosis poisoning was, therefore, indicated, though not proven.

4th. *Examination of Milk for Adulteration*—During the year, 320 samples of milk have been analyzed. The adulteration detected in the great majority of cases has been the addition of water, the removal of cream, or both. The relative percentages of adulteration are given under the head of "Milk Inspection."

The methods of determining the purity of milk at present in use in this laboratory are as follows :

Milk—(a.) Total Solids and Salts—Five gms. of the sample are weighed into a previously tared, shallow, flat bottomed platinum dish, by means of a pipette. With a little practice, exactly five gms. can be easily weighed, thus greatly facilitating the subsequent calculation for percentage. The contents of the dish are now evaporated on the water bath until apparently dry, and then in an air bath at 100–105° C. for two and a half hours. The dish and contents are transferred to a dessicator, cooled and weighed, and returned to the air bath for half an hour, again cooled and weighed, and this process repeated until the weight is constant. The final weight, minus the weight of the dish, gives the total solids. The solids are now ignited to ash at a very low heat, the process being continued, until the ash is white or slightly grayish. This is best done by the use of a rose burner, the dish being supported about one inch above the same, and covered with a platinum or nickel cover. With this arrangement the solids can be easily burnt to ash in one-half to three-quarters of an hour, at a temperature below visible redness, thus avoiding loss by volatilization of chlorides, etc. The dish and contents are cooled in a dessicator and weighed; the weight of dish subtracted gives the ash or salts in the sample.

(b.) Fat—The method employed is that of Adams, the details being as follows: The paper used is a strong, somewhat heavy filter paper, Schleicher & Schülls, No. 598. This is cut into strips 20" long by 2½" wide. A number of these strips are rolled into coils, placed in a large extraction apparatus, and thoroughly extracted with a mixture of 10 per cent. acetic acid and 90 per cent. alcohol. The coils are now removed from the apparatus, thoroughly washed with hot water, dried and re-extracted in another apparatus with ether. This treatment leaves the coils absolutely free from any substance which can be extracted by ether. The treatment with acetic acid and alcohol is recommended by Richmond (Analyst, Vol. XIV., page 123) as necessary to remove resinous compounds of the alkaline earths, which are difficultly soluble in ether, and which can only be removed by protracted extraction with ether alone. The analysis is conducted as follows: Exactly five gms. of milk are weighed in a tared platinum dish as described under "total solids." A paper coil, held in shape by a piece of platinum wire, is then placed on end in the dish until the milk is absorbed. The dry end of the coil is then used to remove the last traces of milk from the dish, and the latter is weighed, when its tare should be the same as at first. The coil is hung in an air bath and dried at 100-105° C. until a cold piece of glass, held at the end of the warm coil, shows no trace of condensed moisture. The coil is now placed in a small Knöfeler extraction apparatus, the latter connected with an upright condenser and a previously tared flask, and extracted for at least two hours with anhydrous ether. In order to save the ether, the coil and inner syphoning tube are now removed, a tube closed at the bottom inserted, and the ether in the flask distilled into the same. The flask is now dried, first on the water bath and then in the air bath to constant weight, cooled and weighed. The process of extraction is repeated, until there is no gain in the weight of the flask and fat. The final weight, minus the tare of the flask, gives the fat in the sample. Before taking the tare of the flask, it should be dried in the air bath, and allowed to cool in the open air. The flask, plus fat, should be cooled in the same way. Care must be taken not to electrify the flask by rubbing. The ether used must, of course, be tested for non-volatile residue, alcohol or water.

The methods of analysis above-described suffice for the detection of adulteration by addition of water or removal of cream, by far the most common forms of adulteration. Other adulterants can be detected as follows :

(c.) Salt—The ash, obtained as above-described, is dissolved in an excess of dilute nitric acid, in which it should be completely soluble. An excess of N/20 silver nitrate solution is now added, together with a few c. c. of a solution of ferric sulphate, free from chlorides. The excess of silver nitrate is now determined by titration with N/20 solution of ammonium sulphocyanate, the end reaction being shown by the red color produced with the ferric sulphate. The difference between the excess of silver nitrate thus determined, and the amount originally added, corresponds to the amount of chlorine present in the ash. Should this be in excess of the amount normally present in milk ash, the addition of a chloride, presumably salt, is indicated.

(d.) Borax—The ash, obtained as above-described, may be tested for borax by treating with a few drops of concentrated sulphuric acid, moistening with one or two c. c. of methyl alcohol, and igniting the latter in a dark place, when, if borax is present, the characteristic grass-green flame is readily seen.

(c) Sugar—This may be detected by an increase in the amount of sugar present in the sample over that normally present in milk. Adulteration by sugar is extremely rare, cane sugar being used, if any.

(f) **Anatto, or Butter Color**—The method devised by Babcock (29th Annual Report, Inspector of Milk and Vinegar, Boston, 1888), has been found to be thoroughly reliable. It is, briefly, as follows: About 100 c. c. of milk, made strongly alkaline with sodium carbonate, are placed in a small cylinder, a strip of heavy filter paper, about one-half inch wide and five inches long, is introduced, and the whole is allowed to stand twelve hours in the dark. If anatto is present, the strip, after washing, will have a pale salmon color, changed to a decided pink by moistening with solution of stannous chloride, and, after drying at the temperature of the laboratory, to a bluish color on treatment with strong sulphuric acid. For further details and method of testing sour milk for anatto, see Babcock's report.

(g.) Alkaline Carbonates—These may be detected by the strongly alkaline character of the ash, obtained as above-described, and by its effervescence with dilute acids. They may be estimated by treating the ash with water and titrating the solution with N/10 sulphuric acid, using Lakmoid as an indicator. Results may be calculated to bi-carbonate of soda, as this, if any, is the alkali usually added as an adulterant.

(h.) Salicylic Acid—This may be detected by coagulating a considerable quantity of the milk (if possible 500 c. c. or more) with a few drops of sulphuric acid, and the application of gentle heat, straining out the serum, evaporating it to small bulk, and shaking out with a mixture of equal parts of ether and benzol. Care must be taken to avoid emulsification in this operation. The mixture of ether and benzol is then evaporated until the ether is completely driven off, and the benzol reduced to small bulk. The benzol is then shaken with warm water in a test tube, separated from the latter by filtration through a wet filter, the filtrate cooled, and a drop of very dilute solution of ferric chloride added, when the characteristic violet color is produced if salicylic acid is present.

(i.) Nitrates.—As nitrates are not present in normal milk, they may be quantitatively estimated by a modification of Gladstone and Tribe's method for the determination of "nitrogen in nitrates."

Acid fumes.....	4	Manure boxes.....	1
Ammonia fumes.....	1	Noisy machinery.....	21
Alc breweries.....	1	Noise from ventilating fans.....	1
Bone burning.....	1	Noise from breweries.....	2
Bad drinking water.....	16	Nickel-plating establishments.....	1
Beef-extract establishments.....	1	Offensive smells.....	73
Bakeries.....	2	Odors from gas houses.....	7
Carpet cleaning.....	7	Offensive sewers.....	1
Clothes cleaning.....	6	Odors from brewers' grains.....	4
Cabbage cooking.....	1	Pumping water.....	2
Cheese manufacture.....	1	Printing presses.....	3
Cigar factories.....	1	Pork-packing establishments.....	2
Cable road.....	1	Pepper-grinding establishments.....	1
Dust nuisance.....	3	Paris-green manufactories.....	1
Dye works.....	4	Paoramas.....	1
Escaping steam.....	32	Smoke nuisance.....	72
Electric dynamos.....	4	Smoke houses.....	3
Electric lights.....	4	Steam whistles.....	6
Elevators.....	1	Saw and planing mills.....	4
Fat boiling.....	9	Sausage cooking.....	4
Fish smoking.....	1	Shooting galleries.....	1
Filthy premises.....	10	Silk factories.....	3
Gas leaks.....	18	Stables.....	1
Gas in sewers.....	6	Steam railroads.....	5
Gas engines.....	11	Steam hammers.....	1
Green hides.....	1	Smelting works.....	5
Heat from steam pipes.....	6	Stenches.....	3
Hide-cleaning establishments.....	1	Sash factories.....	1
Horse-feed manufacturing.....	2	Soap factories.....	1
Hot water.....	1	Slaughter houses.....	1
Ice pipes.....	2	Smoke, dust and soot.....	3
Ice factories.....	1	Sewer gas.....	2
Junk shops.....	2	Stagnant water.....	1
Lard rendering and refining.....	3	Tar burning and boiling.....	5
Laundries.....	1	Ventilation of cars.....	1
Locomotives.....	3	Wire factories.....	1
Lime kilns.....	2		
Leather-finding establishments.....	1	Total.....	445
Malt houses.....	1		

The analytical work performed by the Assistant Chemists during the past year may be classified under the following heads :

Substance Examined.	Analyzed for—
Baking powders.....	Deleterious ingredients.
Bacon.....	Trichina spiralis.
Beverages, non-alcoholic.....	Deleterious ingredients.
Cake.....	Poisonous metals.
Cod-liver oil preparations.....	Per cent. of cod-liver oil.
Coffee beans, artificial.....	Composition.
Candies.....	Poisonous metals.
“.....	Terra alba.
Cocoa.....	Adulteration.
Cosmetics.....	Poisonous metals.
Canned goods.....	Poisonous metals, etc.
Chocolate.....	“
Colors, for food.....	“
Coffee.....	Poisonous ingredients.
Cooking utensils.....	Poisonous metals.
Cream of tartar.....	Deleterious ingredients.
Cheese.....	Poisonous ingredients.
Cream.....	Poisonous metals.
Disinfectants.....	Antiseptic value.
Distilled liquors.....	Adulteration.
Flour.....	Poisonous ingredients.
Food preparations.....	Deleterious ingredients.
Garbage.....	Value as fertilizer.
Gelatin.....	Poisonous metals.
Ham.....	Trichina spiralis.
Ice cream.....	Poisonous metals and tyrotoxinon.
Ice.....	Sanitary purity and number of bacteria.
Koumiss.....	Antiseptics.
Milk.....	Adulteration.
“ condensed.....	“
“ preserved.....	“
“ “.....	Poisonous metals.
Malt liquors.....	Deleterious ingredients.
Medicinal preparations.....	Composition.
Mineral waters.....	Agreement in composition with published formula.
“.....	Poisonous metals.

in water. Two hundred grammes of milk, warmed to 80° Fahr., are coagulated by addition of a little acetic acid. The serum is strained out, the nitrates reduced therein by the zinc copper couple and 1 c. c. or more of the solution nesslerized in the usual way. The ammonia thus found is calculated to nitrate of potash or soda.

(k.) Microscopic Examination—By this examination the presence of blood, pus, colostrum, starch or other insoluble substances may be ascertained, each substance exhibiting its characteristic appearance.

Condensed and Preserved Milk—Condensed milk is milk condensed without the addition of sugar. Preserved milk is milk condensed with the addition of cane sugar.

(a.) Total Solids, Ash—40 grammes of the milk are accurately weighed in a small beaker, and diluted to exactly 100 c. c. with distilled water. Five c. c. of the resulting solution (= 2 grammes of the milk) are introduced by means of a pipette into a tared platinum dish, and the analysis thereafter conducted exactly as in determination of "total solids" and "ash" previously described under "Milk."

(b.) Fat—A coil is fastened at one end and held extended by the left hand. Five c. c. of the diluted milk as prepared above are gradually run on to the coil by means of a pipette, so as to be distributed as evenly as possible over the entire surface. The coil is then grasped at each end and passed back and forth over a rose burner, until surface dried. It is then rolled up, kept in place by a small piece of platinum wire, and thoroughly dried in the air bath at 100–105° C., the process hereafter being conducted exactly as described for the estimation of "fat" under "Milk."

Other adulterants may be detected or estimated as previously described for milk, the condensed or preserved milk being first diluted if necessary.

General Notes—Tin coated lead capsules, readily obtained from bottle cap manufacturers throughout the city, at the small price of sixty cents per gross, may be advantageously substituted for platinum dishes in the determination of total solids, provided the determination of ash is not required. Those used in this laboratory have a diameter of about 2¼ inches and a height of ½ inch, and weigh about 8 grammes. By using capsules of this size, the milk is spread over so large a surface that evaporation is much hastened, and considerable time thereby saved. Experiments made in this laboratory have proved that the capsules themselves undergo no change in weight during the analysis.

Other Methods for Testing Milk—(a.) Detection of Adulteration by Water—This may be accomplished by the use of the lactometer. As used by this Department, the lactometer is a delicate hydrometer, which indicates specific gravity at a temperature of 60° Fahr., between 1.0000 (the specific gravity of pure water) and 1.03480. On the scale the specific gravity of water is indicated by 0°, the specific gravity of 1.03480 by 120°, the space between 0 and 120 being divided into 120 equal parts. The 100° mark indicates a specific gravity of 1.02000. The results of many thousand tests by Inspectors of this Department have conclusively shown that milk from a healthy cow in normal condition will never show a specific gravity less than 1.020 (= 100° lactometer) at a temperature of 60° Fahr. If, therefore, a given sample of milk stands below 100° on the lactometer at 60° Fahr., the sample has been adulterated by addition of water. The space between 0° and 100° being divided into 100 equal parts, each part indicates one per cent. If, therefore, the milk tested has a specific gravity indicated by 90°, for example, i. e., if the lactometer floats at 90°, it is safe to assume that at least 10 per cent. of water has been added. It must be remembered that average milk will stand at points between 105° to 115° on the lactometer at 60° Fahr. From 5 to 15 per cent. of water may, therefore, be added to average milk without bringing it below 100° on the lactometer.

The proper method of using the lactometer is as follows: The milk to be tested is thoroughly mixed by stirring, a sample taken, and the latter warmed or cooled, as the case may be, to 60° Fahr. The lactometer is then placed in it, care being taken not to wet that part of the stem above the milk. The mark at which it floats is noted. Now remove the lactometer, and observe the character of the film adhering to it. If this runs off rapidly and is thin and bluish, and if the sample has a flat, watery taste, the lactometer standing below 100°, we are certain that water has been added. If the appearance and taste are as before stated, the lactometer floating at some point higher than 100°, the milk may be skimmed, or skimmed and watered.

As skimmed milk has a specific gravity much greater than whole milk, the cream, the lightest constituent, having been removed, it will stand high when tested by lactometer, and will have, of course, a thin appearance and flat taste. On the other hand, cream will stand at points much below 100° on the lactometer; but it is evidently impossible to confound cream with milk, and much less with milk that has been watered. If the lactometer floats at some point greater than 100°, the appearance of the film being whitish and the taste of the milk creamy, we may assume that the milk has not been adulterated by the addition of water, or by the removal of cream.

Should the temperature of the milk tested be above or below 60° Fahr., an approximate calculation can be made, giving the point at which the lactometer would stand at 60° Fahr., as follows: Find the difference between the indicated temperature and 60° Fahr. Divide this by 2½, and the quotient, if the temperature is above 60°, add to, and if below 60° subtract from, the degree at which the lactometer floats. This calculation, approximate at best, only holds good between 45° and 75° Fahr.

(b.) Detection of Adulteration by Skimming—This can be approximately accomplished by the use of the lactoscope, that devised by Professor Feser being a convenient form for Inspector's use. This instrument is constructed on the principle that the transparency of a layer of milk is inversely as the quantity of fat in the milk. It consists of a hollow glass cylinder doubly graduated, one scale giving the number of cubic centimeters of water used for the dilution, the other indicating the percentage of fat. In the lower part of the cylinder a small cylindrical piece of opaque white glass is fixed, which is marked with black lines. In testing a sample of milk, 4 c. c. are transferred to the apparatus by means of a pipette. Water is then gradually added, the mixture being thoroughly shaken after each addition, until all the black lines on the small cylinder can be read, when the scale indicates the percentage of fat in the milk.

5th. Examination of Water—This work may be classified as follows:

(a.) Determination of Character—This examination is made for the purpose of determining whether the sample submitted is Croton, surface water, river water or sewage, and is of much value in ascertaining the probable cause of damp or flooded cellars, etc. Of these analyses thirty-three were made during the year.

(b.) Determination of Metallic Contamination—Six samples of water taken from tanks on tenement-house roofs in the city were examined, for the purpose of ascertaining whether such tanks were improperly lined or painted. In one case a notable amount of lead was discovered in the water from a tank which had been recently painted with an iron paint containing about four per cent. of lead.

(c.) Determination of Sanitary Purity—During the past year ninety-seven samples of water have been analyzed for the purpose of determining their fitness for domestic use. Of these fifty-two are the regular weekly analyses of the Croton, which subject is considered in detail below, together with the method of analysis employed in all cases. The remainder are principally well waters, together with samples of Croton water from different parts of the city, of the character of which complaint had been made by citizens. Well water on New York island is invariably surface water, owing to the geological formation. So called "artesian wells" are an impossibility, as there are no water-bearing strata underlying the island which can be reached by boring. In the thickly-settled portions of the city the water from wells is invariably contaminated with sewage, as is to be expected. Some nine hundred analyses of water from so-called "artesian" and other wells throughout the city made in previous years have proven this fact conclusively, and have been substantiated by the analyses made during the past year.

Croton Water—The water supply of the City of New York is taken from what is known as the Croton water-shed, which is situated in Westchester, Dutchess and Putnam Counties, a small portion being in the State of Connecticut. It has an area of about 361 square miles. The geological formation of the rocks is metamorphic, and consists principally of gneiss, Limestone, dolomite and serpentine are also found. The dip of the strata is generally to the east, with an angle of from 30° to 95°. The soil is porous, with but few drift deposits. There are certain peat deposits, which give a decided color to the waters of the Thruway, Cross and Muscote rivers, and to a part of the east and west branches of the Croton river, and to these the light brownish color of the Croton is due. These deposits have a total area not exceeding two square miles, about fifteen per cent. of the total drainage of the water-shed passing through such area. The average yearly rainfall on the water-shed for the past ten years has been about fifty inches. Two recent inspections of the Croton water-shed have been made, the first in December, 1884, and January, 1885, by Inspector Lucas of this Department, under direction of Chief Inspector Edson, and the second by the State Board of Health, during the summer of 1888. From these reports it would appear that the population of the water-shed in 1888 was about 25,000, and the number of domestic animals thereon about 33,000.

Since January 1, 1888, an analysis of the Croton water, as supplied to households in this city, has been made weekly. Up to July 1, 1888, samples were taken from a tap at the School of Mines, Columbia College. From July 1 to October 15, 1888, samples were taken from hydrants near the School of Mines. Since October 15, 1888, samples have been taken from a hydrant on the corner of Bleecker and Mott streets, except in a few instances, during June and July, 1890, when, owing to the extreme low pressure at this hydrant, it was necessary to obtain the sample from other hydrants. In all cases hydrants were "blown off" for at least five minutes before taking the sample, and the temperature of the water at the hydrant was noted. The method of analysis employed is that adopted by Professors Chandler and Waller of the Columbia School of Mines, and consists in the determination of the appearance, color, odor, chlorine, its equivalent as sodium chloride, phosphates, nitrites, nitrogen in nitrates, free ammonia, albuminoid ammonia, hardness before and after boiling, equivalent to carbonate of lime, organic and volatile, mineral matter and total solids.

The appearance and color are determined by observing the sample in a tube, about two inches in diameter and two feet in length, held against a white background. The odor is determined by heating the water to 100° Fahr. in a closed flask. The chlorine is determined by titration of the water with a twentieth normal solution of nitrate of silver, and its equivalent in sodium chloride is

calculated. The nitrites are determined by the color reaction with sulphanilic acid and sulphate of naphthylamine, and the phosphates by dissolving the "mineral matter" in nitric acid, and testing with molybdate solution. The nitrogen in nitrates and nitrites is determined by means of the zinc copper couple, recommended by Gladstone and Tribe, the complete reduction of the nitrates to ammonia being ascertained in each case. The free ammonia is determined by distilling 500 c. c. of water, made alkaline with sodium carbonate and estimating the ammonia in the distillate. The albuminoid ammonia is determined by distilling the same quantity of water with alkaline permanganate, estimating the ammonia in the distillate and subtracting the free ammonia from the total ammonia thus found. Hardness before boiling is determined by ascertaining the soap destroying power of 100 c. c. of the water, using a standard alcoholic solution of soap. Hardness after boiling is determined by diluting 100 c. c. of the water to 200 c. c. with distilled water, boiling down to 100 c. c., filtering and treating the filtrate as in "hardness before boiling." Results in each case are calculated to carbonate of lime. Total solids are determined by evaporating a measured quantity of the water to dryness; organic and volatile and mineral matter by igniting the residue so obtained at dull red heat, the loss being organic and volatile and the remainder mineral matter.

The results of these analyses for the years 1888, 1889 and 1890 are given in the following tables. Results have been averaged for each month of these years.

As the tests for phosphates and nitrites have uniformly been negative, they are not inserted in the tables. The "odor" of the Croton for the years mentioned has ranged from "none" to "marshy." The "color" has always been some shade of yellowish brown. There has been so little variation from week to week in these characteristics that it is not considered necessary to tabulate them. The difference between the "hardness before boiling" and "hardness after boiling" is so slight that only the "hardness before boiling" is given in the tables.

Table No. 1.—Analyses of Croton Water for 1888.
Parts by Weight in 100,000.

MONTH.	TEMPERATURE FAHR.	APPEARANCE.	Chlorine in Chlorides.	Equivalent to Sodium Chloride.	Nitrogen in Nitrates.	Free Ammonia.	Albuminoid Ammonia.	Hardness before boil- ing, Equivalent to Carbonate of Lime.	Organic and Volatile.	Mineral Matter.	Total Solids.
January...	Samples from School of Mines tap, temperature not taken.	Samples from School of Mines tap, appearance not taken.	0.239	0.395	0.0483	0.0020	0.0046	3.05	1.66	4.20	5.87
February..			0.216	0.335	0.0580	0.0018	0.0056	2.98	1.55	4.59	6.14
March			0.194	0.319	0.0794	0.0002	0.0112	2.89	1.49	4.02	5.51
April.....			0.190	0.313	0.0642	0.0007	0.0124	2.63	1.72	3.95	5.68
May			0.208	0.342	0.0484	0.0016	0.0095	3.69	2.02	4.90	6.92
June			0.181	0.298	0.0432	0.0009	0.0116	4.07	1.85	5.32	7.28
July	72½°	Very slightly turbid.	0.202	0.332	0.0392	Trace.	0.0061	4.70	1.90	5.45	7.35
August....	74°	Somewhat turbid...	0.199	0.330	0.0326	0.0004	0.0085	4.31	1.84	5.44	7.28
September.	68¾°	Somewhat turbid...	0.195	0.320	0.0356	0.0005	0.0096	3.84	2.25	5.00	7.25
October...	54°	Slightly turbid	0.202	0.334	0.0321	Trace.	0.0064	3.89	2.30	5.42	7.72
November.	49½°	Slightly turbid	0.211	0.344	0.0373	Trace.	0.0061	4.06	2.47	5.50	7.97
December.	37½°	Slightly turbid.....	0.208	0.345	0.0432	Trace.	0.0035	3.70	2.02	5.12	7.15
Average...			0.204	0.336	0.0463	0.0007	0.0079	3.65	1.92	4.91	6.84

Table No. 2. Analyses of Croton Water for 1889.
Parts by weight in 100,000.

MONTH.	TEMPER- ATURE.	APPEARANCE.	Chlorine in Chlorides.	Equivalent to Sodium Chloride.	Nitrogen in Nitrates.	Free Ammonia.	Albuminoid Ammonia.	Hardness Before Boil- ing, Equivalent to Carbonate of Lime.	Organic and Volatile.	Mineral Matter.	Total Solids.
January	36°	Slightly turbid.....	0.203	0.335	0.0442	0.0003	0.0045	3.68	2.08	4.44	6.52
February.....	35°	Very slightly turbid	0.202	0.332	0.0452	0.0001	0.0037	3.86	1.98	4.50	6.48
March	39°	Slightly turbid.....	0.202	0.332	0.0440	0.0003	0.0031	3.62	1.95	4.50	6.45
April.....	46°	Slightly turbid.....	0.197	0.325	0.0402	Trace.	0.0048	3.82	1.75	4.85	6.60
May	61°	Somewhat turbid...	0.194	0.321	0.0233	0.0005	0.0042	3.68	2.30	4.52	6.82
June	69°	Slightly turbid.....	0.186	0.306	0.0379	0.0003	0.0048	4.07	1.95	4.88	6.83
July	73½°	Somewhat turbid...	0.182	0.300	0.0369	0.0012	0.0057	4.11	1.86	5.80	7.66
August.....	73½°	Slightly turbid.....	0.193	0.318	0.0342	0.0010	0.0045	4.26	2.00	5.68	7.68
September	66½°	Somewhat turbid...	0.199	0.328	0.0313	0.0010	0.0075	4.80	2.20	5.85	8.06
October.....	55°	Slightly turbid.....	0.210	0.346	0.0328	0.0008	0.0058	4.22	2.03	6.50	8.53
November	50°	Slightly turbid.....	0.208	0.343	0.0293	0.0006	0.0059	4.19	2.35	5.20	7.55
December.....	41°	Slightly turbid	0.184	0.303	0.0279	0.0001	0.0039	3.69	1.66	4.80	6.46
Average.....	53½°	.....	0.196	0.324	0.0356	0.0005	0.0049	4.00	2.01	5.12	7.13

Table No. 3. Analyses of Croton Water for 1890.
Parts by weight in 100,000.

MONTH.	TEMPER- ATURE FAHR.	APPEARANCE.	Chlorine in Chlorides,	Equivalent to Sodium Chlorides.	Nitrogen in Nitrates.	Free Ammonia.	Albuminoid Ammonia.	Hardness before Boil- ing, Equivalent to Carbonate of Lime,	Organic and Volatile,	Mineral Matter.	Total Solids.
January.....	39¼°	Slightly turbid....	0.197	0.325	0.0443	Trace.	0.0026	3.91	1.57	5.28	6.85
February.....	38¼°	Somewhat turbid...	0.188	0.311	0.0464	Trace.	0.0031	3.49	1.70	4.82	6.52
March.....	39¼°	Somewhat turbid...	0.180	0.297	0.0494	Trace.	0.0024	3.50	1.64	4.26	5.90
April.....	49½°	Slightly turbid....	0.170	0.254	0.0559	Trace.	0.0011	3.30	0.95	4.47	5.42
May.....	59°	Somewhat turbid..	0.165	0.273	0.0435	0.0002	0.0053	4.04	2.45	5.83	8.28
June.....	67¼°	Somewhat turbid...	0.161	0.265	0.0503	0.0003	0.0170	4.36	2.43	5.83	8.26
July.....	68¾°	Slightly turbid....	0.176	0.289	0.0556	0.0004	0.0131	5.27	2.68	5.60	8.28
August.....	71¾°	Slightly turbid....	0.175	0.287	0.0494	0.0003	0.0112	5.29	1.90	7.95	9.85
September.....	68½°	Turbid.....	0.190	0.313	0.0457	0.0005	0.0147	4.55	1.80	7.40	9.20
October.....	61¾°	Slightly turbid....	0.204	0.336	0.0377	0.0018	0.0133	4.21	2.00	7.00	9.00
November.....	48½°	Slightly turbid....	0.193	0.316	0.0247	Trace.	0.0095	3.97	1.93	7.33	9.26
December.....	37°	Somewhat turbid...	0.201	0.333	0.0311	0.0002	0.0077	4.50	1.68	6.64	8.24
Average....	54°	.....	0.183	0.300	0.0445	0.0006	0.0084	4.20	1.89	6.03	7.93

Parts by weight in 100,000.

A typical analysis is given below :

Water of this character cannot be considered as suitable for domestic uses.

INSPECTION OF MILK.

The Inspectors perform their work as follows : They are provided with a lactometer and thermometer, which they have previously tested themselves, a tin cylinder for holding the milk to be

The following table shows the total receipts of milk, cream and condensed milk over all roads, for 1889 and 1890 :

* Decrease.

INSPECTION OF FRUIT AND FOODS.

This class of inspection has been carried on during the past year in the same manner as in previous years. Fruit and vegetables have been inspected as brought into the city on vessels, at piers and at railroad depots, and also at commission houses, auction rooms, sales of condemned government stores, etc. At least once a week during the summer, the fruit and foods offered for sale by vendors in Ludlow, Hester, Mulberry and adjacent streets have been inspected; also that sold on Ninth avenue, between Forty-second and Thirty-seventh streets. An approximate statement of the amounts of fruit, vegetables and canned goods brought into the city during the past year is as follows:

Canned goods.....	700,000 packages.
Vegetables and fruit.....	35,000,000 "

INSPECTION OF MEAT.

The inspection of meat during the year has been conducted upon the same lines as heretofore. Constant supervision of the slaughter-houses, stock-yards and wholesale markets has been maintained, together with such inspection of retail dealers as was possible. The stock of vendors on the east side and on Ninth avenue has been inspected at least once a week. In only one instance was tuberculous meat offered for sale. In this case the meat was traced, recovered, and the vendor was arrested and fined \$250. In nearly all of the slaughter-houses where cows are killed the Jewish custom of cutting "Kosher" prevails. This is an additional safeguard against the sale of diseased meat, as such meat is marked in a peculiar way by the Rabbi, and the attention of the Inspector is thereby directed to it. During the past five years not a single case has been found in this city of a steer or bull suffering from tuberculosis. The disease has been confined entirely to cows. Particular attention has been paid during the past year to the prevention of the sale of "bob" veal, the seizures of this kind of meat being largely in excess of those of the preceding year. The following table shows the number of animals slaughtered in this city during the past year:

	CARCASSES.	POUNDS.
Cattle.....	410,334	246,200,400
Hogs.....	1,072,558	107,255,800
Sheep and lambs.....	992,335	39,693,440
Calves.....	214,873	17,209,840
Total.....	2,690,101	410,359,480

The following table shows the amount of meat and poultry brought into this city during the past year:

Live poultry, 1,214 carloads.....	amounting to	13,354,000 pounds.
Dressed poultry, 337,572 packages.....	"	67,514,400 "
Dressed beef, 279,405 carcasses.....	"	287,643,500 "
Dressed sheep, 722,500 carcasses.....	"	28,900,000 "
Dressed hogs, 450,665 carcasses.....	"	45,066,500 "
Dressed calves, 320,000 carcasses.....	"	24,000,000 "
Total.....		466,477,900 pounds.

INSPECTION OF FISH.

This class of inspection has been carried on during the past year as heretofore. Special care has been given to the inspection of Fulton Market, the great fish depot of the city, and to the adjacent ice houses. In cases of emergency the Fish Inspector has assisted the Fruit Inspector in the discharge of his duty. There are at present about 900,000 pounds of fish in cold storage in this city, and during the past year in the neighborhood of 100,000,000 pounds were brought into the city.

OFFENSIVE TRADES.

New York is the largest manufacturing city in the country. There are at present in the city some 16,000 factories in operation, a large proportion of which are liable to cause nuisances at any time. The nuisances due to offensive trades in this city may be broadly divided into two main classes, nuisances from foul odors and smoke, and nuisances from noise and vibration.

Nuisances from Foul Odors and Smoke.—The principal sources of this class of nuisance are as follows:

- 1st. Slaughter-houses and the industries dependent upon them, viz.: fat rendering, blood drying, etc.
- 2d. Gas houses.
- 3d. Burning of soft coal, sawdust or shavings in factories.
- 4th. Smoke houses.
- 5th. Smoke from locomotives.
- 6th. Garbage and manure dumps.
- 7th. Car stables.
- 8th. Steam or hot water in sewers.
- 9th. Hunter's Point industries.

Of the above, inspections have been made almost daily of slaughter-houses and their allied industries, and of gas-houses, throughout the past year.

1st. Slaughter-houses—These are located mainly between Forty-third and Forty-sixth streets, on the east side, and between Thirty-ninth and Fifty-ninth streets on the west side, with the exception of the poultry slaughter-houses, which are located at southeast corner of Gouverneur Slip and Front street, at One Hundred and Twenty-eighth street and Harlem river, and One Hundred and Nineteenth street, east of Third avenue. During the past three years the character of the buildings and the methods used to dispose of the offal have been much improved. It is now required that all slaughter-houses shall have floors of some material impervious to moisture; that the cattle yards be paved with a water-tight pavement and properly drained, and that the openings to sewers be covered with a grating with holes not larger than one-quarter inch, in order to prevent pieces of flesh and offal from getting into the sewer. The killing place must not be exposed to view from the streets. The cattle yards must be cleaned every twenty-four hours and oftener if necessary. After the day's work is over, the slaughter-house must be cleaned, and all offal, heads, hides and hoofs removed. All of the blood must be caught and must be removed daily. During warm weather all of the wood work in the pens and partitions or walls around the killing beds must be scraped and whitewashed weekly, or oftener if necessary, together with a disinfection of the premises. For this, bromine and water (1 to 500) has proved efficacious.

Fat rendering is conducted only under the following conditions: The fat must be rendered in an air-tight kettle connected with a suitable condenser, so that all gases generated during the rendering process will be condensed as far as possible. Such gases as may not be condensed are conducted into a furnace and burnt.

In the manufacture of dried blood, all gases and odors must be condensed and burnt. The rooms used in this industry must be so arranged that all of the air passing out from such rooms is conducted through a "scrubber," and any gases contained therein burnt.

In general, all of the industries dependent on the slaughtering of animals must be conducted in such a manner as not to prove a nuisance. The system of daily inspection, and rigid enforcement of the law, has reduced such nuisances to a minimum.

During the year 1890, the amount of blood and offal resulting from the slaughtering of animals in this city was, as nearly as can be ascertained, as follows:

Blood.....	21,831,853 pounds.
Offal.....	110,227,260 "
Total.....	132,059,113 pounds.

2d. Gas Houses—Gas is manufactured in this city by the following companies:

NAME OF COMPANY.	LOCATION OF WORKS.	KIND OF GAS.	AVERAGE DAILY OUTPUT.
			Cubic Feet.
Consolidated.....	Eighteenth street and Tenth avenue.....	Coal.....	30,000,000
".....	Forty-second street and Eleventh avenue.....	".....	
".....	Forty-fourth street and Eleventh avenue.....	Water.....	
".....	Fourteenth street and Avenue C.....	".....	30,000,000
".....	Twenty-first street and Avenue A.....	".....	
".....	Ninety-ninth street and First avenue.....	".....	
".....	One Hundred and Tenth street and First avenue.....	".....	

NAME OF COMPANY.	LOCATION OF WORKS.	KIND OF GAS.	AVERAGE DAILY OUTPUT.
			Cubic Feet.
Mutual.....	Twelfth street and East river.....	Water.....	5,000,000
Standard.....	One Hundred and Fifteenth street and East river.....	".....	1,500,000
Equitable.....	Forty-second street and East river.....	".....	5,250,000
Northern.....	West Farms.....	".....	500,000
Central.....	Foot East One Hundred and Thirty-ninth street.....	".....	500,000

The causes of nuisances arising from this industry are:

(a.) From Coal Gas, including: The odors from the spent purifying material; the smoke which escapes when the retorts are drawn and refilled.

(b.) From Water Gas, including: The odors from the spent purifying material; the odors from the "drips."

It is gratifying to state that these nuisances have been so abated as now to be almost entirely confined within the works themselves.

The purifying material used in the manufacture of both coal and water gas is principally lime, and in either case the odor from this material is very offensive. The methods employed to prevent odors escaping from this foul lime are as follows:

The "spent lime" is removed from the purifying-box as soon as the cover is taken off, as many men being employed as can work in the box. The lime is put into covered carts, taken to the river front and loaded on scows, which must be kept covered with a canvas cover. Great cleanliness is exercised in the purifying house, so that no "spent" lime is scattered around.

At the works where the "oxide of iron" method for purification is used the oxide is removed from the boxes to the banks of the river, in a manner similar to that described for lime, and is there spread out for revivification. This is only done, however, when the wind is in such a direction as to blow away the noxious odors from the city. At all other times the oxide is kept covered with a canvas cover.

The discharge of smoke, due to opening and refilling the retorts in the manufacture of coal gas, has been largely abated by care in preventing the escape of smoke from the retort house. No complaints of this nuisance have been received during the past year.

"Drips" are an oily liquid, having a very disgusting odor, somewhat resembling gas. They are a by-product in the manufacture of water-gas, and are that portion of the naphtha oils used in enriching the gas, which is condensed out during the process of manufacture. A heavy naphtha produces much more "drips" than a light one.

It was customary for the gas companies to allow their "drips" to run into the river. They floated upon the surface of the water, giving off an intolerable stench, which was carried by the wind all over the city. This nuisance has been abated by causing the water containing the "drips" to pass through separating tanks, in which the "drips" are caught. They are then pumped into suitable reservoirs and burned under the retorts.

Certain of the gas companies have attempted to use "lima oil" for enriching the gas, but the nuisance produced was so great that its use was at once discontinued.

The odors of gas noticed throughout the city have been due, in a majority of cases, to the digging up of the streets, the soil of which had become saturated with gas from leaks in the pipes, caused, in a great measure, by the careless handling of the pipes by other companies engaged in making excavations, etc. Bromine has been found to be effective as a deodorizer of such gas-laden soil. As soon as a complaint is made of a gas leak in the street the company having pipes passing the location complained of is notified by telephone, and usually within two hours has the street opened at that point and the leak repaired as promptly as possible. The removal of the "drips" which collect in the street-mains is done early in the morning or late at night, so that the nuisance caused be as little as possible. These "drips" are conveyed in air-tight iron carts to the works and burnt.

3d. Burning of Soft Coal, Sawdust or Shavings in Factories—The consumption of soft coal in this city has increased largely during the past few years, the amount burnt in 1890 being estimated at about 1,000,000 tons. The nuisance caused by the smoke from this coal is mainly attributable to careless firing or faulty construction of the furnace. Wherever complaint has been made, or smoke has been observed by Inspectors to enter the windows of dwelling-houses, orders have at once been issued to abate the nuisance forthwith. It has been found in nearly every case that a more careful firing or the use of some device for consuming the smoke has abated the nuisance. The use of sawdust or shavings as fuel, in planing mills, box factories, etc., creates a similar nuisance, and such nuisance is abated in a similar manner.

4th. Smoke-houses—There are at present in this city about 500 smoke houses. As most of these are situated in the crowded district of the city, they are liable to become nuisances at any time, unless properly constructed. Before a permit to operate a smoke-house can be obtained the Inspector ascertains the following facts: (a) Whether there is complaint from occupants of the building in which the smoke-house is situated, or from neighbors. (b) Whether the smoke-house is properly built and is provided with a separate flue, leading to roof, and discharging above roofs of adjoining houses. (c) Character of the building in which the smoke-house is built, and location of the smoke-house therein. Should these facts prove satisfactory, a permit is recommended. Almost the entire time of one Inspector is occupied in the inspection of smoke-houses, and the nuisance from this cause has been thereby largely abated.

5th. Smoke from Locomotives—The nuisance from this source is twofold in character; firstly, the burning of soft coal in locomotives entering the city on the east and west sides, and secondly, the escape of smoke and gases from the round houses near the Grand Central depot, where engines are temporarily stored. The first nuisance has been abated in great measure by the substitution of coke for soft coal on the switch engines, and by more careful firing on the road engines. The second nuisance has been largely abated by placing hoods over the smoke-stacks of each locomotive, connecting with a high chimney, in which a suction fan is placed.

6th. Garbage and Manure Dumps—The accompanying map shows the location of these dumps. They are liable to become nuisances through the accumulation of garbage or manure thereat. This is prevented by daily inspections made by the Sanitary Police, and by frequent inspections made by the Inspectors of this Division.

7th. Car Stables—The large number of horses housed in these buildings make them prolific sources of nuisance. This has been prevented in a large measure by the enforcement of rigid cleanliness, daily removal, except on Sundays and holidays, of accumulated manure, and the constant use of proper disinfectants.

8th. Steam or Hot Water in Sewers—The effect of running steam or hot water into the sewers is in most cases to cause the discharge of offensive odors from the manholes. Where the temperature of the sewer contents is raised to that most favorable to putrefactive fermentation, the escaping odors are very offensive. This temperature must necessarily be reached at some point on the sewer, more or less remote from the point at which steam or hot water enters, its distance being, of course, dependent on the initial temperature of the hot water, and the temperature, volume and flow of the sewage. A case in point was that of a sewer into which hot water and the washings of beer kegs, etc., were discharged by a brewing company. At a distance of nearly three-quarters of a mile from the point of entrance of the hot water, etc., fermentation set in, and the odors escaping from the manholes were excessively offensive, permeating the entire neighborhood. The brewing company was ordered to abate the nuisance and did so by cooling all the water running into the sewer from the brewery to a temperature of 70° Fahr.

9th. Hunter's Point Industries—The main nuisance from this source in the past has been due to the escape of vapors from the so-called "Steam Stills" in the refining of kerosene oil. These vapors are now conducted under a furnace and burnt. There has been practically no nuisance from this source during the past year, save on one occasion, when an explosion took place, necessitating the discharge of the gases from the steam stills into the open air for a short time.

Nuisances from Noise and Vibration.—The principal sources of this class of nuisances are as follows:

- 1st. Exhausts of High Pressure Engines.
- 2d. Factory Machinery.
- 3d. Ringing of Bells and Blowing of Whistles.

1st. Exhausts of High Pressure Engines—These are frequently a cause of both noise and vibration. When the exhaust is small, the nuisance has been in many cases abated by exhausting into a proper receptacle, whereby the sharp puffing sound is destroyed. With an exhaust from a large engine, this method is not always efficient. A case in point was as follows: The occupants of the houses adjoining an electric-light station in this city complained of the vibration imparted to their houses, attributing it to the running of the engines in the station. On inspection, it was believed that the jar was caused by the vibration of the air, due to the exhaust on the roof of the station. On turning the steam into the chimney stack this supposition was found to be correct, as the nuisance was thereby entirely abated.

2d. Factory Machinery—The complaints of noise or vibration from machinery have been mainly due to the fact that the machinery was run at night, thus preventing sleep. In most cases the only method of abating such nuisances has been to order the discontinuance of night work.

3d. Ringing of Bells and Blowing of Whistles—The nuisance caused by the ringing of bells and blowing of whistles on locomotives has been a cause of much discomfort to citizens residing on West End avenue, in this city. It was due, in great measure, to the carelessness of the locomotive engineers and firemen, and on notifying the railroad company, the nuisance was abated.

The foregoing includes, as has been previously stated, the main sources of nuisance in this city, with the methods adopted for the abatement of nuisance in each case. Of minor nuisances the number is legion. Among these may be mentioned, heat from steam boilers and pipes, odors from restaurants, perfumery factories, tobacco factories, etc., dust from carpet beating, fumes from smelting works, photographers' establishments, electro-plating establishments, etc., barking dogs, playing of pianos, and hundreds of others. No matter how trivial a complaint may have seemed, nor in what form it has been presented, it has received careful investigation. Before an order is issued an attempt has always been made to have the nuisance abated by representing to the party maintaining the nuisance its character and the annoyance to the complainant. In many instances this plan has proved successful.

In presenting this report the Chemist desires to express his satisfaction with the manner in which the Inspectors under his direction have, as a whole, performed their duties during the past year. With but few exceptions the work devolving upon them has been carried out promptly and efficiently, and has redounded to the credit of the Department.

Respectfully submitted,

EDWARD W. MARTIN, Chemist.

DIVISION OF SANITARY INSPECTION, INCLUDING THE WORK OF THE SANITARY POLICE.

To this Division is referred all complaints of a general character, such as of faulty plumbing and drainage of public and private buildings, stables, manufactories and workshops, stores and warehouses, docks and piers, etc.

All citizens' complaints, not otherwise provided for, are investigated by this Division. The magnitude of this work may be known by considering that 16,294 complaints of citizens were investigated, and 229,400 inspections were made during the year, resulting in the forwarding of 24,734 complaints.

In addition to their other duties, the Sanitary Police have made 23,855 night inspections of apartments in tenement-houses, as to overcrowding, and as a result 891 orders to reduce number of occupants have been made.

The following is a summary of the work performed by the lay Sanitary Inspectors:

Number of inspections made.....	39,202
" complaints made.....	9,536

The following premises and locations have been inspected and reported upon by the Sanitary Inspectors, a summary of which is as follows:

Summary of Inspections.

Tenement houses.....	9,075	Slaughter houses.....	339
Lodging houses.....	264	Manure dumps.....	3
Private dwellings.....	1,755	Marsh lands.....	3
Other dwellings.....	1,123	Water courses.....	12
Public buildings.....	64	Canals.....	1
Other buildings.....	665	Railroad cars.....	3
Manufactories and workshops.....	574	Railroads.....	2
Stores and warehouses.....	410	Gas mains.....	3
Stables.....	1,010		
Offensive trade buildings.....	34	Total.....	16,353
Sunken and vacant lots.....	682	Total re-inspections.....	22,849
Public highways.....	147		
Receiving-basins and public sewers.....	143	Total inspections and re-inspec-	39,202
Dumps and dumping grounds.....	22	tions made.....	
Docks and piers.....	19		
Number of privy vaults abolished.....			137
Number of cellars ordered to be made water-tight.....			229

The reports received from Sanitary Inspectors, classified as to causes of complaint, are as follows:

NATURE OF COMPLAINT.	CAUSE.	NO CAUSE.	TOTAL.	NATURE OF COMPLAINT.	CAUSE.	NO CAUSE.	TOTAL.
Dangerous buildings.....	25	9	34	Filth.....	2,397	483	2,880
Uninhabited dwellings.....	3	..	3	Manure dumps.....	2	1	3
Lodging houses.....	16	1	17	Railroads.....	1	..	1
Offensive trade buildings.....	35	16	51	Public baths.....	..	1	1
Public highways.....	41	12	53	Swamp lands.....	1	..	1
Docks and piers.....	..	1	1	Wells.....	12	1	13
Water courses.....	32	2	34	Streams.....	4	..	4
Sunken and vacant lots.....	454	61	515	Ponds.....	1	..	1
Dumping grounds.....	10	3	13	Railroad cars.....	..	2	2
Public sewers and receiving-basins.....	121	33	154	Cows and other animals.....	33	9	42
Croton water-mains.....	4	1	5	Fowls.....	38	6	44
Steam-heating mains.....	8	..	8	Noise.....	14	15	29
Gas-mains.....	42	6	48	No housekeeper.....	8	1	9
Stables.....	612	137	749	Light.....	60	37	97
Plumbing.....	5,611	981	6,592	Overcrowding.....	1	8	9
Drainage.....	2,830	584	3,414	Dangerous structures.....	250	28	278
Ventilation.....	709	158	867	Repairs.....	2,236	216	2,452
Cesspools.....	402	14	416	Cellars and basements.....	2,114	378	2,492
Manure-vaults.....	123	14	137	Privies and water-closets.....	4,526	603	5,129
Croton water supply.....	513	247	760	Ash and garbage receptacles.....	52	4	56
Dangerous chimneys.....	294	47	341	Marsh lands.....	3	..	3
Public vehicles.....	1	..	1				
Streets, gutters and sidewalks.....	90	12	102	Totals.....	23,729	4,132	27,861

The whole number of citizens' complaints received from the Sanitary Bureau for investigation and report by the Lay Sanitary Inspectors, was..... 8,697

The whole number of complaints received from the Sanitary Officers for investigation and report by the Lay Sanitary Inspectors was..... 1,644

The whole number of reports upon complaints, original and referred, which have been forwarded to the Sanitary Bureau for Board's orders was..... 8,748

The whole number of reports upon complaints, original and referred, which have been forwarded to the Sanitary Superintendent for action was..... 788

The whole number of original complaints made by the Inspectors, and forwarded to the Sanitary Bureau for the Board's orders, was..... 841

The whole number of citizens' complaints returned with a negative report, was..... 2,284

The whole number of orders reinspected and forwarded to the Sanitary Bureau for the Board's action was as follows: Attorney's orders, 5,547; orders complied with, 4,416; orders not complied with, 1,249.

The following is a summary of the work performed by the Sanitary Police:

Number of inspections and reinspections made.....	190,198
" complaints made.....	15,198
" complaints made and forwarded to the Sanitary Superintendent.....	9,145
" " and referred to the Sanitary Inspectors.....	1,661
Number of complaints made on complaints of citizens and forwarded to the Sanitary Superintendent.....	3,517
Number of complaints made on overcrowding in tenements.....	875
Number of citizens' complaints received from Sanitary Bureau.....	7,597

The number of orders received, inspected, reinspected and reported upon was 39,828, of which number, with 900 held for reinspection, there have been returned to the Sanitary Superintendent:

Orders complied with.....	18,152
" not complied with.....	21,706
" held for reinspection while work is progressing.....	900
To stop work, close stores and keep premises under observation.....	203
Number of inspections of tenement apartments at night to report overcrowding.....	23,855
Number of orders issued by the Board to reduce the number of occupants in overcrowded apartments.....	891
Number of orders returned complied with.....	790
" orders returned not complied with.....	95
" notices of violations served.....	1,623
" letters delivered.....	6,331
" water-closets ordered in lieu of privy-vaults.....	869
" scavenger permits collected and forwarded to the Sanitary Superintendent.....	1,291
" manure-dump inspections.....	796
" lodging-house inspections.....	583
" tenement-house inspections (general).....	76,944
" tenement-houses inspected (house to house inspection).....	8,079
" inspections, and reinspections other than tenement-houses (miscellaneous).....	61,310
" ash and garbage receptacles removed from sidewalk.....	792
" slaughter-house inspections.....	4,159
" stable inspections.....	12,182
Number of notices served in relation to the burial of persons who died from contagious disease.....	1,637
Number of postal cards to the Department of Street Cleaning.....	1,097
" persons removed from overcrowded tenements.....	1,555

Nature of Complaints and Violations Reported by the Sanitary Police.

NATURE OF COMPLAINTS AND VIOLATIONS REPORTED.	NUISANCES ABATED BY PERSONAL EFFORT.	COMPLAINTS MADE.	TOTAL.
Air-shafts filthy, not covered, or connected with house sewer.....	428	445	873
Areas filthy and dangerous.....	786	715	1,501
Ash-boxes in violation of Sanitary Code.....	2,065	498	2,563
Ashes and garbage removed.....	6	..	6
Balusters and stairs dangerous.....	12	559	571
Bedrooms in tenements not sufficiently ventilated.....	..	382	382
Cellars filthy.....	2,739	2,116	4,855
Cellars occupied as a place of dwelling or lodging.....	..	194	194
Cellar doors dangerous.....	2	59	61
Cellars not water tight.....	..	33	33
Cellar ceilings not plastered.....	3	2,440	2,443
Cesspools.....	2	136	138
Chimneys dangerous or obstructed.....	3	270	273
Clothes poles dangerous.....	..	16	16
Croton supply tanks filthy.....	19	113	132
Croton water not supplied on each floor of a tenement occupied by a family.....	..	129	129
Cows, no permit.....	..	24	24
Docks filthy.....	..	10	10
Dogs kept in violation of Sanitary Code.....	..	222	222
Drains obstructed or defective.....	..	357	357
Drains not provided with running trap or fresh air inlet.....	..	4	4
Eaves, gutters defective or dangerous.....	3	113	116
Fences dangerous.....	4	137	141
Fire-escapes filthy or obstructed.....	84	46	130
Flooring broken, dangerous or filthy.....	183	1,035	1,218
Fresh-air inlets obstructed.....	547	3	550
Fowls, no permit.....	59	303	362
Gas-pipes defective.....	..	2	2
Goats, no permit.....	2	76	78
Hogs, no permit.....	..	8	8
Hydrants out of repair.....	..	136	136
Ice-boxes defective.....	..	40	40
Ice-boxes not connected with a properly trapped Croton supplied sink.....	..	245	245
Lodging-houses, no permit.....	..	1	1
Leaders defective, obstructed or dangerous.....	8	390	398
Manure-vaults in violation of the Sanitary Code, or no permit.....	..	400	400
Manure removed across the sidewalk.....	..	706	706
Pigeons kept on premises.....	..	212	212
Pumps out of repair.....	..	119	119
Privy accommodations not sufficient.....	..	107	107
Privy-vaults full, offensive or out of repair.....	3	1,008	1,011
Privy houses filthy or out of repair.....	784	1,068	1,852
Premises not connected with street sewer.....	..	93	93
Rabbits on premises.....	..	19	19
Receiving-basins full or offensive.....	24	396	420
Roofs leaking or filthy.....	357	1,254	1,611
School-sinks out of order.....	1,119	448	1,557
Soil pipes used as leaders.....	..	106	106
Stable yards filthy, not graded or sewer connected.....	444	243	687
Stables in tenement-houses.....	..	22	22
Streets cleaned.....	32	..	32
Skylights broken.....	..	218	218
Stoops dangerous.....	4	102	106
Soil pipes obstructed, defective or not ventilated.....	10	536	546
Sinks filthy, defective or not trapped.....	94	825	919
Sidewalks filthy, dangerous or not flagged.....	36	297	333
Street pavements dangerous.....	116	117	233
Streets or gutters filthy or obstructed.....	493	716	1,209
Street cuiverts obstructed.....	..	22	22
Smoke-houses in tenements, no permit.....	..	3	3

NATURE OF COMPLAINTS AND VIOLATIONS REPORTED.	NUISANCES ABATED BY PERSONAL EFFORT.	COMPLAINTS MADE.	TOTAL.
Supply pipes obstructed or defective.....	4	711	715
Trees dangerous or noxious.....	....	2	2
Tenement-houses overcrowded.....	....	35	35
Urinals not trapped, ventilated or sewer connected.....	52	206	258
Vacant lots filthy, dangerous, not fenced or sewer connected	10	508	518
Vault covers or gratings dangerous	2	17	19
Water-closets out of repair or filthy.....	4	1,100	1,104
Water-closets not trapped or ventilated.....	2	5	7
Walls and ceilings filthy or out of repair.....	....	6,440	6,440
Waste-pipes obstructed, defective or not ventilated ...	3	1,024	1,027
Waste-pipes used as leaders .....	....	9	9
Yards filthy, not properly graded or sewer connected.....	2,609	1,316	3,925
Yard pavements out of repair.....	....	299	299
Totals.....	13,157	31,966	45,123

The Sanitary Superintendent, under instruction and authority of the Board, granted 2,989 permits to discharge cargoes, under proper vouchers from the Health Officer of the Port; 1,263 permits to scavengers to empty privies; 93 permits to land rags (in bulk) under bonds, and 677 miscellaneous permits under the Sanitary Code.

During the year 29 orders for vacation of houses have been issued upon the certificate of the Sanitary Superintendent that they were unfit for human habitation. The result of these potent orders has in every case been the immediate abatement of the nuisance without resorting to the actual vacation of the premises.

All of which is respectfully submitted.

W. A. EWING, M. D., Sanitary Superintendent.

REPORT OF WILLARD PARKER AND RECEPTION HOSPITALS.

General Statement—Willard Parker Hospital.

1890.	MALE.	FEMALE.	NATIVE.	FOREIGN.	TOTAL.	MOTHERS.
Remaining in Hospital December 31, 1889.....	22	19	34	7	41	3
Admitted	228	219	328	119	447	46
Total.....	250	238	362	126	488	49
Discharged	188	182	265	105	370	47
Died	45	39	66	18	84	..
Total.....	233	221	331	123	454	47
Remaining in Hospital December 31, 1890.....	17	17	31	3	34	2
Total number of cases treated.....	488					
“ mothers accompanying.....	49					
Total, patients and mothers.....	537					
Scarlet fever, mortality per cent	9.6					
Diphtheria, “	21.54					

REMAINING IN HOSPITAL DECEMBER 31, 1889.

	CLASS.				MALES.			FEMALES.			Total Male and Female.	Mothers.
	City.	Public Institutions.	Walked In.	Quarantine.	Native.	Foreign.	Total.	Native.	Foreign.	Total.		
Scarlet fever.....	14	8	..	..	7	2	9	10	3	13	22	2
Diphtheria.....	8	7	4	..	12	1	13	5	1	6	19	1
Total	22	15	4	..	19	3	22	15	4	19	41	3

ADMISSIONS.

Scarlet fever.....	50	53	13	9	64	8	72	70	13	83	153	15
Diphtheria.....	123	109	58	2	108	48	156	86	50	136	292	31
Total.....	173	162	71	11	172	56	228	156	63	219	447	46

DISCHARGES.

Scarlet fever.....	51	74	10	5	58	7	65	62	13	75	140	17
Diphtheria.....	91	93	45	1	80	43	123	65	42	107	230	30
Total	142	167	55	6	138	50	188	127	55	182	370	47

DEATHS.

Scarlet fever.....	6	7	1	3	4	2	6	8	3	11	17	..
Diphtheria.....	34	19	13	1	34	5	39	20	8	28	67	..
Total	40	26	14	4	38	7	45	28	11	39	84	..

REMAINING IN HOSPITAL, DECEMBER 31, 1890.

Scarlet fever.....	7	10	2	1	9	1	10	10	..	10	20	..
Diphtheria.....	6	4	4	..	6	1	7	6	1	7	14	2
Total	13	14	6	1	15	2	17	16	1	17	34	2

RECAPITULATION OF REPORT FOR THE YEAR ENDING DECEMBER 31, 1890.

	REMAINING IN HOSPITAL DEC. 31, 1889.		ADMITTED DURING THE YEAR.		DISCHARGED DURING THE YEAR.		DIED DURING THE YEAR.		REMAINING IN HOSPITAL DECEMBER 31, 1890.				
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Native.	Foreign.	Total.
Scarlet fever.....	9	13	72	83	65	75	6	11	10	10	19	1	20
Diphtheria	13	6	156	136	123	107	39	23	7	7	12	2	14
Total.....	22	19	228	219	188	182	45	39	17	17	31	3	34

SCARLET FEVER.

AGE.	REMAINING IN HOSPITAL DEC. 31, 1889.			ADMITTED DURING THE YEAR.			DISCHARGED DURING THE YEAR.			DIED DURING THE YEAR.			REMAINING IN HOSPITAL DEC. 31, 1890.			Mortality, per cent.
	Native.	Foreign.	Total.	Native.	Foreign.	Total.	Native.	Foreign.	Total.	Native.	Foreign.	Total.	Native.	Foreign.	Total.	
Under 5 years.....	9	1	10	80	5	85	66	3	69	8	3	11	15	..	15	11.58
5 years and under 16 years.....	7	2	9	51	13	64	51	12	63	4	2	6	3	1	4	8.22
16 years to 21 years.....	1	2	3	2	1	3	2	3	5	..	..	..	1	..	1	..
Over 21 years.....	..	..	..	1	2	3	1	2	3	..	..	..	..	..	..	..
Total.....	17	5	22	134	21	155	120	20	140	12	5	17	19	1	20	9.6

DIPHTHERIA.

Under 5 years.....	6	..	6	94	10	104	49	4	53	48	6	54	3	..	3	49
5 years and under 16 years.....	7	..	7	76	24	100	72	18	90	5	5	10	6	1	7	9.35
16 years to 21 years.....	1	1	2	11	25	36	11	25	36	..	1	1	1	..	1	2.6
Over 21 years.....	3	1	4	13	39	52	13	38	51	1	1	2	2	1	3	3.6
Total.....	17	2	19	194	98	292	145	85	230	54	13	67	12	2	14	21.54

RECEPTION HOSPITAL.

General Statement.

1890.	MALE.	FEMALE.	NATIVE.	FOREIGN.	TOTAL.	MOTHERS.
Remaining in Hospital, December 31, 1889	2	1	1	2	3	..
Admitted	311	261	308	264	572	96
Total	313	262	309	266	575	96
Discharged	20	21	25	16	41	..
Transferred.....	288	240	281	247	528	93
Died.....	5	..	3	2	5	..
Total	313	261	309	265	574	96
Remaining in Hospital, December 31, 1890.....	..	1	..	1	1	..

REMAINING IN HOSPITAL, DECEMBER 31, 1889.

	CLASS.			MALES.			FEMALES.			Total Male and Female.	Mothers.
	City.	Public Institutions.	Quarantine.	Native.	Foreign.	Total.	Native.	Foreign.	Total.		
Scarlet fever.....	1	1	..	..	1	1	..	1	1	2	..
Observation.....	1	..	..	1	..	1	..	..	..	1	..
Total.....	2	1	..	1	1	2	..	1	1	3	..

ADMISSIONS.

Variola.....	..	..	11	..	9	9	..	2	2	11	..
Scarlet fever.....	28	23	4	11	19	30	13	12	25	55	5
Measles.....	105	67	104	71	79	150	62	64	126	276	66
Pertussis.....	14	13	..	10	..	10	16	1	17	27	2
Varicella.....	10	27	11	20	8	28	12	8	20	48	5
Mumps.....	1	1	..	..	..	..	..	2	2	2	..
Leprosy.....	1	..	..	1	..	1	..	..	..	1	..
Diphtheria and ophthalmia.....	1	..	..	1	..	1	..	..	..	1	1
Scarlet fever and measles.....	..	1	..	1	..	1	..	..	..	1	..
Observation.....	78	62	10	50	31	81	41	28	69	150	17
Total.....	238	194	140	164	147	311	144	117	261	572	96

DISCHARGES.

Varicella.....	2	..	..	..	..	..	2	..	2	2	..
Mumps.....	1	..	..	..	..	..	..	1	1	1	..
Observation.....	..	3	..	..	1	1	..	2	2	3	..
Tonsillitis.....	..	1	..	1	..	1	..	..	..	1	..

	CLASS.			MALES.			FEMALES.			Total Male and Female.	Mothers.	RECAPITULATION OF REPORT FOR YEAR ENDING DECEMBER 31, 1890.																												
	City.	Public Institutions.	Quarantine.	Native.	Foreign.	Total.	Native.	Foreign.	Total.			REMAINING IN HOSPITAL DECEMBER 31, 1890.	ADMITTED DURING YEAR.		DISCHARGED DURING YEAR.		TRANSFERRED DURING YEAR.		DIED DURING YEAR.		REMAINING IN HOSPITAL DECEMBER 31, 1890.																			
													Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Native.	Foreign.	Total.	Mothers.												
Diphtheria	1	1	..	..	..	..	..	2	2	2	1	Variola.....	..	..	9	2	..	..	9	2	..	..	..	..	..	..	..	..	..		
Dematitis .....	..	1	..	..	..	..	1	..	1	1	..	Typhus fever.....	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..		
Exfoliativa												Scarlet fever.....	1	1	30	25	30	26		
Erysipelas .....	..	1	..	..	..	..	..	1	1	1	..	Scarlet fever*.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Ophthalmia .....	..	1	..	..	..	..	..	1	1	1	..	Scarlet fever and measles	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Phthisis.....	..	1	..	..	1	1	..	..	..	1	..	Measles .....	..	..	150	126	..	..	151	127	2	..	..	..	..	..	..	..	..			
No case	15	12	1	13	4	17	8	3	11	28	2	Pertussis .....	..	..	10	17	..	..	10	17	..	..	..	..	..	..	..	..	..		
Total	19	21	1	14	6	20	11	10	21	41	3	Varicella .....	..	..	28	20	..	2	28	20	..	..	..	..	..	..	..	..	..		
TRANSFERRED TO NORTH BROTHER ISLAND.																		Leprosy.....	1	1
Variola .....	..	..	11	..	9	9	..	2	2	11	..	Mumps.....	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..
Typhus fever.....	1	1	..	..	1	1	..	1	1	2	..	Diphtheria and ophthalmia	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Scarlet fever.....	28	24	4	9	21	30	14	12	26	56	5	Observation	1	..	81	69	..	..	..	..	..	..	1	..	1	1	1	..	..									
Measles	105	69	104	73	78	151	61	66	127	278	67	Variola.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Pertussis.....	14	13	..	10	..	10	16	1	17	27	2	Typhus fever.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Varicella.....	8	29	11	20	8	28	12	8	20	48	5	Scarlet fever.....	..	..	..	..	..	..	8	3	..	..	..	..	..	..	..	..	..		
Scarlet fever*.....	1	..	..	..	..	..	..	1	1	1	..	Scarlet fever*.....	..	..	..	..	..	..	13	6	..	..	..	..	..	..	..	..	..		
Leprosy	1	..	..	..	1	1	..	..	..	1	..	Scarlet fever and measles	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Diphtheria and ophthalmia.....	1	..	..	1	..	1	..	..	..	1	1	Scarlet fever and varicella	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Scarlet fever and measles.....	..	1	..	1	..	1	..	..	..	1	..	Measles .....	..	..	..	..	..	..	7	6	..	..	..	..	..	..	..	..	..		
Observation.....	5	12	2	10	3	13	4	2	6	19	1	Measles and pneumonia.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..		
Scarlet fever*.....	28	9	..	6	9	15	15	7	22	37	4	Pertussis.....	..	..	..	..	..	..	8	4	..	..	..	..	..	..	..	..	..		
Diphtheria*.....	10	1	..	3	5	8	1	2	3	11	1	Pertussis and varicella...	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Scarlet fever.....	..	1	..	..	..	..	1	..	1	1	..	Varicella.....	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..		
Scarlet fever and measles.....	..	1	..	..	..	..	1	..	1	1	..	Diphtheria*.....	..	..	..	..	..	..	15	22	..	..	..	..	..	..	..	..	..		
Measles.....	5	4	4	5	2	7	4	2	6	13	3	Diphtheria .....	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..		
Pertussis.....	9	3	..	6	2	8	3	1	4	12	1	Diphtheria and varicella.	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Pertussis and varicella.....	1	..	..	1	..	1	..	..	..	1	..	Diphtheria and pertussis.	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	
Varicella.....	..	2	..	1	..	1	1	..	1	2	..	Mumps.....	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..
Variola .....	..	..	1	..	..	..	..	1	1	1	1	Tonsilitis .....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Typhus fever.....	..	..	1	..	1	1	..	..	..	1	..	Dematitis exfoliativa....	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Diphtheria and varicella.....	..	1	..	1	..	1	..	..	..	1	..	Erysipelas.....	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Diphtheria and Pertussis.....	1	..	1	..	..	..	1	1	2	2	2	Ophthalmia.....	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Scarlet fever and varicella.....	..	1	..	1	..	1	..	..	..	1	..	Phthisis.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Total	218	171	139	148	140	288	133	107	240	528	93	No case.....	..	..	..	..	17	11	..	..	..	..	..	..	..	..	..	..	..
												Total.....	2	1	311	261	20	21	288	240	5	..	1	..	1	1	1	..												

* To Willard Parker Hospital.

DEATHS.

Measles.....	2	..	..	1	1	2	..	..	..	2	..
Measles and pneumonia .....	..	1	..	1	..	1	..	..	..	1	..
Observation.....	..	..	..	..	..	..	..	..	..	..	..
Diphtheria.....	..	2	..	1	1	2	..	..	..	2	..
Total	2	3	..	3	2	5	..	..	..	5	..

Dead bodies received—24.

REMAINING IN HOSPITAL DECEMBER, 31, 1890.

Observation	1	1	1	1	..
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* To Willard Parker Hospital.

As compared with the report for the year 1889, the preceding tables show a decrease in the number of admissions of scarlet fever of 50, and of diphtheria 91—a total decrease of 141. Daily average of patients, 54, as against 58½ in 1889. Per cent. of mortality: In diphtheria, 21 54-100, as against 20 1-5 in 1889, and in scarlet fever, 9 6-10 as against 17½ in 1889.

Sequelæ, which contributed to death in those cases of diphtheria unattended by laryngeal stenosis, were: Acute nephritis, 7; sepsis, 8; paralysis of the heart, 8; sepsis and acute nephritis, 8; exhaustion, 4; asphyxia, 3; sepsis and asphyxia, 1; exhaustion and asphyxia, 1. In scarlet fever: Sepsis and nephritis, 4; sepsis, 5; nephritis, 5; pneumonia and heart failure, 2.

Number of operations performed for laryngeal stenosis, 44. Per cent. of recoveries, 36 36-100, as against 40 operations in 1889, and per cent. of recoveries, 42½.

Average age of cases operated on, 3 years 3 months, as against average age of cases operated on in 1889 of 3 years 7½ months.

Of those who died after operation, the immediate cause of death was: Asphyxia, 9; acute nephritis, sepsis and pneumonia, 8; paralysis of the heart, 7; exhaustion, 3; acute nephritis and paralysis of the heart, 1.

One operation has been omitted this year because the tube is still in situ.

Respectfully submitted,

F. W. LESTER, Resident Physician.

REPORT OF RIVERSIDE HOSPITAL, NORTH BROTHER ISLAND.

Table of Total Cases Treated During 1890.

DISEASES.	REMAINING DECEMBER 31, 1889.			ADMITTED 1890.			TOTAL NUMBER TREATED.			DISCHARGED 1890.			DIED, 1890.			REMAINING DECEMBER 31, 1890.			Mortality, Per Cent.
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
Small-pox.....	..	..	..	10	3	13	10	3	13	8	3	11	2	..	2	..	..	..	15½
Chicken-pox.....	..	..	..	19	23	42	19	23	42	17	23	40	1	..	1	1	..	1	2½
Leprosy.....	..	..	..	1	....	1	1	....	1	1	....	1	..	..	..	..	..	..	0
Typhus fever.....	5	..	5	5	1	6	10	1	11	8	1	9	2	..	2	..	..	..	18½
Typhoid fever.....	..	..	..	1	....	1	1	....	1	....	....	....	1	..	1	..	..	..	100
Scarlet fever.....	5	2	7	27	26	53	32	28	60	28	26	54	..	2	2	4	..	4	3½
Measles.....	2	1	3	141	107	248	143	108	251	126	97	223	12	6	18	5	5	10	7
Whooping cough.....	2	4	6	14	18	32	16	22	38	15	13	28	..	3	3	1	6	7	7½
Scarlet fever and measles.....	..	..	..	9	12	21	9	12	21	8	11	19	..	1	1	1	..	1	4½
“ whooping cough .....	..	..	..	1	1	2	1	1	2	1	1	2	..	..	..	..	..	..	0
“ chicken-pox.....	..	..	..	6	1	7	6	1	7	5	1	6	..	..	..	1	..	1	0
“ diphtheria .....	..	..	..	8	1	9	8	1	9	6	1	7	2	..	2	..	..	..	22½
Scarlet fever, measles and chicken-pox....	..	..	..	3	1	4	3	1	4	1	1	2	2	..	2	..	..	..	50
“ “ diphtheria.....	..	..	..	3	2	5	3	2	5	2	2	4	1	..	1	..	..	..	20
Measles and whooping cough.....	..	..	..	1	....	1	1	....	1	....	....	....	1	..	1	..	..	..	100
“ chicken-pox.....	..	..	..	2	6	8	2	6	8	1	5	6	1	1	2	..	..	..	25
“ diphtheria .....	..	..	..	5	4	9	5	4	9	3	2	5	2	2	4	..	..	..	44½
Measles, chicken-pox and diphtheria.....	..	..	..	1	....	1	1	....	1	....	....	....	1	..	1	..	..	..	100
Whooping-cough and chicken-pox.....	..	..	..	4	3	7	4	3	7	4	3	7	..	..	..	..	..	..	0
Chicken-pox and diphtheria.....	..	..	..	2	....	2	2	....	2	2	....	2	..	..	..	..	..	..	0
Diphtheria and ophthalmia.....	..	..	..	1	....	1	1	....	1	1	....	1	..	..	..	..	..	..	0
Total.....	14	7	21	264	209	473	278	216	494	237	190	427	28	15	43	13	11	24	8½

TYPHUS FEVER.

[illegible]

TYPHOID FEVER.

TYPHOID FEVER.

[illegible]

SCARLET FEVER.

Remaining December 31, 1889.....	7	..	..	..	5	2	1	6	7	..	7
Admitted.....	40	1	12	..	27	26	13	40	53	..	53
Total.....	47	1	12	..	32	28	14	46	60	..	60
Died.....	1	..	1	..	..	2	1	1	2	..	2
Discharged.....	43	1	10	..	28	26	13	41	54	..	54
Total.....	44	1	11	..	28	28	14	42	56	..	56
Remaining December 31, 1890.....	3	..	1	..	4	..	..	4	4	..	4

SCARLET FEVER AND WHOOPING-COUGH.

[illegible]

SCARLET FEVER AND CHICKEN-POX.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..
Admitted.....	..	..	7	..	6	1	7	..	7	7
Total.....	..	..	7	..	6	1	7	..	7	7
Died.....	..	..	..	..	..	..	..	..	..	..
Discharged.....	..	..	6	..	5	1	6	..	6	6
Total.....	..	..	6	..	5	1	6	..	6	6
Remaining December 31, 1890.....	..	..	1	..	1	..	1	..	1	1

SCARLET FEVER AND DIPHTHERIA.

[illegible]

SCARLET FEVER, MEASLES AND CHICKEN-POX.

	City.	Quarantine.	Public Hospitals.	Other Places.	Males.	Females.	Natives.	Foreign.	White.	Colored.	Total.
Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted	1	..	3	..	3	1	4	..	4	..	4
Total	1	..	3	..	3	1	4	..	4	..	4
Died .....	..	..	2	..	2	..	2	..	2	..	2
Discharged	1	..	1	..	1	1	2	..	2	..	2
Total	1	..	3	..	3	1	4	..	4	..	4
Remaining December 31, 1890.....	..	..	..	..	..	..	..	..	..	..	..

SCARLET FEVER, MEASLES AND DIPHTHERIA.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted	3	1	1	..	3	2	5	..	5	..	5
Total	3	1	1	..	3	2	5	..	5	..	5
Died.....	1	..	..	..	1	..	1	..	1	..	1
Discharged	2	1	1	..	2	2	4	..	4	..	4
Total	3	1	1	..	3	2	5	..	5	..	5
Remaining December 31, 1890.....	..	..	..	..	..	..	..	..	..	..	..

MEASLES AND WHOOPING-COUGH.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted	1	..	..	..	1	..	1	..	1	..	1
Total	1	..	..	..	1	..	1	..	1	..	1
Died.....	1	..	..	..	1	..	1	..	1	..	1
Discharged .....	..	..	..	..	..	..	..	..	..	..	..
Total	1	..	..	..	1	..	1	..	1	..	1
Remaining December 31, 1890.....	1	..	..	..	1	..	1	..	1	..	1

WHOOPING-COUGH AND CHICKEN-POX.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted	4	..	3	..	4	3	6	1	7	..	7
Total	4	..	3	..	4	3	6	1	7	..	7
Died.....	..	..	..	..	..	..	..	..	..	..	..
Discharged	4	..	3	..	4	3	6	1	7	..	7
Total	4	..	3	..	4	3	6	1	7	..	7
Remaining December 31, 1890.....	..	..	..	..	..	..	..	..	..	..	..

CHICKEN-POX AND DIPHTHERIA.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted .....	..	..	2	..	2	..	2	..	2	..	2
Total .....	..	..	2	..	2	..	2	..	2	..	2
Died.....	..	..	..	..	..	..	..	..	..	..	..
Discharged .....	..	..	2	..	2	..	2	..	2	..	2
Total .....	..	..	2	..	2	..	2	..	2	..	2
Remaining December 31, 1890.....	..	..	..	..	..	..	..	..	..	..	..

DIPHTHERIA AND OPHTHALMIA.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted.....	1	..	..	..	1	..	1	..	1	..	1
Total	1	..	..	..	1	..	1	..	1	..	1
Died .....	..	..	..	..	..	..	..	..	..	..	..
Discharged	1	..	..	..	1	..	1	..	1	..	1
Total	1	..	..	..	1	..	1	..	1	..	1
Remaining December 31, 1890.....	..	..	..	..	..	..	..	..	..	..	..

MEASLES AND CHICKEN-POX.

	City.	Quarantine.	Public Hospitals.	Other Places.	Males.	Females.	Natives.	Foreign.	White.	Colored.	Total.
Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted	1	3	4	..	2	6	5	3	8	..	8
Total	1	3	4	..	2	6	5	3	8	..	8
Died .....	..	2	..	..	1	1	..	2	2	..	2
Discharged	1	1	4	..	1	5	5	1	6	..	6
Total	1	3	4	..	2	6	5	3	8	..	8
Remaining December 31, 1890.....	..	..	..	..	..	..	..	..	..	..	..

MEASLES AND DIPHTHERIA.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted	7	1	1	..	5	4	8	1	9	..	9
Total	7	1	1	..	5	4	8	1	9	..	9
Died.....	4	..	..	..	2	2	4	..	4	..	4
Discharged	3	1	1	..	3	2	4	1	5	..	5
Total	7	1	1	..	5	4	8	1	9	..	9
Remaining December 31, 1890.....	..	..	..	..	..	..	..	..	..	..	..

MEASLES, CHICKEN-POX AND DIPHTHERIA.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted .....	..	1	..	..	1	..	..	1	1	..	1
Total .....	..	1	..	..	1	..	..	1	1	..	1
Died .....	..	1	..	..	1	..	..	1	1	..	1
Discharged .....	..	..	..	..	..	..	..	..	..	..	..
Total .....	..	1	..	..	1	..	..	1	1	..	1
Remaining December 31, 1890.....	..	..	..	..	..	..	..	..	..	..	..

TOTAL NUMBER OF CASES.

Remaining December 31, 1889.....	13	..	8	..	14	7	10	11	21	..	21
Admitted	209	113	130	21	264	209	245	228	466	7	473
Total	222	113	138	21	278	216	255	239	487	7	494
Died	23	10	10	..	28	15	25	18	43	..	43
Discharged	186	99	121	21	237	199	217	210	421	6	427
Total	209	109	131	21	265	205	242	228	464	6	470
Remaining December 31, 1890.....	13	4	7	..	13	11	13	11	23	1	24

MOTHERS AND CHILDREN ACCOMPANYING.

Remaining December 31, 1889.....	..	..	..	..	..	..	..	..	..	..	..
Admitted	23	66	3	1	6	87	11	82	85	8	93
Total	23	66	3	1	6	87	11	82	85	8	93
Died	1	..	..	..	..	1	1	..	1	..	1
Discharged	21	65	3	1	6	84	10	80	83	7	90
Total	22	65	3	1	6	85	11	80	84	7	91
Remaining December 31, 1890.....	1	1	..	..	..	2	..	2	1	1	2

[illegible][illegible]

FORM OF DISEASE.	Total.	Bronchitis.	Broncho-Pneumonia.	Pneumonia.	Enteritis.	Diphtheria.	Meningitis.	Peritonitis.	Bright's.	Ulcerative Endocarditis.	Puerperal Septicæmia.	Surgical Pyæmia.	Marasmus.	Dentition.	Hæmorrhagic.	Confluent.	Acute Lumb.
Small-pox	2	..	..	..	..	..	..	..	..	..	..	..	..	..	I	I	..
Chicken-pox	1	..	..	..	..	..	..	..	..	..	..	..	I	..	..	..	..
Typhus fever.....	2	..	..	..	..	..	..	..	I	I	..	..	..	..	..	..	..
Typhoid fever	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet fever.....	2	..	..	..	..	..	..	..	..	..	I	I	..	..	..	..	..
Measles	13	2	4	I	5	..	I	..	..	..	..	..	I	I	I	..	2
Whooping cough	3	I	I	..	..	..	..	..	..	..	..	..	I	..	..	..	..
Scarlet fever and measles.....	1	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet fever and diphtheria.....	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Scarlet fever, measles and chicken-pox.....	2	..	..	..	I	..	..	I	..	..	..	..	..	..	..	..	..
Scarlet fever, measles and diphtheria.....	1	..	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..
Measles and whooping-cough.....	1	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..	..
Measles and chicken-pox.....	2	I	..	..	I	..	..	..	..	..	..	..	..	..	..	..	..
Measles, chicken-pox and diphtheria.....	1	..	..	..	..	I	..	..	..	..	..	..	..	..	..	..	..
Measles and diphtheria	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..
Total	43	4	5	I	9	8	I	I	I	I	I	I	3	I	2	I	2

Cases Treated for United States Immigration Service, 1890, received from Barge Office.

DISEASES.	MAY.			JUNE.			JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.			TOTAL.			DIED.			MORTALITY. PER CENT.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.				
Small-pox	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	2	1	3	..	..	..	..
Chicken-pox .....	..	..	..	2	5	7	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	..	1	4	6	10	..	..	..	..
Typhus fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	..
Measles	8	10	18	10	6	16	2	2	4	..	1	1	12	8	20	9	9	18	5	3	8	10	10	20	56	49	105	3	4	7	6½
Scarlet fever and measles.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	2	..	2	..	..	..	..
Scarlet fever, measles and diphtheria .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..
Mothers accompanying.....	..	9	9	..	9	9	..	..	..	..	1	1	..	8	8	..	8	8	..	7	7	..	12	12	..	54	54	..	..	..	..
Children accompanying .....	..	..	..	3	..	3	..	..	..	..	..	..	2	..	2	1	..	1	..	..	..	1	..	1	7	..	7	..	..	..	..
Total.....	10	19	29	15	20	35	2	2	4	..	2	2	14	16	30	10	18	28	8	12	20	13	22	35	72	111	183	3	4	7	3½

Respectfully submitted,

F. R. PERCIVAL, Resident Physician.

REPORT ON VITAL STATISTICS.

EMMONS CLARK, *Secretary*:

SIR—I have the honor to transmit the annual report of the Bureau of Records for the year 1890.

There were 40,230 deaths, 14,992 marriages and 39,250 births reported during the year 1890, showing an increase from the previous year of 647,592 and 1,723 respectively. The actual number of deaths during the year was 40,103. The number of deaths reported in any year and the actual number which occur during the year usually differ little, the overlapping at the beginning being nearly counterbalanced by the loss at the end. The unusual difference of 127 was due to the excessive mortality at the opening of the year from epidemic pneumonia or influenza.

The actual number of deaths for the year, 40,103, exceeded that of 1889 by 424. The excess of deaths in January, 1890, over January, 1889, was 1,370, which the greater healthfulness of the remainder of the year did not quite obliterate. The death rate for the year, however, was only 24.58 per 1,000 of a population estimated at 1,631,232 against 25.06 on an estimated population of 1,583,120 in 1889, and an average rate for the past ten years of 26.60 on an average population of 1,388,737.

AGES.

The total deaths of children under five years of age were 16,305, of which 10,288 were under one year, against 17,152 and 10,527 respectively in 1889. The decrease of 846 in the deaths of children between one and five years of age was of course due to the diminished prevalence of the infectious diseases especially affecting childhood.

The greatest mortality of children under five years of age occurred, as is the rule, in the third or hottest quarter of the year, and of persons over five years, in the first or coldest quarter.

PARTICULAR DISEASES.

Influenza.

The salient feature in the mortality records of the year was the epidemic of influenza, or the "grippe," which began in December, 1889, but did not assume alarming proportions until the last week of that month. It manifested itself first by the startling increase of deaths reported, which ran up in one day from 123 on December 30 to 196 on December 31. The epidemic reached its height in about two weeks, and then slowly abated, lasting altogether about six weeks, the deaths reported in the second week, extending from January 4 to January 11, having reached the almost unprecedented total of 1,424, the largest number ever recorded in this city in a single week since 1865, with the exception of the week ending July 6, 1872, a week of intense and protracted heat, when there were 1,591 deaths, including 212 from sunstroke, of which 68 occurred in a single day. The course of the epidemic, as indicated by the deaths reported daily, is shown in the following table:

DATE.	DEATHS REPORTED.	DEATHS FOR WEEK.	DATE.	DEATHS REPORTED.	DEATHS FOR WEEK.
Week ending December 28....	....	762	January 19.....	146	
December 29.....	139		" 20.....	91	
" 30.....	123		" 21.....	133	
" 31.....	196		" 22.....	135	
January 1.....	165		" 23.....	95	
" 2.....	125		" 24.....	127	
" 3.....	220		" 25.....	145	
" 4.....	234				872
" 5.....	208	1,202	" 26.....	109	
" 6.....	146		" 27.....	124	
" 7.....	235		" 28.....	164	
" 8.....	250		" 29.....	96	
" 9.....	207		" 30.....	90	
" 10.....	202		" 31.....	85	
" 11.....	176		February 1.....	114	
" 12.....	196	1,424			782
" 13.....	159		" 2.....	93	
" 14.....	212		" 3.....	81	
" 15.....	173		" 4.....	137	
" 16.....	125		" 5.....	110	
" 17.....	138		" 6.....	127	
" 18.....	148		" 7.....	102	
		1,151	" 8.....	115	
					765

It became evident very early in the epidemic that the great increase of mortality was chiefly due to diseases of the respiratory organs, although the deaths were directly attributed to influenza in only a minority of the cases. Deaths from bronchitis or pneumonia which were stated to have been complications of influenza were recorded as deaths from influenza, for the same reason that deaths due to similar complications of other zymotic diseases are always classed under the zymotic heading, e. g., deaths from pneumonia or bronchitis complicating measles or whooping-cough are always classified as deaths from measles or whooping-cough, respectively, and not as deaths from pneumonia or bronchitis.

Now, of such deaths classified as due to influenza, there were 314 during the year 1890, 161 males and 153 females. Of these 264 died in January, 140 males and 124 females, including 14 deaths (6 males and 8 females) who were reported during the month as having died from influenza alone, no other cause of death being given.

306 of the 314 deaths took place in the first quarter of the year, including 15 attributed solely to the "grippe." That, in the opinion of some physicians, the traces of the disease still lingered is shown by the report of five deaths due to the "grippe" alone in the second quarter of the year, and three more during the latter half of the year. Thus, for the entire year there were 23 deaths,

mostly of old people, attributed to "la grippe" alone, which, with 7 similar deaths reported in December, 1889, make a total of 30.

The effect of the epidemic is better shown, as already hinted, in the mortality from bronchitis, pneumonia and pulmonary phthisis, the death of many persons afflicted with the latter disease being undoubtedly hastened by the supervention of acute inflammatory processes in the lungs. This effect is shown in the following table:

Deaths in January.

YEAR.	BRONCHITIS.	PNEUMONIA.	PHTHISIS.
1880.....	106	261	402
1881.....	166	366	494
1882.....	218	376	466
1883.....	155	357	473
1884.....	158	348	412
1885.....	157	376	475
1886.....	203	327	490
1887.....	218	480	522
1888.....	191	460	412
1889.....	182	405	445
Average (10 years).....	175	382	457
Corrected for increase of population (average population, 1,388,737)...	206	449	557
1890.....	397	1,111	797

It will be found that the deaths from these three causes in January, 1890, exceeded those in January, 1889, by 1,267, which comes very near accounting for the entire excess of mortality in that month, viz., 1,370. The average number of the deaths from these causes for the ten previous years was 1,014 against 2,299 in 1890, and if this average is increased to correspond with the increase of population, we find a decennial average of only 1,192 against 2,299, showing that what might be called the normal death-rate from these diseases for the month of January was nearly doubled in January, 1890.

Influenza was given as a complicating cause in other cases besides those already mentioned, but not in so many as might have been anticipated. A careful scrutiny of 5,500 certificates of death, beginning with number 1 at the beginning of the year and ending with February 6, covering the epidemic period, gave the following result. (These certificates of course included many reports of deaths that occurred in the last two or three days of December, 1889):

Total number of certificates examined.....	5,500
Influenza given as the sole cause of death.....	18

Influenza given as the sole cause of death.....	18
" ending in pneumonia.....	197
" " bronchitis.....	56
Other deaths from pneumonia.....	1,271
" " bronchitis.....	312

Bright's disease, complicated by influenza	57
Cancer,	2
Congestion of kidneys,	2
Convulsions,	2
Croup,	1
Diabetes,	1
Dysentery,	1
Enterocolitis,	2
Gastritis,	1
Heart disease,	3
Meningitis,	9
Phthisis,	25
Pleurisy,	1
Puerperal mania,	1
Softening of brain,	2

The epidemic pressed most heavily upon adults, and the death-rate of persons over 25 years of age was increased about 30 per cent. This will appear from the following table, showing the deaths by sex and age for the first quarter of the year, as compared with those for the corresponding period of the year 1889 :

YEAR.	UNDER 5.		5-25.		25-45.		45-65.		65 AND OVER.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1890.....	1,950	1,616	587	537	1,551	1,214	1,241	1,007	563	740
1889.....	2,351	2,075	563	612	1,115	844	938	702	432	563

It will be noticed that there is no indication of epidemic influence of any kind affecting persons under 25 years of age. The notable diminution in the deaths of children, as previously explained, is due to the diminished prevalence of contagious diseases. The fatal illnesses caused by the epidemic do not seem to have been brought on especially by exposure to the weather, for the increased mortality is just as evident among females as among males.

INFECTIOUS AND CONTAGIOUS DISEASES.

These diseases were all less prevalent than in 1889, with the exception of measles, the deaths from which numbered 730 against 470 in 1889. Scarlet fever and diphtheria, the two most dreaded diseases of this class, caused, respectively, 408 and 1,262 deaths, against 1,242 and 1,686 in 1889, and an average for the past ten years of 1,012 and 1,638.

The deaths from scarlet fever and diphtheria for the past 25 years show a decided tendency to periodicity in their increase and decrease, as will be seen on referring to the table of total deaths from the most prominent causes since 1865. It will be noticed that these diseases show a tendency to reach their highest point at intervals of 3 or 6 years, e. g., beginning with the first high point after a depression, we find that the greatest mortality from diphtheria was in the years 1869, 1875, 1878, 1881 and 1887, the intervals being 6, 3, 3 and 6 years, while the greatest mortality from scarlet fever was in the years 1870, 1873, 1879, 1882 and 1888, these intervals are 3, 6, 3 and 6 years. It is noticeable that when scarlet fever and diphtheria increase together, the deaths from scarlet fever attain their maximum in the year succeeding the maximum of diphtheria.

DIARRHOEAL DISEASES.

These diseases caused 3,346 deaths during the year, against 3,648 in 1889 and an actual annual average of 3,716 for the previous ten years. The gradual decrease in the actual as well as in the relative number of deaths from diarrhoeal diseases, usually considered so good an indication of the vigor and sanitary environment of a community, is a most gratifying proof of the efficacy of the sanitary laws and regulations which it has been the duty of the Board of Health to execute, often in the face of determined opposition and the most contemptuous criticism.

OTHER CAUSES.

Of other diseases there seem to be none that call for special mention. There was one death from hydrophobia during the year, and two from the electric current. The deaths from suicide numbered 239, against 244 for the previous year. The number of suicides varies little from year to year relatively to the population. Most of the persons are foreign born, probably disappointed at not finding an Eldorado on this side of the ocean. There are more males than females, and more between thirty-five and fifty-five than at other ages, viz.: 102 out of a total of 190 males, and the majority of those between thirty-five and forty-five, a time of life when people first begin to fear that disappointments and failures in life are irremediable. Of the total of 239 suicides, the Germans furnished 81, or more than one-third. 120 of the 190 males died by shooting or hanging, while 26 out of 49 females, or more than one-half, chose poison, and ten of these selected Paris green, a horrible death, attended with great suffering, but one that can apparently be compassed without difficulty, notwithstanding the laws regulating the sale of poisons.

NATIVITY.

Of the grand total of 40,103 deaths, 24,736 were of persons born in the United States. When it is considered that this number includes almost all of the deaths of children, it is a surprisingly

small proportion, only three-fifths, and shows very graphically what a foreign city New York is getting to be. This will be still more apparent if we consider the parentage of the deceased, for out of the total of 40,103, only 7,253, or a little more than one in six, were the children of parents who were both natives of the United States. Of the foreign born 6,622 were natives of Ireland, and 4,198 of Germany, while 10,996 were of Irish parentage and 7,280 of German.

The cause of the greatest number of deaths among persons born in the United States and also of those of native parentage was pneumonia, while the most prominent cause of death among the Irish and Germans, as well as among those of Irish and German parentage, was phthisis pulmonalis. This would seem to indicate that the January epidemic affected the native stock more severely than the foreign.

The great relative number of deaths from measles among persons of Italian birth or blood indicates a peculiar susceptibility to that disease. Out of a total of 730 deaths from measles, 154 were of persons of Italian parentage, more than one-fifth of the whole number, and more than any other nationality furnished.

DEATHS IN INSTITUTIONS.

Out of the total of 8,315 deaths in institutions, 3,431 were born in the United States, 2,072 in Ireland and 1,058 in Germany, while only 940 were of native parentage; 2,727, nearly one-third of the whole, were of Irish parentage and 1,105 of German parentage.

BIRTHS AND MARRIAGES.

While the registration of deaths is complete, it is not so with the births and marriages. A certain number, supposed to be at least one-fourth of the whole escape registration. This imperfection in the records renders them useless for statistical purposes, as the other fourth, if obtained, might change the whole aspect of tables that had been compiled from three-fourths. The non-registration of a birth or marriage is in after years a frequent cause of embarrassment and delay in the adjustment of legal and social relations. If those who attend at the birth of infants or who perform the marriage ceremony could see and appreciate, as it is seen in this office, the trouble and expense and delay caused by a hiatus in our birth and marriage records, it is certain that they would send reports of all such cases to us with unhesitating cheerfulness.

There was a gratifying increase in the number of births and marriages reported during the year, the births coming nearer to the deaths than ever before. It is to be hoped that this improvement will continue.

Respectfully submitted,

ROGER S. TRACY, M. D., Register.

March 4, 1891.

REPORT OF VITAL STATISTICS.

YEAR ENDING DECEMBER 31, 1890.	CERTIFICATES RECEIVED AND TABULATED.	INCREASE OVER PREVIOUS YEAR.	DECREASE FROM PREVIOUS YEAR.	RATE PER 1,000, POPULATION ESTIMATED AT 1,031,232.	BURIAL PERMITS ISSUED.	TRANSIT PERMITS ISSUED.	CORONERS' CASES.	SEARCHES MADE.	TRANSCRIPTS ISSUED.	INDEXED.
Marriages.....	14,992	592	....	9.19	....	....	....	1,681	864	14,992
Births.....	39,250	1,723	....	24.06	....	....	....	1,374	808	39,250
Deaths.....	40,230	647	....	24.66	40,230	755	4,432	7,654	6,886	40,230
Still-births.....	3,315	....	34	2.03	3,315	....	....	....	....	3,315

Particulars Regarding Births, Deaths, Marriages and Still-births Reported during Year ending December 31, 1890.

	TOTAL.	WHITE.		COLORED.		NATIVE PARENTS.		FOREIGN PARENTS.		PARENTAGE OF MIXED NATIVITY.		PARENTAGE UNKNOWN OR NOT STATED.		SINGLE.		MARRIED.		WIDOWED.		NOT STATED.		NON-RESIDENTS.	The Returns of Births, Marriages and Still-births are Incomplete.											
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		MONTH OF UTERO-GESTATION.											
																							1	2	3	4	5	6	7	8	9	10	Not Stated.	
Marriages.....	14,992	14,776	14,787	216	205	....	....	....	....	....	....	....	....	13,187	13,460	....	....	1,770	1,483	35	49	....	1	2	3	4	5	6	7	8	9	10	Not Stated.
Births.....	39,250	20,070	18,748	228	204	5,101	4,794	11,385	10,643	3,343	3,029	469	486	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Deaths.....	40,230	21,059	18,253	464	454	3,762	3,442	13,786	12,121	2,271	2,100	1,704	1,044	13,371	10,377	6,012	4,782	1,805	3,434	335	114	137	....	6	49	150	220	401	488	523	1,471	6	1
Still-births *	3,315	1,864	1,342	58	28	499	352	1,020	710	269	194	124	114	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

* 21, sex not stated; 2, color not stated.

Places where Deaths Occurred during Year 1890—(Actual Number of Deaths).

Institutions.....	8,315	Hotels and boarding-houses.....	481
Tenement-houses, three families or more.....	26,125	Elsewhere.....	565
Dwellings, with less than three families.....	4,617		

Deaths of Males and Total of both Sexes in New York City, by Age, Color and Cause of Death, Year ending December 31, 1890.

CAUSE OF DEATH.	TOTAL BOTH SEXES.	ALL AGES.	0	1	2	3	4	TOTAL UNDER 5.	5	10	15	20	25	35	45	55	65	75	85	Colored.
I. SPECIFIC FEBRILE (ZYMOTIC) DISEASES.																				
<i>Miasmatic.</i>																				
Small-pox.....	2	2	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Chicken-pox.....	4	2	1	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Measles.....	730	385	121	139	59	35	11	365	16	..	..	..	2	1	..	1	..	..	..	..
Scarlet fever.....	408	201	9	35	39	30	30	143	50	5	2	..	1	..	..	..	..	..	..	3
Diphtheria.....	1,262	653	67	157	129	108	68	529	109	8	1	..	3	1	1	..	1	..	..	6
Mumps.....	6	4	2	..	..	..	..	2	..	..	1	..	..	..	..	..	1	..	..	..
Whooping Cough.....	487	213	115	49	30	4	6	204	7	..	1	..	..	1	..	..	..	..	..	8
Fever, Typhoid.....	352	201	1	2	1	4	..	8	9	10	15	38	60	27	18	7	9	..	..	5
Influenza.....	314	161	9	4	3	2	..	18	..	1	6	11	30	33	30	17	12	3	..	5
Fever, Cerebro-spinal.....	136	58	16	11	5	2	4	38	6	5	..	2	3	2	..	1	..	1	..	1
Total Miasmatic Diseases.....	3,701	1,880	341	398	266	185	119	1,309	197	29	26	51	99	65	51	26	23	4	..	28
<i>Diarrhoeal.</i>																				
Cholera Morbus.....	57	30	2	2	1	1	..	6	..	..	..	..	2	3	6	5	6	2	..	..
" Infantum.....	1,486	798	651	137	9	1	..	798	..	..	..	..	..	..	..	..	..	..	..	22
Diarrhoea, Enterocolitis.....	1,615	838	633	101	12	3	..	749	1	..	2	2	9	11	16	9	18	18	3	14
Dysentery.....	188	92	26	12	3	1	2	44	4	..	2	5	8	5	6	8	5	4	1	..
Total Diarrhoeal Diseases.....	3,346	1,758	1,312	252	25	6	2	1,597	5	..	4	7	19	19	28	22	29	24	4	36
<i>Zoogenous.</i>																				
Hydrophobia.....	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Malignant Pustule.....	4	3	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..
Total Zoogenous Diseases.....	5	4	..	..	..	..	..	..	..	..	1	..	3	..	..	..	..	..	..	..

CAUSE OF DEATH.	TOTAL BOTH SEXES.	ALL AGES.	0	1	2	3	4	TOTAL UNDER 5.	5	10	15	20	25	35	45	55	65	75	85	Colored.
Syphilis.....	161	87	49	1	1	1	..	52	..	1	1	..	12	9	4	3	4	1	..	3
<i>Septic.</i>																				
Erysipelas.....	148	72	42	3	1	..	..	46	..	..	..	1	1	5	8	3	4	2	2	3
Pyæmia, Septicæmia.....	10	6	..	1	..	..	..	1	..	..	..	1	..	2	2	..	..	..	..	..
Puerperal Fever.....	208	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Septic Diseases.....	366	78	42	4	1	..	..	47	..	..	..	2	1	7	10	3	4	2	2	3
Other Zymotic Diseases.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Zymotic Diseases.....	7,756	3,881	1,752	659	298	197	124	3,030	207	33	34	63	140	110	99	61	66	32	6	72
II. PARASITIC DISEASES.																				
Aphthæ (Thrush).....	19	11	10	..	..	..	..	10	1	..	..	..	..	..	..	..	..	..	..	..
Other Parasitic Diseases.....	5	2	..	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
Total Parasitic Diseases.....	24	13	10	..	1	..	..	11	2	..	..	..	..	..	..	..	..	..	..	..
III. DIETETIC DISEASES.																				
Starvation, want of Breast Milk.....	2	2	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
Scurvy.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Intemperance—Alcoholism.....	276	219	..	..	..	..	1	1	..	2	1	5	71	74	37	24	2	2	..	1
Total Dietetic Diseases.....	279	221	1	..	..	..	1	2	..	3	1	5	71	74	37	24	2	2	..	1
IV. CONSTITUTIONAL DISEASES.																				
Acute Rheumatism (Rheumatism of the Heart)....	134	76	2	..	1	1	1	5	3	2	4	3	10	13	16	10	8	2	..	3
Rheumatism.....	20	9	..	..	..	..	..	..	1	..	1	1	..	1	2	1	1	1	..	..
Gout.....	6	5	..	..	..	..	..	..	..	..	..	..	..	1	2	..	1	1	..	..
Rickets.....	20	15	7	3	4	..	..	14	1	..	..	..	..	..	..	..	..	..	..	2
Cancer.....	954	356	1	..	..	3	..	4	1	2	1	5	13	57	81	105	70	13	4	3
Tabes Mesenterica.....	38	22	17	4	..	..	1	22	..	..	..	..	..	..	..	..	..	..	..	..
Tubercular Meningitis.....	598	340	132	79	31	23	13	278	24	8	4	1	9	9	4	2	..	1	..	7
Phthisis.....	5,492	3,160	30	24	10	5	7	76	14	8	123	380	955	755	483	242	96	26	2	88
Other forms of Tuberculosis, Scrofula.....	230	124	52	10	6	1	2	71	2	2	5	6	18	8	4	3	4	1	..	7
Purpura, Hæmophilia.....	23	15	8	..	1	..	..	9	..	..	3	2	1	..	..	..	..	..	..	..
Anæmia, Chlorosis, Leucocythæmia.....	62	20	5	..	1	..	1	7	..	..	1	2	2	1	3	4	..	..	..	..
Diabetes.....	130	72	..	..	..	..	..	..	..	1	4	5	6	6	13	21	13	2	1	1
Other Constitutional Diseases.....	28	15	1	1	..	1	..	3	1	..	..	..	8	1	1	1	..	..	..	..
Total Constitutional Diseases.....	7,735	4,229	255	121	54	34	25	489	47	23	146	405	1,022	852	609	389	193	47	7	111
V. DEVELOPMENTAL DISEASES.																				
Premature Birth.....	744	413	413	..	..	..	..	413	..	..	..	..	..	..	..	..	..	..	..	14
Atelectasis.....	171	96	95	1	..	..	..	96	..	..	..	..	..	..	..	..	..	..	..	4
Cyanosis.....	121	74	73	1	..	..	..	74	..	..	..	..	..	..	..	..	..	..	..	2
Umbilical Hemorrhage.....	16	8	8	..	..	..	..	8	..	..	..	..	..	..	..	..	..	..	..	..
Spina Bifida.....	21	10	10	..	..	..	..	10	..	..	..	..	..	..	..	..	..	..	..	..
Imperforate Anus.....	13	10	10	..	..	..	..	10	..	..	..	..	..	..	..	..	..	..	..	..
Cleft Palate, Hare Lip.....	9	4	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..
Other Congenital Defects.....	23	7	7	..	..	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..
Old Age.....	571	193	..	..	..	..	..	..	..	..	..	..	..	1	7	13	42	92	38	4
Total Developmental Diseases.....	1,689	815	620	2	..	..	..	622	..	..	..	..	..	1	7	13	42	92	38	24
VI. LOCAL DISEASES.																				
<i>Diseases of Nervous System.</i>																				
Meningitis, Encephalitis.....	856	448	162	83	35	19	14	313	29	16	5	6	16	14	22	14	11	2	..	5
Chronic Hydrocephalus.....	45	31	20	5	1	1	3	30	1	..	..	..	..	..	..	..	..	..	..	1
Apoplexy.....	931	477	7	..	1	1	..	9	..	1	..	4	31	51	99	122	108	45	7	7
Softening of Brain.....	71	37	..	..	..	..	..	..	..	..	..	..	2	6	3	11	11	4	..	..
Hemiplegia, Brain Paralysis.....	133	59	..	..	1	..	..	1	..	..	6	..	1	4	6	14	19	6	2	1
Insanity, General Paresis.....	252	162	..	..	..	..	..	..	..	..	2	2	27	54	36	14	13	13	1	4
Epilepsy.....	76	37	5	4	1	..	..	10	1	2	3	5	5	5	2	2	2	..	..	1
Convulsions.....	493	295	239	42	7	3	..	291	4	..	..	..	..	..	..	..	..	..	..	4
Congestion of Brain.....	102	59	37	8	2	..	3	50	1	..	..	..	3	2	..	1	2	..	..	2
Laryngismus Stridulus.....	12	7	5	..	2	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..
Idiopathic Tetanus, Trismus.....	48	23	20	..	..	..	..	20	1	..	..	..	..	1	..	1	..	..	..	..
Paraplegia, Myelitis.....	92	54	..	1	..	2	..	3	..	..	1	2	3	10	12	13	8	2	..	1
Other Diseases Nervous System.....	99	61	1	2	3	..	3	9	2	2	1	5	7	8	10	9	4	4	..	1
Total Diseases Nervous System.....	3,210	1,750	496	145	53	26	23	743	39	21	18	24	95	155	190	201	178	76	10	27
<i>Diseases Organs of Special Sense.</i>																				
Otitis, Otorrhœa, Mastoid Abscess.....	58	40	9	3	1	..	1	14	3	5	2	4	4	3	3	1	..	1	..	..
Other Diseases Eye, Ear and Nose.....	2	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Total Diseases Organs Special Sense.....	60	41	9	3	1	..	1	14	3	5	2	4	5	3	3	1	..	1	..	..
<i>Diseases of Circulatory System.</i>																				
Endocarditis, Valvular Disease of Heart.....	1,371	694	7	..	..	3	6	16	16	20	37	30	75	116	144	114	71	49	6	21
Pericarditis.....	85	43	..	..	..	..	..	..	1	3	4	4	12	4	9	2	2	2	..	..
Hypertrophy of Heart.....	77	48	..	..	..	..	..	..	..	..	..	3	1	6	6	20	8	4	..	..

CAUSE OF DEATH.	TOTAL BOTH SEXES.	ALL AGES.	0	1	2	3	4	TOTAL UNDER 5.	5	10	15	20	25	35	45	55	65	75	85	Colored.
Puerperal Mania.....	6	....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Placenta Prævia, Flooding.....	32	....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Post-Partum Hemorrhage.....	8	....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of Parturition	38	....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Diseases of Parturition	175	....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<i>Diseases of Organs of Locomotion.</i>																				
Caries, Necrosis	31	19	..	..	..	..	..	..	2	4	..	1	2	3	4	1	2	..	..	..
Arthritis, Osteitis, Periostitis.....	19	13	..	1	..	..	..	1	1	1	2	2	1	2	..	3	..	..	..	1
Spinal Disease.....	37	19	..	..	2	1	1	4	4	3	1	1	3	..	..	1	2	..	..	1
Hip Disease.....	14	4	..	..	..	1	..	1	1	1	1	..	..	..	..	..	..	..	..	..
Other Diseases, Locomotor System	13	10	5	..	..	..	..	5	1	..	..	..	..	2	..	..	1	1	..	..
Total Diseases of Organs of Locomotion...	114	65	5	1	2	2	1	11	9	9	4	4	6	7	4	5	5	1	..	2
<i>Diseases of the Integumentary System.</i>																				
Carbuncle.....	11	7	..	..	..	..	..	..	..	..	1	..	..	2	..	2	2	..	..	..
Phlegmon, Cellulitis	10	3	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..
Ulcer, Bedsore	14	6	2	1	..	..	..	3	..	..	..	1	..	..	..	..	..	1	1	..
Eczema	11	4	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..
Pemphigus	9	2	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of Integumentary System.....	41	21	7	3	..	..	..	10	1	1	1	..	4	2	1	1	..	..	..	..
Total Diseases of Integumentary System...	95	43	15	4	..	..	..	19	1	1	2	1	4	4	3	3	3	1	1	..
Total Local Diseases	19,470	10,244	2,213	807	329	180	96	3,625	230	101	182	283	935	1,179	1,274	1,152	841	377	65	219
VII. VIOLENCE.																				
<i>Accident and Negligence.</i>																				
Fractures, Contusions.....	731	579	5	8	9	10	18	50	35	24	21	48	118	123	64	58	29	8	1	12
Wounds.....	32	28	..	..	..	..	..	..	1	3	7	2	3	6	4	1	1	..	..	1
Cut, Stab.....	4	3	..	..	..	..	..	..	..	..	1	..	..	2	..	..	..	..	..	..
Burn, Scald.....	120	55	4	12	10	7	5	38	1	..	1	1	4	6	1	..	2	1	..	2
Poison	62	38	..	1	..	1	..	2	..	..	2	3	10	9	9	..	2	1	..	..
Drowning	221	196	1	1	..	..	3	5	18	14	9	12	45	53	21	14	3	2	..	2
Suffocation	96	52	25	3	1	..	..	29	..	..	2	..	10	7	1	2	1	..	..	2
Sunstroke	62	47	1	1	..	..	..	2	..	..	2	3	14	13	5	3	4	1	..	..
Surgical Operations	116	53	10	..	2	1	..	13	1	1	2	2	6	9	9	5	4	1	..	1
Electric Current.....	2	2	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
Neglect, Exposure.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Forms	2	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Total Accident and Negligence.....	1,449	1,054	46	26	22	19	26	139	56	42	47	72	211	229	114	83	46	14	1	20
<i>Homicide.</i>																				
Blows.....	19	13	..	..	..	..	..	..	..	..	2	2	2	5	1	1	..	..	..	..
Cut, Stab.....	12	10	..	..	..	..	..	..	..	..	..	1	5	..	3	1	..	..	..	1
Gunshot	15	10	..	..	..	..	..	..	..	..	3	..	5	1	..	1	..	..	..	2
Poison	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Methods	14	11	1	..	..	..	..	1	1	..	..	2	1	4	2	..	..	..	..	2
Total Homicides.....	61	44	1	..	..	..	..	1	1	..	5	5	13	10	6	3	..	..	..	5
<i>Suicide.</i>																				
Cut, Stab.....	21	20	..	..	..	..	..	..	..	..	..	1	6	6	5	2	..	..	..	..
Drowning.....	5	3	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..
Gunshot.....	87	81	..	..	..	..	..	..	..	..	3	9	17	24	17	8	3	..	..	..
Hanging	41	38	..	..	..	..	..	..	..	..	1	1	9	12	12	1	2	..	..	1
Leaps	12	3	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..
Poison	63	38	..	..	..	..	..	..	..	..	2	2	8	10	10	4	1	1	..	..
Other Methods	10	7	..	..	..	..	..	..	..	..	..	2	1	1	1	2	..	..	..	..
Total Suicides	239	190	..	..	..	..	..	..	..	..	6	15	43	57	45	17	6	1	..	1
Total Violence.....	1,749	1,288	47	26	22	19	26	140	57	42	58	92	267	296	165	103	52	15	1	26
VIII. ILL-DEFINED OR NOT SPECIFIED CAUSES.																				
Debility, Marasmus, Inanition	1,280	663	620	32	6	1	1	660	..	..	1	..	..	..	1	..	..	1	..	14
Injury at Birth	114	78	78	..	..	..	..	78	..	..	..	..	..	..	..	..	..	..	..	1
Other Ill-defined Causes	7	3	2	..	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..
Total Ill-defined Causes.....	1,401	744	700	32	6	1	1	740	..	..	1	..	..	..	1	1	..	1	..	15
I. Specific Febrile Diseases.																				
II. Parasitic Diseases.....	24	13	10	..	1	..	..	11	2	..	..	..	..	..	..	..	..	..	..	..
III. Dietetic Diseases.....	279	221	1	..	..	..	1	2	..	3	1	5	71	74	37	24	2	2	..	1
IV. Constitutional Diseases.....	7,735	4,229	255	121	54	34	25	489	47	23	146	405	1,022	852	609	389	193	47	7	111
V. Developmental Diseases	1,689	815	620	2	..	..	..	622	..	..	..	..	..	1	7	13	42	92	38	24
VI. Local Diseases	19,470	10,244	2,213	807	329	180	96	3,625	230	101	182	283	935	1,179	1,274	1,152	841	377	65	219
VII. Violence	1,749	1,288	47	26	22	19	26	140	57	42	58	92	267	296	165	103	52	15	1	26
VIII. Ill-defined Causes.....	1,401	744	700	32	6	1	1	740	..	..	1	..	..	..	1	1	..	1	..	15
Total, all causes	40,103	21,435	5,598	1,647	710	431	273	8,659	543	202	422	848	2,435	2,512	2,192	1,743	1,196	566	117	468

Deaths of Females in New York City by Age, Color and Cause of Death, Year Ending December 31, 1890.

CAUSE OF DEATH.	ALL AGES.	0	1	2	3	4	TOTAL UNDER 5.	5	10	15	20	25	35	45	55	65	75	85	Colored.
I.—SPECIFIC FEBRILE (ZYMOTIC) DISEASES.																			
Miasmatic.																			
Chicken Pox.....	2	1	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Measles.....	345	99	141	51	23	13	327	15	1	..	..	1	..	..	..	1	..	..	2
Scarlet Fever.....	207	14	40	42	36	24	156	39	6	2	..	4	..	..	..	..	..	..	1
Diphtheria.....	609	47	118	124	112	61	462	118	11	4	3	4	5	2	..	..	..	..	8
Mumps.....	2	1	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough.....	274	133	79	33	17	6	268	6	..	..	..	..	..	..	..	..	..	..	8
Fever, Typhoid.....	151	..	2	..	1	3	6	8	13	17	26	31	28	16	3	2	1	..	3
" Influenza.....	153	10	2	2	..	1	15	2	..	4	10	12	23	29	24	23	9	2	6
" Cerebro-spinal.....	78	15	16	6	5	2	44	11	4	6	3	2	3	3	1	..	1	..	1
Total Miasmatic Diseases.....	1,821	320	400	258	194	110	1,282	199	35	33	42	54	59	50	28	26	11	2	29
Diarrheal.																			
Cholera Morbus.....	27	1	..	..	..	..	1	1	..	2	..	3	4	5	5	6	..	..	..
" Infantum.....	688	554	120	11	..	1	686	2	..	..	..	..	..	..	..	..	..	..	15
Diarrhoea, Enterocolitis.....	777	556	104	12	1	1	674	5	1	3	4	8	13	17	18	21	10	3	14
Dysentery.....	96	20	9	5	2	3	39	3	1	1	3	9	6	13	6	6	6	3	1
Total Diarrheal Diseases.....	1,588	1,131	233	28	3	5	1,400	11	2	6	7	20	23	35	29	33	16	6	30
Malarial Fevers.....	102	6	7	4	5	3	25	4	1	2	2	13	16	9	16	11	2	1	3
Zoogenous.																			
Malignant Pustule.....	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Total Zoogenous Diseases.....	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis.....	74	37	2	1	1	..	41	..	..	1	2	10	12	5	3	..	..	..	4
Septic.																			
Erysipelas.....	76	42	..	..	..	..	42	..	..	1	2	4	3	9	6	2	6	1	2
Pyæmia, Septicæmia.....	4	1	..	..	..	..	1	..	..	1	..	..	1	1	..	..	..	..	..
Puerperal Fever.....	208	..	..	..	..	..	..	..	..	9	54	109	35	1	..	..	..	..	5
Total Septic Diseases.....	288	43	..	..	..	..	43	..	..	11	56	113	39	11	6	2	6	1	7
Other Zymotic Diseases.....	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Total Zymotic Diseases.....	3,875	1,537	643	291	203	118	2,792	215	38	53	109	210	149	110	82	72	35	10	73
II.—PARASITIC DISEASES.																			
Aphthæ (Thrush).....	6	8	..	..	..	..	8	..	..	..	..	..	..	..	..	..	..	..	..
Other Parasitic Diseases.....	3	1	..	2	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Total Parasitic Diseases.....	11	9	..	2	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..
III.—DIETETIC DISEASES.																			
Scurvy.....	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Intemperance—Alcoholism) " Del. Tremens)	57	..	..	..	..	..	..	..	..	..	2	15	25	10	5	..	..	..	1
Total Dietetic Diseases.....	58	..	..	..	..	..	..	..	..	..	2	15	26	10	5	..	..	..	1
IV.—CONSTITUTIONAL DISEASES.																			
Acute Rheumatism Rheumatism of the Heart.....	58	..	..	..	..	..	..	4	4	3	2	8	7	7	8	10	5	..	2
Rheumatism.....	11	..	..	..	..	..	..	..	1	..	..	1	3	3	1	1	1	..	..
Gout.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Rickets.....	5	2	2	..	..	..	4	1	..	..	..	..	..	..	..	..	..	..	1
Cancer.....	598	1	..	2	..	..	3	..	1	5	2	41	130	158	140	82	32	4	7
Tabes Mesenterica.....	16	9	2	1	..	..	12	3	..	..	..	1	..	..	..	..	..	..	2
Tubercular Meningitis.....	258	92	70	33	19	8	222	20	4	2	3	3	3	..	..	1	..	..	6
Phthisis.....	2,332	31	23	12	7	2	75	25	45	161	337	731	468	268	137	57	27	1	95
Other forms of Tuberculosis, Scrofula.....	106	37	12	10	3	3	71	4	..	4	6	10	4	3	2	1	1	..	8
Purpura, Hæmophilia.....	8	5	..	..	..	..	5	..	..	1	..	..	1	..	1	..	..	..	..
Anæmia, Chlorosis, Leucocythæmia.....	42	8	1	..	..	..	9	1	1	5	2	8	4	3	6	2	1	..	..
Diabetes.....	58	..	..	..	..	..	..	1	1	1	2	3	5	13	12	13	7	..	..
Other Constitutional Diseases.....	13	1	..	1	..	..	2	..	1	..	..	3	1	2	1	3	..	..	..
Total Constitutional Diseases.....	3,506	186	116	59	29	13	403	59	58	182	354	809	626	457	308	171	74	5	121
V.—DEVELOPMENTAL DISEASES.																			
Premature Birth.....	331	331	..	..	..	..	331	..	..	..	..	..	..	..	..	..	..	..	4
Atelectasis.....	75	75	..	..	..	..	75	..	..	..	..	..	..	..	..	..	..	..	2
Cyanosis.....	47	46	..	..	..	..	46	..	1	..	..	..	..	..	..	..	..	..	..
Umbilical Hemorrhage.....	8	8	..	..	..	..	8	..	..	..	..	..	..	..	..	..	..	..	1
Spina Bifida.....	11	11	..	..	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..
Imperforate Anus.....	3	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Cleft Palate, Hare Lip.....	5	5	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..
Other Congenital Defects.....	16	16	..	..	..	..	16	..	..	..	..	..	..	..	..	..	..	..	..
Old Age.....	378	..	..	..	..	..	..	..	..	..	..	1	1	5	23	83	153	112	23
Total Developmental Diseases.....	874	495	..	..	..	..	495	..	1	..	..	1	1	5	23	83	153	112	30
VI.—LOCAL DISEASES.																			
Diseases of Nervous System.																			
Meningitis, Encephalitis.....	408	148	83	29	24	18	302	26	10	9	9	16	14	10	3	5	4	..	7
Chronic Hydrocephalus.....	14	8	3	2	..	..	13	..	..	..	..	..	..	..	1	..	..	..	1
Apoplexy.....	454	9	1	1	..	1	12	1	..	5	2	13	39	75	126	109	63	9	7
Softening of Brain.....	34	..	..	..	..	..	..	..	..	..	..	..	6	3	9	8	7	1	1
Hemiplegia, Brain Paralysis.....	74	..	..	..	..	..	..	..	..	..	1	1	6	13	17	17	13	6	4

CAUSE OF DEATH.	ALL AGES.	0	1	2	3	4	TOTAL UNDER 5.	5	10	15	20	25	35	45	55	65	75	85	Colored.
Insanity, General Paresis.....	90	..	..	..	..	..	..	..	..	..	4	14	19	19	12	12	6	4	2
Epilepsy.....	39	2	4	2	..	..	8	2	3	5	2	3	7	2	1	5	1	..	1
Convulsions.....	198	154	34	8	..	1	197	1	..	..	..	..	..	..	..	..	..	..	5
Congestion of Brain.....	43	24	10	2	..	..	36	1	1	..	..	1	1	..	1	..	2	..	1
Laryngismus Stridulus.....	5	4	1	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..
Idiopathic Tetanus, Trismus.....	25	22	..	..	..	..	22	1	..	..	..	2	..	..	..	..	..	..	..
Paraplegia, Myelitis.....	38	..	1	..	..	..	1	1	..	..	1	2	12	7	8	5	1	..	1
Other Diseases Nervous System.....	38	..	..	..	2	..	2	1	1	1	1	9	7	6	5	3	2	..	1
Total Diseases Nervous System.....	1,460	371	137	44	26	20	598	34	15	20	20	61	111	135	183	164	99	20	37
Otitis, Otorrhœa, Mastoid Abscess.....	18	4	3	1	..	..	8	2	..	..	1	2	2	..	3	..	..	..	..
Other Diseases Eye, Ear and Nose.....	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Total Diseases Organs Special Sense.....	19	5	3	1	..	..	9	2	..	..	1	2	2	..	3	..	..	..	..
<i>Diseases of Circulatory System.</i>																			
Endocarditis, Valvular Disease of Heart.....	677	6	..	2	..	3	11	20	39	41	33	69	105	111	113	83	45	7	27
Pericarditis.....	42	..	..	..	..	..	..	2	4	1	1	7	5	6	11	4	1	..	..
Hypertrophy of Heart.....	29	..	..	..	1	..	1	1	1	..	..	2	4	3	8	6	2	1	1
Fatty Degeneration of Heart.....	89	..	..	..	..	..	..	..	..	..	1	8	13	24	21	16	4	2	1
Heart Disease.....	103	..	1	..	..	1	2	3	4	3	2	5	13	16	29	18	6	2	1
Angina Pectoris.....	15	..	..	..	..	..	..	..	..	..	..	1	2	3	5	2	2	..	..
Aneurysm.....	11	..	..	..	..	..	..	..	..	..	..	1	5	2	1	2	..	..	1
Senile Gangrene.....	18	..	..	..	..	..	..	..	..	..	..	..	..	2	2	5	5	4	..
Embolism, Thrombosis.....	21	..	..	..	..	..	..	..	2	1	1	2	6	5	4	..	..	..	1
Phlebitis.....	6	2	..	..	..	..	2	..	..	..	..	1	..	1	1	1	..	..	..
Other Diseases Circulatory System.....	8	..	..	..	..	..	..	1	..	..	..	..	1	..	..	3	..	3	..
Total Diseases Circulatory System.....	1,019	8	1	2	1	4	16	27	48	47	38	95	150	174	196	144	65	19	32
<i>Diseases of Respiratory System.</i>																			
Croup.....	254	24	70	56	50	29	229	21	2	..	2	..	..	..	..	..	..	..	1
Laryngitis.....	22	6	7	3	3	..	19	..	..	..	..	1	..	1	1	..	..	..	..
Other Diseases Larynx and Trachea.....	5	2	..	..	..	..	2	1	..	..	..	..	..	..	1	1	..	..	..
Emphysema, Asthma.....	50	..	..	..	..	..	..	..	..	..	..	2	5	6	14	10	10	3	2
Bronchitis.....	1,022	447	154	46	14	5	666	10	4	8	8	26	27	50	68	72	61	22	19
Chronic Bronchitis.....	166	4	3	2	2	..	11	1	1	1	3	10	19	14	44	35	18	9	4
Pneumonia.....	2,230	435	325	119	52	38	969	48	21	50	77	203	213	203	190	147	85	24	55
Pleurisy.....	55	8	2	2	1	..	13	2	1	1	3	6	6	7	11	3	1	1	3
Hydrothorax, Empyema.....	11	3	..	3	..	..	6	..	..	1	1	..	1	..	2	..	..	..	..
Congestion of Lungs.....	45	27	3	..	..	1	31	..	1	1	..	..	2	2	2	2	3	1	1
Hemorrhage of Lungs.....	15	3	..	..	..	..	3	..	..	..	2	1	1	5	..	2	1	..	1
Other Diseases Respiratory System.....	18	2	1	..	..	..	3	1	..	..	2	1	3	2	2	2	1	1	..
Total Diseases Respiratory System.....	3,893	961	565	231	122	73	1,952	84	30	62	98	250	277	290	335	274	180	61	86
<i>Diseases of Digestive System.</i>																			
Stomatitis.....	6	6	..	..	..	..	6	..	..	..	..	..	..	..	..	..	..	..	2
Dentition.....	40	28	12	..	..	..	40	..	..	..	..	..	..	..	..	..	..	..	2
Tonsillitis, Quinsy.....	5	1	..	1	1	1	4	..	..	..	..	..	..	..	..	..	1	..	1
Gastritis.....	128	19	9	6	..	1	35	2	..	..	1	12	12	19	22	12	8	5	4
Gastro-Enteritis.....	346	250	41	9	4	1	305	6	..	..	5	5	5	4	4	5	4	3	5
Ulcer of Stomach.....	26	1	..	..	..	1	2	1	..	2	2	3	2	8	1	4	1	..	..
Enteritis.....	92	55	7	3	1	..	66	4	2	2	..	1	5	4	2	5	1	..	1
Ulcer of Intestine, Chronic Diarrhœa.....	37	4	1	1	1	..	7	..	..	..	2	1	1	5	7	6	7	1	..
Ileus, Obstruction of Intestine.....	29	2	1	..	..	..	3	1	..	2	4	3	3	5	3	..	5	..	..
Stricture or Strangulation of Intestine.....	19	2	..	1	1	..	4	1	2	..	..	2	..	4	3	1	1	1	..
Intussusception of Intestine.....	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..
Typhlitis, Perityphlitis, Per. verm. app.....	27	1	..	..	..	..	1	1	1	4	3	9	2	5	..	1	..	..	..
Hernia.....	42	..	..	..	..	..	..	..	..	..	..	2	4	12	13	5	4	2	..
Peritonitis.....	124	12	1	1	1	1	16	10	6	9	15	23	16	12	8	7	2	..	4
Hepatitis.....	41	..	..	..	..	..	..	1	..	..	..	6	10	5	11	7	1	..	..
Cirrhosis.....	131	..	..	..	..	..	..	..	..	..	3	12	28	34	35	13	5	1	1
Jaundice.....	14	10	..	..	..	..	10	..	..	..	..	..	..	2	..	2	..	..	..
Gall-stones, Biliary Colic, etc.....	17	1	..	..	..	..	1	..	..	..	..	2	2	5	3	1	3	..	..
Other Diseases of Liver.....	34	2	..	..	..	..	2	..	..	..	1	7	6	5	9	3	1	..	1
Other Diseases of Digestive System.....	71	22	5	1	..	1	29	1	1	1	4	3	12	9	6	3	1	1	1
Total Diseases of Digestive System.....	1,231	416	77	23	9	6	531	28	12	20	40	92	108	138	127	76	45	14	22
<i>Diseases of Lymphatic System and Ductless Gland.</i>																			
Lymphadenoma (Hodgkin's Disease).....	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Exophthalmic Goitre (Basedow's Disease).....	2	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..
Addison's Disease.....	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Other Diseases, Lymphatic System.....	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Total Diseases of Lymphatic System.....	5	1	..	..	..	..	1	1	1	..	..	..	1	1	..	..	..	..	..
<i>Diseases of the Urinary System.</i>																			
Acute Nephritis.....	199	4	4	2	4	..	14	11	3	1	16	28	42	35	21	20	8	..	3
Bright's Disease, Albuminuria.....	935	2	..	2	3	2	9	4	2	13	44	113	156	221	170	142	47	14	32
Uræmia, Suppression of Urine.....	19	5	2	1	1	..	9	..	..	..	1	1	..	4	2	..	1	1	1
Calculus.....	5	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	..	..	..
Diseases of Bladder and Prostate Gland.....	10	..	..	..	..	..	..	..	1	..	..	..	1	5	..	..	2	1	..
Other Diseases, Urinary System.....	13	..	..	1	..	..	1	..	..	..	1	4	2	2	..	1	..	..	..
Total Diseases of Urinary System.....	1,181	11	6	6	8	2	33	15	5	15	62	146	201	264	202	163	59	16	36

CAUSE OF DEATH.	ALL AGES.	0	1	2	3	4	TOTAL UNDER 5.	5	10	15	20	25	35	45	55	65	75	85	Colored.
<i>Diseases of Organs of Generation.</i>																			
Ovarian Diseases.....	50	..	..	..	..	..	..	..	..	..	8	17	7	9	8	1	..	..	..
Diseases of Uterus and Vagina.....	47	..	..	..	..	..	..	..	..	..	4	19	14	10	..	..	..	..	3
Pelvic Abscess.....	14	..	..	..	..	..	..	..	..	1	1	8	3	..	..	1	..	..	..
Other Diseases of Organs of Generation.....	30	..	..	..	..	..	..	..	..	1	9	11	7	1	1	..	..	..	..
Total Diseases of Organs of Generation.....	141	..	..	..	..	..	..	..	..	2	22	55	31	20	9	2	..	..	3
<i>Diseases of Parturition.</i>																			
Abortion, Miscarriage.....	45	..	..	..	..	..	..	..	..	..	9	28	8	..	..	..	..	..	1
Puerperal Convulsions.....	46	..	..	..	..	..	..	..	..	3	12	23	8	..	..	..	..	..	2
Puerperal Mania.....	6	..	..	..	..	..	..	..	..	..	1	2	3	..	..	..	..	..	1
Placenta Prævia, Flooding.....	32	..	..	..	..	..	..	..	..	1	4	17	10	..	..	..	..	..	..
Post-Partum Hemorrhage.....	8	..	..	..	..	..	..	..	..	..	..	5	3	..	..	..	..	..	..
Other Diseases of Parturition.....	38	..	..	..	..	..	..	..	..	..	7	17	12	2	..	..	..	..	1
Total Diseases of Parturition.....	175	..	..	..	..	..	..	..	..	4	33	92	44	2	..	..	..	..	5
<i>Diseases of Organs of Locomotion.</i>																			
Caries, Necrosis.....	12	..	..	..	1	..	1	4	1	..	..	1	1	2	..	2	..	..	..
Arthritis, Osteitis, Periostitis.....	6	1	..	..	1	..	2	..	1	..	..	..	..	1	1	1	..	..	..
Spinal Disease.....	18	..	..	2	..	3	5	4	1	..	..	3	1	1	1	2	..	..	..
Hip Disease.....	10	..	..	..	2	1	3	3	1	1	2	..	..	..	..	..	..	..	..
Other Diseases, Locomotor System.....	3	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..
Total Diseases of Organs of Locomotion.....	49	1	..	2	4	4	11	11	4	1	2	4	3	4	4	5	..	..	..
<i>Diseases of the Integumentary System.</i>																			
Carbuncle.....	4	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	..	..	..
Phlegmon, Cellulitis.....	7	1	..	..	..	..	1	..	..	..	..	..	1	4	1	..	..	..	..
Ulcer, Bedsore.....	8	2	..	..	..	..	2	..	..	..	1	1	..	..	1	2	1	..	..
Eczema.....	7	5	..	..	..	..	5	..	..	..	..	..	1	1	..	..	..	..	..
Pemphigus.....	7	5	..	..	..	..	5	..	..	..	..	..	..	1	1	..	..	..	..
Other Diseases of Integumentary System.....	20	14	1	..	..	1	16	..	..	1	..	1	..	..	1	..	..	1	1
Total Diseases of Integumentary System.....	53	27	1	..	..	1	29	..	..	1	1	2	3	7	6	2	1	1	1
Total Local Diseases.....	9,226	1,801	790	309	170	110	3,180	202	115	173	316	799	929	1,034	1,067	831	449	131	216
VII. VIOLENCE.																			
<i>Accident and Negligence.</i>																			
Fractures, Contusions.....	152	4	4	6	9	6	29	13	7	4	2	13	15	14	24	11	14	6	1
Wounds.....	4	1	..	..	..	..	1	..	..	1	..	..	..	2	..	..	..	..	..
Cut, Stab.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Burn, Scald.....	65	7	5	5	3	4	24	5	1	2	2	7	5	8	6	3	1	1	1
Poison.....	24	2	2	2	..	..	6	..	..	1	4	3	6	1	2	1	..	..	..
Drowning.....	25	..	3	..	..	..	3	2	2	2	3	4	2	2	4	1	..	..	..
Suffocation.....	44	29	3	..	..	..	32	2	..	..	2	2	..	2	2	2	..	..	1
Sunstroke.....	15	4	2	1	..	1	8	..	..	..	..	..	2	3	2	..	..	..	..
Surgical Operations.....	63	4	1	1	1	..	7	..	1	1	5	18	19	9	1	2	..	..	5
Neglect, Exposure.....	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Other Forms.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Total Accident and Negligence.....	395	52	20	15	13	11	111	22	11	11	18	47	49	42	41	20	16	7	8
<i>Homicide.</i>																			
Blows.....	6	1	..	..	..	..	1	1	..	1	1	1	1	..	..	..	..	..	..
Cut, Stab.....	2	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
Gunshot.....	5	..	..	..	..	..	..	..	..	2	1	2	..	..	..	..	..	..	..
Poison.....	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Other Methods.....	3	2	..	..	..	..	2	..	..	1	..	..	..	..	..	..	..	..	..
Total Homicides.....	17	4	..	..	..	..	4	1	..	4	3	3	2	..	..	..	..	..	..
<i>Suicide.</i>																			
Cut, Stab.....	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Drowning.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..
Gunshot.....	6	..	..	..	..	..	..	..	..	1	1	3	..	1	..	..	..	..	..
Hanging.....	3	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..
Leaps.....	9	..	..	..	..	..	..	..	..	..	2	3	4	..	..	..	..	..	..
Poison.....	25	..	..	..	..	..	..	..	..	1	1	13	4	3	3	..	..	..	..
Other Methods.....	3	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..
Total Suicides.....	49	..	..	..	..	..	..	..	..	2	5	21	11	6	3	1	..	..	..
Total Violence.....	461	56	20	15	13	11	115	23	11	17	26	71	62	48	44	21	16	7	8
VIII. ILL-DEFINED OR NOT SPECIFIED CAUSES.																			
Debility, Marasmus, Inanition.....	617	569	36	4	3	1	613	..	..	..	..	..	1	1	..	1	1	..	13
Injury at Birth.....	36	36	..	..	..	..	36	..	..	..	..	..	..	..	..	..	..	..	..
Other Ill-defined Causes.....	4	1	..	..	..	..	1	..	..	..	..	..	..	1	2	..	..	..	..
Total Ill-defined Causes.....	657	606	36	4	3	1	650	..	..	..	..	..	1	2	2	1	1	..	13
I. Specific Febrile Diseases.....	3,875	1,537	643	291	203	118	2,792	215	38	53	109	210	149	110	82	72	35	10	73
II. Parasitic Diseases.....	11	9	..	2	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..
III. Dietetic Diseases.....	58	..	..	..	..	..	..	..	..	..	2	15	26	10	5	..	..	..	1
IV. Constitutional Diseases.....	3,506	126	116	59	29	13	493	59	58	182	354	809	626	457	308	171	74	5	121
V. Developmental Diseases.....	874	495	..	..	..	..	495	..	1	..	..	1	1	5	23	83	153	112	30
VI. Local Diseases.....	9,226	1,801	790	309	170	110	3,180	202	115	173	316	799	929	1,034	1,067	831	449	131	216
VII. Violence.....	461	56	20	15	13	11	115	23	11	17	26	71	62	48	44	21	16	7	8
VIII. Ill-defined Causes.....	657	606	36	4	3	1	650	..	..	..	..	..	1	2	2	1	1	..	13
Total, All Causes.....	18,668	4,690	1,605	680	418	253	7,646	499	223	425	807	1,905	1,794	1,666	1,531	1,179	728	265	462

Mortality from the Principal Causes, by Months, with Ages of Decedents and Meteorology, for the Year 1890.
Estimated population July 1, 1890, 1,631,232. Death-rate per 1,000 inhabitants, 24.58.

METEOROLOGY.	Mean Barometer.....	30.077	29.985	29.904	29.997	29.883	29.919	29.965	29.946	30.037	29.781	29.927	29.919	29.945
	Mean Humidity	79	75	76	68	75	79	81	79	77	73	72	61	74
	Maximum Humidity	100	100	100	100	94	100	100	95	90	94	100	90	97
	Minimum Humidity.....	44	42	46	35	44	43	52	48	46	35	28	34	41
	Inches of rain.....	2.29	3.41	5.50	1.85	3.45	4.67	4.49	4.37	4.63	6.56	0.71	3.70	45.63
	Mean Temperature (Fahr.).....	37.62	37.93	35.59	49.07	60.25	70.68	73.12	72.74	67.13	54.50	43.91	29.90	52.65
	Maximum Temperature (Fahr.).....	64	68	71	79	81	90	98	91	88	75	69	49	77
	Minimum Temperature (Fahr.).....	15	16	7	29	41	54	55	52	45	37	19	13	32
CAUSE OF DEATH.		JANUARY.	FEBRUARY.	MARCH.	APRIL.	MAY.	JUNE.	JULY.	AUGUST.	SEPTEMBER.	OCTOBER.	NOVEMBER.	DECEMBER.	YEAR.
Total, all causes		4,745	2,988	3,339	3,230	3,188	3,485	4,254	3,332	2,882	2,728	2,748	3,184	40,103
Cerebro-spinal Meningitis		9	12	13	13	20	6	16	11	7	10	13	6	136
Diphtheria		110	117	132	121	123	107	97	66	61	80	107	141	1,262
Enteric Fever		20	28	14	12	11	11	31	49	64	49	34	29	332
Erysipelas		8	19	24	22	18	14	7	6	5	3	7	15	148
Malarial Fevers		17	10	9	8	15	20	12	23	16	15	12	19	176
Measles		24	32	50	109	129	107	63	45	20	28	48	75	730
Scarlatina.....		47	41	58	36	32	37	24	14	15	12	40	52	408
Small-pox .....		.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Whooping-cough.....		46	42	36	30	26	46	61	57	50	37	26	30	487
Cholera Morbus.....		.....	.....	.....	.....	.....	10	21	17	8	1	.....	.....	57
Other Diarrhoeal Diseases.....		69	53	46	59	81	573	1,187	609	372	147	47	46	3,289
Diarrhoeal Diseases under 5 years		54	34	35	45	66	545	1,122	562	338	132	33	31	2,997
Other Zymotic Diseases		302	47	36	21	12	18	13	14	12	17	16	13	521
Cancer		92	61	80	78	102	80	78	72	81	65	79	86	954
Rheumatism		17	17	13	6	20	14	10	13	11	13	6	12	152
Phthisis.....		797	512	476	418	422	368	428	413	424	400	394	440	5,492
Other Constitutional Diseases		99	93	106	116	111	110	111	83	80	80	64	84	1,137
Apoplexy.....		95	64	92	96	88	77	68	58	55	70	70	98	931
Convulsions		52	41	52	50	35	35	51	40	36	32	31	38	493
Meningitis and Encephalitis		63	82	73	84	71	76	103	69	58	76	48	53	856
*Other Diseases of Nervous System.....		93	75	88	83	77	84	74	84	69	68	55	80	930
Aneurysm.....		9	5	4	7	7	7	5	1	5	2	8	4	64
Heart Diseases.....		184	155	196	176	194	162	146	143	122	151	167	182	1,978
Other Diseases of Circulatory System.....		6	4	9	12	9	4	11	6	6	10	12	8	97
Bronchitis		391	190	229	201	163	116	94	98	96	121	136	152	1,987
Croup		46	59	56	65	44	34	28	26	24	32	53	54	521
Pneumonia.....		1,111	434	487	465	412	276	205	223	196	285	362	533	4,989
Other Diseases of Respiratory System		77	53	80	69	79	52	59	67	60	78	82	106	856
Gastritis, Gastro-Enteritis, Enteritis and Peritonitis.....		79	67	78	87	78	161	265	159	137	92	59	60	1,322
Cirrhosis of Liver and Hepatitis.....		30	20	33	30	37	45	37	28	40	34	38	34	406
Other Diseases of Digestive System		59	53	57	66	67	89	89	67	68	72	71	63	821
Bright's Disease and Nephritis.....		241	163	219	200	218	207	217	172	162	205	193	213	2,410
Premature and Preternatural Births, Cyanosis and Atelectasis....		101	83	88	94	106	103	104	93	96	92	102	88	1,150
Puerperal Diseases.....		29	31	40	38	35	41	29	24	14	27	43	32	383
Old Age.....		79	56	54	41	45	33	46	38	41	37	40	60	570
Alcoholism		52	22	21	30	15	14	20	17	29	20	20	16	276
Sunstroke .....		.....	.....	.....	.....	.....	7	29	25	1	.....	.....	.....	62
Accident		113	99	110	106	124	152	161	168	119	90	100	107	1,449
Homicide		6	8	5	5	6	2	8	5	3	4	5	4	61
Suicide.....		28	22	21	21	15	21	18	17	23	14	26	13	239
Under one month.....		236	171	226	198	197	194	301	259	214	174	195	195	2,560
One month, and under one year		520	429	453	559	521	1,011	1,487	827	676	493	354	398	7,728
Total under five years.....		1,288	1,073	1,205	1,310	1,255	1,762	2,432	1,598	1,284	1,048	938	1,112	16,305
Sixty-five years and over.....		602	314	393	324	323	288	327	278	250	272	393	377	4,051
Males.....		2,494	1,584	1,814	1,743	1,690	1,897	2,261	1,797	1,560	1,444	1,438	1,713	21,435
Females		2,251	1,404	1,525	1,487	1,498	1,588	1,993	1,535	1,322	1,284	1,310	1,471	18,668
Colored		117	75	81	68	65	75	109	65	68	80	52	75	930

* Sunstroke not included in diseases of nervous system.

Deaths by Accidents and Negligence during the Year 1890.

Burns and scalds (including 1 at fire, No. 34 Norfolk street; 1 at fire, No. 544 Hudson street, and 1 at No. 530 West Forty-first street and 11 from careless use of kerosene).....	120	Fractures and contusions (including 32 by fall of heavy bodies, 9 by kick of horse and 3 by explosion of dynamite).....	221
Drowning (including 3 in boilers and 3 in tubs).....	222	Sunstroke	62
Falls (including 36 down elevators and air shafts).....	433	Run over by railroads (including 28 by New York Central and Hudson River Railroad; 10, New York and New Haven Railroad; 9, New York and Harlem Railroad; 1, New York and Northern Railroad; 2, West Shore Railroad; 1, Staten Island Railroad; 3, Manhattan Elevated Railroad; 2, cable car; 1 Broadway and Seventh Avenue car; 3 Second Avenue car; 2 Third Avenue car; 1, Grand Street and Forty-second Street car; 1, Avenue A car; 1, Avenue C car, and 1 by East Broadway car.....	71
Poisons (including 5 by lead and 1 by whisky; by illuminating gas, 1 each, No. 149 Broadway, No. 36 West Seventeenth street, No. 109 West Houston street, No. 32 West Thirty-second street, No. 151 West Thirty-fifth street, No. 202 William street, No. 78 Madison street, No. 141 Fulton street, No. 193 East Broadway, No. 43 South Washington Square, No. 47 Park street, No. 51 Henry street, No. 341 Lenox avenue, No. 21 Second avenue, No. 328 Third avenue, No. 206 Eighth avenue, No. 159 East Twenty-eighth street, No. 212 East One Hundred and Twenty-third street, No. 142 East Eighty-third street, No. 64 East Twelfth street, No. 537 West One Hundred and Forty-second street, No. 135 West Third street, No. 2235 Third avenue, No. 161 East One Hundred and Eighteenth street, No. 170 East Eighty-seventh street, No. 203 East Nineteenth street, No. 222 East Twelfth street, No. 75 East One Hundred and Twenty-first street, No. 208 East One Hundred and Twenty-eighth street, No. 371 West Forty-sixth street, No. 251 Canal street, No. 127 West street, No. 147 East Thirty-third street, Occidental Hotel, and 2 cases at No. 448 Canal street.....	42	Street vehicles.....	44
		Suffocation (including 50 overlaid in bed and at mothers' breast; 1 each at fire, No. 234 West Thirtieth street, No. 1577 Third avenue, No. 152 West Thirty-third street; 1 by coal gas.....	116
		Electric current.....	2
		Total accidents and negligence.....	1,333

Weekly Mortality from the Principal Causes of Death, with Ages of Decedents, Death-rate and Meteorology for Year 1890.
Representing, not the actual mortality, but the reported mortality for the year.

METEOROLOGY.		WEEK ENDING—																												
		CAUSE OF DEATH.																												
		4 days ending January 4.	Jan. 11.	Jan. 18.	Jan. 25.	Feb. 1.	Feb. 8.	Feb. 15.	Feb. 22.	Mar. 1.	Mar. 8.	Mar. 15.	Mar. 22.	Mar. 29.	Apr. 5.	Apr. 12.	Apr. 19.	Apr. 26.	May 3.	May 10.	May 17.	May 24.	May 31.	June 7.	June 14.	June 21.	June 28.	July 5.		
Mean Barometer.....		30.422	29.844	30.120	30.036	30.127	30.012	30.079	29.903	29.862	30.022	30.089	29.623	29.861	30.071	29.837	29.983	30.182	29.911	29.799	29.842	29.978	29.885	29.914	29.973	29.985	29.824	29.819		
Mean Humidity.....		77	83	80	73	74	79	72	71	81	78	77	78	73	70	72	57	68	73	74	80	76	74	78	80	82	80	87		
Maximum Humidity..		100	100	100	92	91	100	90	89	100	100	91	100	92	100	100	79	92	93	94	91	94	94	100	100	100	100	100		
Minimum Humidity...		52	52	56	47	44	42	44	46	51	47	46	48	46	38	41	35	37	44	46	52	56	44	43	47	52	49	64		
Inches of rain .....		..	..	1.51	.11	.52	1.35	.67	.88	.74	.73	1.35	1.82	1.13	.81	.54	.07	.57	.37	1.17	.81	.40	.75	1.77	1.60	1.02	.28	.67
Mean Temp. (Fah.)....		42.8	39.2	39.4	32.0	37.7	39.1	37.1	34.1	42.7	25.0	41.5	37.2	39.1	41.1	45.5	50.6	53.7	55.2	59.5	61.5	59.5	63.6	70.8	68.2	69.0	72.4	74.4		
Maximum Temp. (Fah.)		63	57	64	55	50	68	52	64	65	41	71	52	52	64	59	79	70	80	80	81	74	79	90	88	88	89	88		
Minimum Temp. (Fah.)		27	22	20	15	23	19	22	16	27	7	13	21	27	29	33	30	38	41	43	46	48	54	57	54	60	59	63		
CAUSE OF DEATH.		4 days ending January 4.																												
Total, all causes		744	1,424	1,151	872	782	765	742	757	730	696	769	772	783	758	756	720	802	741	740	705	751	656	821	695	773	873	1,010		
Cerebro-spinal Meningitis.		1	4	..	1	3	2	2	5	2	6	5	..	1	4	5	3	3	2	7	4	4	2	2	..	1	3	4		
Diphtheria.....		15	28	24	22	24	34	30	29	25	32	32	28	24	28	29	31	29	28	22	31	26	32	23	24	29	27	17		
Enteric Fever.....		6	7	2	5	2	9	6	5	6	3	5	5	3	3	5	1	2	1	3	4	1	2	3	2	3	1	3		
Erysipelas		1	4	1	2	1	3	5	4	6	3	7	6	6	9	5	5	4	5	1	5	4	5	4	3	4	1	3		
Malarial Fevers.....		..	5	2	2	4	4	1	5	2	4	..	2	3	3	1	2	3	1	4	1	4	5	7	2	3	5	5		
Measles		4	6	2	3	10	10	6	6	10	11	11	11	14	13	14	31	32	27	26	37	30	24	37	25	10	27	23		
Scarlatina.....		9	9	9	10	13	10	11	13	8	9	20	12	9	14	7	5	7	12	8	8	6	6	13	4	11	6	9		
Small-pox .....		..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough.....		9	7	14	7	10	12	12	13	6	11	4	10	6	8	13	4	9	5	9	4	4	5	13	9	8	11	10		
Influenza.....		12	93	88	52	13	11	9	6	6	5	3	2	..	3	..	2	..	..	..	1	..	..	1	..	1	..	..
Cholera Morbus .....		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	4	..	7	
Other Diarrhoeal Diseases.		14	21	15	11	10	18	10	12	13	9	14	7	12	9	14	13	13	19	23	13	20	17	36	61	117	208	353		
Other Zymotic Diseases...		2	11	12	5	3	9	1	1	8	7	7	2	5	6	7	..	5	4	3	..	4	2	2	5	4	5	2		
Cancer		16	24	15	13	19	13	20	15	14	7	19	20	18	24	19	24	17	12	24	22	29	21	14	16	22	25	17		
Rheumatism.....		4	2	4	5	6	3	2	5	5	2	3	2	2	7	1	1	1	1	5	5	5	5	6	2	4	1	1		
Phthisis.....		128	211	194	160	134	149	133	117	122	111	99	121	105	99	113	82	97	102	99	88	104	86	104	74	90	80	81		
Other Constitutional Diseases.....		8	26	19	24	20	21	28	23	19	17	26	24	27	30	22	32	34	21	22	25	26	23	30	26	21	31	28		
Apoplexy.....		14	26	19	15	23	14	20	11	18	20	19	19	27	16	24	26	23	17	16	21	18	25	30	15	14	15	15		
Convulsions.....		10	11	14	9	13	13	4	12	11	11	10	18	11	10	16	6	13	9	6	4	11	8	11	5	10	9	11		
Meningitis and Encephalitis		13	16	12	15	12	22	13	27	18	12	12	22	21	18	20	16	21	19	19	10	21	15	20	9	19	21	33		
Other Diseases of Nervous System*.....		5	38	25	10	17	18	17	22	20	17	26	18	24	13	20	24	17	17	21	22	14	12	24	14	20	16	22		
Aneurysm.....		3	2	2	2	1	1	2	1	1	1	1	..	2	..	1	3	2	1	1	2	4	..	1	2	2	1	1		
Heart Diseases.....		32	58	50	26	27	44	45	35	36	35	49	42	52	36	40	38	38	50	42	40	49	41	51	35	33	39	31		
Other Diseases of Circulatory System.....		1	4	1	..	1	1	1	1	..	1	1	2	5	..	3	4	5	1	2	1	2	2	1	1	..	3	..		
Bronchitis		63	122	95	68	66	55	48	43	43	50	56	52	55	50	51	41	49	38	39	37	34	34	41	24	25	28	23		
Croup.....		3	12	9	13	12	13	12	12	22	12	17	13	12	13	13	17	16	11	17	9	6	7	7	14	7	6	4		
Pneumonia.....		197	384	296	192	122	112	103	118	95	116	105	116	108	106	111	102	121	108	119	90	86	75	75	77	69	51	35		
Other Diseases of Respiratory System.....		9	28	24	10	8	14	15	10	14	9	8	19																	

Weekly Mortality from the Principal Causes of Death, with Ages of Decedents, Death-rate and Meteorology for Year 1890—(Continued.)
Representing, not the actual mortality, but the reported mortality for the year.

METEOROLOGY.	Mean Barometer.....	29.969	29.950	30.044	30.028	30.026	29.942	29.968	29.832	30.085	30.067	29.934	29.991	30.072	29.875	29.820	29.759	29.564	29.931	30.103	29.833	29.901	29.850	29.819	29.995	29.904	30.009	29.945
	Mean Humidity.....	75	81	81	83	84	76	82	72	75	84	77	74	73	72	66	79	69	73	80	68	68	67	60	61	61	51	74
	Maximum Humidity ..	90	100	100	100	95	95	95	94	90	90	89	89	94	86	82	93	84	100	93	100	100	89	78	90	79	66	97
	Minimum Humidity ...	58	52	52	60	62	49	59	48	55	69	52	48	46	53	35	53	54	41	58	28	39	50	49	34	38	25	41
	Inches of Rain.....	..	.79	2.22	.81	.07	.21	2.94	1.15	.05	.70	3.22	.66	1.55	.92	1.54	2.46	.09	..	.39	.32	..	1.00	.05	1.87	.77	.01	45.63
	Mean Temp. (Fah.)....	72.9	73.6	69.4	79.4	77.6	70.6	73.6	69.8	71.3	69.0	68.1	61.2	62.2	58.7	56.2	50.8	45.2	48.9	47.2	45.9	35.2	32.0	29.7	32.0	31.5	23.2	52.65
	Maximum Temp. (Fah.)	98	93	80	94	91	84	90	81	88	77	78	76	75	72	66	63	53	69	60	64	59	49	47	43	47	31	77
	Minimum Temp. (Fah.)	55	58	52	70	70	61	55	52	56	60	56	45	48	47	45	42	37	36	37	31	19	18	16	16	15	13	32
	WEEK ENDING—																											
CAUSE OF DEATH.	July 12.	July 19.	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.	Oct. 4.	Oct. 11.	Oct. 18.	Oct. 25.	Nov. 1.	Nov. 8.	Nov. 15.	Nov. 22.	Nov. 29.	Dec. 6.	Dec. 13.	Dec. 20.	Dec. 27.	4 days ending December 31.	Year.	
Total, all causes.....	1,157	941	815	907	815	732	751	716	717	686	660	639	650	613	618	601	602	671	643	583	654	672	704	731	705	457	40,230	
Cerebro-spinal Meningitis.	4	1	3	7	2	5	2	..	1	2	1	3	4	3	1	1	1	4	1	3	4	2	4	1	1	..	137	
Diphtheria.....	21	13	29	30	12	12	14	20	11	13	20	11	12	18	15	20	22	19	27	29	22	31	31	37	31	18	1,261	
Enteric Fever.....	6	5	8	12	8	10	12	11	15	17	17	16	8	14	14	7	11	10	10	7	5	8	11	3	5	4	352	
Erysipelas.....	3	1	2	1	3	1	..	1	..	1	1	2	2	1	..	..	1	2	2	1	2	1	6	1	5	1	148
Malarial Fevers.....	4	..	3	3	5	5	7	5	4	3	3	6	4	1	8	1	3	5	3	3	1	1	5	3	6	2	174	
Measles.....	25	11	9	14	10	9	12	8	7	7	6	2	3	4	7	5	7	13	11	12	12	12	15	15	19	11	726	
Scarlatina.....	5	7	4	4	4	5	4	1	1	3	8	3	1	2	4	2	3	11	7	10	10	5	10	11	11	12	406	
Small-pox.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Whooping-cough.....	14	15	15	15	13	15	16	8	11	14	17	6	7	11	6	10	6	10	7	7	3	5	7	5	8	5	489	
Influenza.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	314
Cholera Morbus.....	4	10	2	2	6	4	3	3	2	2	1	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	57
Other Diarrhoeal Diseases.	363	264	174	203	162	133	144	127	108	107	82	59	70	39	41	23	17	20	11	8	8	10	9	11	9	7	3,292	
Other Zymotic Diseases..	4	4	1	4	4	2	4	1	4	1	3	5	4	2	3	3	7	2	4	4	3	4	1	2	5	3	206	
Cancer.....	23	14	20	14	19	12	18	13	12	23	20	18	25	15	9	13	17	17	15	15	26	16	16	22	23	10	952	
Rheumatism.....	5	..	3	2	4	1	5	1	4	6	1	..	3	5	1	3	3	1	2	..	2	2	2	7	..	2	155	
Phthisis.....	113	96	108	86	65	97	98	98	104	84	83	123	107	81	97	93	80	110	85	78	98	94	102	98	96	66	5,523	
Other Constitutional Diseases.....	24	32	18	20	18	18	18	24	19	14	17	18	24	16	16	23	14	14	16	15	11	19	22	24	15	11	1,133	
Apoplexy.....	22	10	14	17	16	14	10	16	10	7	16	14	14	13	14	13	21	23	17	10	23	17	23	27	16	12	929	
Convulsions.....	11	11	5	22	16	5	7	7	5	13	9	4	11	8	6	5	8	8	6	8	9	4	4	7	11	11	497	
Meningitis and Encephalitis	20	20	24	19	19	18	18	14	9	18	12	7	15	21	17	14	19	21	8	12	7	7	12	15	15	5	862	
Other Diseases of Nervous System*.....	19	19	9	20	31	21	11	16	13	16	13	13	23	17	20	11	13	15	8	13	14	20	18	16	15	9	926	
Aneurysm.....	1	..	2	2	..	..	..	..	2	..	2	1	1	..	2	..	..	2	3	..	3	3	..	1	..	..	65
Heart Diseases.....	43	40	22	31	30	38	37	28	31	29	27	26	30	39	32	34	28	41	30	40	44	45	44	37	44	18	1,382	
Other Diseases of Circulatory System.....	3	4	2	2	1	1	1	2	3	..	..	..	4	..	2	4	3	2	6	..	5	2	1	2	2	..	96
Bronchitis.....	16	29	15	20	17	24	27	22	25	25	23	16	26	29	29	22	31	30	40	32	25	35	29	38	22	30	2,007	
Croup.....	3	8	11	5	6	5	2	8	7	5	9	3	5	6	5	11	8	5	17	6	20	14	11	11	14	9	523	
Pneumonia.....	54	47	47	44	48	54	42	53	59	50	41	41	55	48	68	64	69	90	72	85	87	95	115	117	126	81	5,041	
Other Diseases of Respiratory System.....	20	12	8	13	22	13	17	12	14	13	13	17	15	14	13	16	21	15	23	18	15	24	21	29	18	16	800	
Gastritis, Gastro-enteritis, Enteritis and Peritonitis.....	84	57	55	45	42	32	39	24	41	33	35	30	21	24	21	23	15	7	15	12	14	19	16	15	13	3	1,222	
Cirrhosis of Liver and Hepatitis.....	7	9	7	10	5	6	9	5	6	13	12	6	8	10	8	5	8	3	11									

Deaths from Zymotic and Certain Other Preventable Diseases by Wards,* for Year 1890.

WARDS.	AREA IN ACRES.	HEALTH DEPARTMENT ESTIMATE OF POPULATION.	NUMBER OF PERSONS TO THE ACRE.	NUMBER OF PERSONS TO THE SQUARE MILE.	Cerebro-spinal Meningitis.	Diphtheria.	Typhoid Fever.	Erysipelas.	Malarial Fevers.	Measles.	Scarlet Fever.	Small-pox.	Influenza.	Whooping Cough.	Diarrhoeal Diseases.	Rheumatism.	Phthisis.	Bronchitis.	Croup.	Pneumonia.	Puerperal Diseases.	Alcoholism.	Bright's Disease and Nephritis.	All Causes.	In Institutions not Redistributed.	† In Institutions Redistributed.	Total in Institutions.	† All Deaths Redistributed.
First	154	11,787	76.1	48,704	3	8	4	1	2	2	4	..	..	3	21	1	77	34	4	65	3	7	37	491	13	93	106	524
Second	81	1,230	15.1	9,664	..	2	1	..	1	..	..	..	..	..	2	..	8	..	1	5	..	..	3	50	..	10	10	55
Third	95	3,630	38.2	24,428	1	2	..	..	..	..	..	..	..	..	4	..	8	1	..	5	1	4	11	94	42	16	58	57
Fourth	83	18,771	226.1	144,704	2	8	1	2	1	25	9	..	..	7	37	1	116	51	8	93	2	8	54	675	3	155	158	737
Fifth	168	12,800	76.1	48,704	1	4	3	1	1	17	2	..	..	4	35	1	50	15	1	42	3	7	22	353	3	65	68	384
Sixth	86	23,298	270.9	177,376	3	13	8	2	1	53	3	..	7	10	47	1	129	78	11	98	9	10	42	787	8	138	146	855
Seventh	198	60,393	305.0	197,200	9	60	8	8	4	18	17	..	10	12	131	2	224	86	20	276	14	12	91	1,648	25	262	287	1,781
Eighth	183	36,963	202.0	129,280	2	29	7	9	3	35	8	..	9	5	93	5	165	85	13	150	13	10	71	1,174	1	178	179	1,287
Ninth	322	58,130	180.5	115,520	4	27	12	4	8	12	14	..	10	19	112	6	211	71	22	161	14	9	98	1,414	65	152	217	1,480
Tenth	110	61,516	559.2	357,888	5	46	15	5	4	17	25	..	11	12	130	4	153	40	25	199	18	8	67	1,243	3	284	287	1,360
Eleventh	196	80,466	410.5	262,720	3	44	11	9	2	37	23	..	6	18	159	6	206	76	31	241	17	3	80	1,574	51	145	196	1,671
Twelfth	5,504.13	263,276	47.8	30,592	22	245	67	20	40	101	56	..	62	89	567	29	863	308	87	731	63	29	283	6,344	1,030	446	1,476	5,831
Thirteenth	107	49,344	461.1	295,104	3	27	3	7	5	28	13	..	4	17	85	2	121	55	32	191	10	4	55	1,051	..	137	137	1,153
Fourteenth	96	29,744	309.8	198,272	1	25	8	5	..	57	15	..	5	8	75	5	114	162	17	145	11	5	52	1,048	2	149	151	1,148
Fifteenth	198	29,289	147.9	94,656	..	17	7	3	2	..	8	..	7	2	42	3	98	25	4	80	10	7	52	664	10	144	154	718
Sixteenth	348.77	55,992	160.5	102,720	5	35	11	5	4	5	11	..	14	16	87	6	204	54	16	132	10	9	100	1,297	29	183	212	1,392
Seventeenth	331	106,450	321.6	205,824	8	96	33	10	6	37	29	..	24	28	223	5	349	94	32	305	23	8	133	2,452	25	374	399	2,663
Eighteenth	449.89	67,491	150.0	96,000	2	50	11	2	5	21	16	..	11	14	107	4	212	76	22	223	15	9	114	1,623	112	226	338	1,658
Nineteenth	1,480.60	248,283	167.6	107,264	19	206	57	28	23	146	49	..	46	86	716	20	820	216	62	675	60	29	385	6,436	1,602	536	2,138	5,304
Twentieth	444	90,087	202.9	129,856	3	73	17	5	9	37	29	..	18	29	188	18	370	133	25	305	16	22	176	2,442	39	339	378	2,637
Twenty-first	411	71,328	173.5	111,040	4	43	11	10	11	13	10	..	12	12	120	7	264	60	13	225	10	47	155	1,809	277	230	507	1,681
Twenty-second	1,529.42	172,779	112.9	72,256	29	116	36	6	20	50	41	..	38	57	220	17	485	187	49	461	49	19	232	3,693	90	402	492	3,953
Twenty-third	4,267.023	57,710	13.5	8,640	3	72	19	5	11	14	19	2	15	35	111	5	185	70	21	140	12	5	70	1,292	47	74	121	1,366
Twenty-fourth	8,050.323	20,535	2.5	1,600	4	14	2	..	13	5	7	..	5	4	34	4	59	10	5	41	..	5	27	449	76	24	100	403
Total	24,893.156	1,631,232	65.5	41,920	136	1,262	352	148	176	730	408	2	314	487	3,346	152	5,491	1,987	521	4,989	383	276	2,410	40,103	3,553	4,762	8,315	40,103

* Deaths in Institutions redistributed according to residence, where residence was known.

† This column contains the persons who died in institutions, but whose residence before admission to the institution was in the ward to which they are assigned in this table.

‡ In this column the 3,553 deaths in institutions, for which no previous or other residence was given in the certificate of death, have been distributed to the different wards in proportion to the number of deaths known to have been properly assigned to each ward.

The following wards contain large public institutions, viz: First Ward—Emigrant Depot; Third Ward—Chambers Street Hospital; Seventh Ward—Gouverneur Hospital; Ninth Ward—St. Vincent's Hospital; Eleventh Ward—St. Francis Hospital; Twelfth Ward—Ward's and Randall's Island Hospitals; Eighteenth Ward—New York, Post-graduate and Willard Parker Hospitals; Nineteenth Ward—Presbyterian, German, Mount Sinai, Colored Home, Nursery and Child's and St. Luke's Hospitals, and Foundling Asylum and the Blackwell's Island institutions; Twenty-first Ward—Bellevue Hospital; Twenty-second Ward—Roosevelt and Sloane Maternity Hospitals; Twenty-third Ward—St. Joseph's Hospital and North Brother Island.

Deaths by Certain Diseases, According to Nativity of Deceased, of Parents of Deceased, and Color, for the Year 1890.

CAUSE OF DEATH, AND DEATHS IN INSTITUTIONS.	PLACE OF BIRTH OF DECEASED.															PLACE OF BIRTH OF PARENTS OF DECEASED.															Total.	Colored.	
	Austro-Hungary.	Bohemia.	British America.	England.	France.	Germany.	Ireland.	Italy.	Poland.	Russia.	Scotland.	Switzerland.	United States.	Other Nationalities.	Unknown Nationality.	Austro-Hungary.	Bohemia.	British America.	England.	France.	Germany.	Ireland.	Italy.	Poland.	Russia.	Scotland.	Switzerland.	United States.	Other Nationalities.	Mixed Nationalities.			Unknown Nationality.
Total—All causes.....	330	195	196	840	243	4,198	6,622	634	96	341	286	114	24,736	561	711	734	464	109	927	287	7,280	10,996	2,117	269	973	368	146	7,253	849	4,679	2,652	40,103	930
Diphtheria.....	5	..	..	12	1	26	6	13	2	7	..	..	1,151	4	35	24	17	1	17	7	240	167	65	7	54	2	4	314	20	267	56	1,262	14
Measles.....	5	..	1	1	..	6	3	20	1	2	1	..	596	1	93	11	8	..	9	2	79	71	154	8	20	1	1	128	19	110	109	730	2
Scarlatina.....	1	1	..	10	..	4	3	3	1	5	..	..	378	1	1	10	1	2	14	1	61	67	10	4	21	..	2	102	9	96	8	408	4
Diarrhoeal diseases.....	7	4	5	13	3	66	150	15	1	11	1	2	2,956	9	103	82	69	3	47	23	562	522	198	39	116	13	11	757	96	612	196	3,346	66
Cancer.....	20	6	5	39	21	291	225	20	..	17	7	10	262	27	4	21	6	1	37	20	278	262	19	1	16	7	8	153	21	39	65	954	19
Insanity.....	6	1	2	10	5	49	68	4	3	3	2	2	87	6	4	2	1	..	8	..	33	64	3	2	2	2	1	28	4	5	97	252	6
Heart diseases.....	35	16	9	70	30	416	523	30	13	30	22	15	726	37	6	31	16	5	66	24	474	686	35	16	34	19	12	295	34	101	130	1,978	53
Phthisis.....	73	64	48	136	37	733	1,325	114	19	64	58	27	2,594	180	19	71	64	28	103	43	1,115	2,286	133	18	67	68	24	626	169	366	310	5,491	185
Pneumonia.....	40	19	23	103	20	448	922	109	6	41	34	6	3,039	60	59	129	56	12	117	27	859	1,481	338	31	165	44	7	849	93	555	226	4,989	114
Cirrhosis of liver and hepatitis....	2	4	5	11	6	107	123	11	1	1	7	2	121	4	1	3	3	2	12	6	117	160	12	1	1	6	1	44	6	13	19	406	4
Bright's disease and nephritis....	24	14	24	98	21	410	784	32	7	27	26	14	858	48	23	22	14	10	87	24	474	1,009	37	8	32	32	11	330	37	120	163	2,410	73
Old age.....	4	10	2	23	7	112	231	4	5	5	13	..	143	9	2	4	10	1	19	7	109	227	5	7	3	11	..	107	9	26	25	570	27
Alcoholism.....	..	..	4	17	1	28	93	3	..	1	2	..	110	3	14	..	..	..	11	2	36	139	3	..	1	3	..	36	3	4	38	276	2
Sunstroke.....	..	1	..	1	1	9	22	1	1	1	2	..	15	3	5	..	1	..	1	1	9	27	1	1	1	2	..	5	3	2	8	62	..
Homicide.....	..	..	1	1	1	4	7	8	2	3	..	..	31	1	2	..	1	..	1	1	4	16	9	1	3	..	..	12	1	3	9	61	5
Suicide.....	6	4	1	12	5	80	22	4	3	5	1	3	72	12	9	5	4	..	12	3	88	30	4	2	5	1	3	27	12	9	34	239	1
Inanition, atrophy, marasmus, etc.	1	..	..	..	..	4	..	..	..	2	..	..	1,189	..	73	16	41	1	11	..	135	122	41	10	36	2	3	270	17	252	312	1,269	26
Other causes.....	101	51	66	283	84	1,405	2,115	243	31	116	110	33	10,348	156	258	303	152	43	355	96	2,607	3,660	1,050	113	396	155	58	3,170	296	2,099	847	15,400	338
Died in Institutions.....	117	28	74	296	87	1,058	2,072	147	29	148	105	49	3,431	201	473	113	31	38	246	77	1,105	2,727	140	38	172	106	30	940	167	438	1,947	8,315	282

Deaths of Persons 100 Years of Age and Over, during the Year 1890.

MONTH.	NAME.	AGE.			COLOR.	NATIVITY.	CAUSE OF DEATH.
		Years.	Months.	Days.			
March	Isaac Wiener.....	100	1	..	White.....	Germany	Erysipelas.
April.....	Mary Bowie.....	100	..	..	Colored	United States.....	Bright's disease.
June	Diana Voohis.....	107	..	..	" .....	" .....	Old age.
July.....	Mary Lavery or Rafferty.....	105	..	..	White.....	Ireland.....	Bright's disease.
August.....	Mary Murphy.....	100	..	..	" .....	" .....	Gastritis.
December.....	Isabella Duff.....	100	..	..	" .....	" .....	Old age.
December.....	Susan de la Montaigne.....	103	3	8	"	United States.....	Pneumonia.

Alms-house.....	510	Homœopathic Hospital (Ward's Island).....	281	St. Francis Hospital.....	239
Babies' Hospital.....	49	House of Rest for Consumptives.....	67	St. Joseph's Hospital.....	324
Bellevue Hospital.....	1,351	Infants' Hospital (Randall's Island).....	414	St. Luke's Hospital.....	188
Bloomington Lunatic Asylum.....	32	Insane Asylum (Ward's Island).....	268	St. Vincent's Hospital.....	261
Castle Garden.....	7	Lunatic Asylum (Blackwell's Island).....	119	St. Mark's Hospital.....	43
Chambers Street Hospital.....	115	Manhattan Hospital.....	49	Skin and Cancer Hospitals.....	78
Charity Hospital.....	588	Mount Sinai Hospital.....	186	Sloane Maternity Hospital.....	26
Colored Home Hospital.....	136	New York Hospital.....	274	Ward's Island Emigrant Hospital.....	34
Foundling Asylum.....	461	North Brother Island Hospital.....	44	Willard Parker Hospital.....	89
French Hospital.....	43	Nursery and Child's Hospital.....	154	Woman's Hospital.....	22
German Hospital.....	171	Post Graduate Hospital.....	77	Workhouse.....	62
Gouverneur Hospital.....	178	Presbyterian Hospital.....	150	Other Institutions.....	550
Harlem Hospital.....	117	Randall's Island Hospital.....	151		
Home for Aged (Little Sisters of the Poor).....	68	Roosevelt Hospital.....	270	Total.....	8,315
Home for Incurables.....	55	Reception Hospital (Ninety-ninth street).....	14		

Prisons.....	112	Institutions for Children.....	670	Other Institutions.....	119
Hospitals.....	6,310	Homes for Aged.....	175		
Lunatic Asylums.....	419	Alms-house.....	510	Total.....	8,315

Abdominal section for ovarian tumor.....	1	Incision for abscess of thigh.....	1	Operation for removal of diseased bone of pelvis.....	1
Abdominal section for pyosalpinx.....	1	Laparotomy, salpingitis, ovaritis, septicæmia.....	1	Operation for hydrocele.....	1
Amputation of foot, gangrene.....	1	Laparotomy for fibroid tumor of uterus.....	1	Operation for fecal fistula.....	1
Amputation of leg, paralysis.....	1	Laparotomy for pyosalpinx, secondary hemorrhage.....	1	Operation for umbilical hernia.....	1
Amputation of leg, tuberculosis of foot, pneumonia.....	1	Laparotomy for cyst of broad ligament.....	1	Operation for suppurative knee joint.....	1
Amputation of thigh for fracture.....	1	Laparotomy for removal of appendages.....	1	Operation for stone in bladder, suppression of urine.....	1
Amputation of right leg, gangrene.....	1	Laparotomy, salpingitis.....	1	Operation for epithelioma of thumb.....	1
Amputation of thigh, tubercular arthritis.....	1	Laparotomy, exploratory, for intra-peritoneal hæmatoma.....	1	Operation for radical cure of omental hernia, peritonitis.....	1
Amputation of arm, gangrene.....	1	Laparotomy for ventral hernia, septicæmia.....	1	Operation for varicose ulcer, pyæmia.....	1
Amputation of thigh, gangrene.....	1	Laparotomy for abscess of ovary.....	1	Operation for empyema.....	1
Amputation of thigh, erysipelas.....	1	Laparotomy for vulvo-vaginitis.....	1	Operation for hernia.....	2
Amputation of thigh for tubercular arthritis of knee.....	1	Laparotomy, pyo-salpinx.....	4	Operation for periostitis of femur.....	1
Amputation of forearm, psychosis, pneumonia.....	1	Laparotomy, renal cyst.....	1	Operation for tumor of antrum, surgical shock.....	1
Cæsarian section.....	1	Laparotomy, removal of appendix.....	1	Ovariectomy.....	2
Cæsarian section, kyphotic pelvis.....	1	Laparotomy for ovarian disease, tubercular peritonitis.....	1	Os dilated and curetted.....	2
Circumcision.....	4	Laparotomy for drainage of abdomen.....	1	Removal of adenoid growth of nasal pharynx, hemorrhage.....	1
Circumcision, excision of portion of scrotum.....	1	Laparotomy, explorative.....	1	Removal of cyst, epilepsy.....	1
Circumcision, hemorrhage, septicæmia.....	2	Laparotomy for abdominal tumor, septicæmia.....	1	Removal of intra-uterine fibroid.....	1
Circumcision, hemorrhage.....	1	Laparotomy for perityphlitis.....	1	Removal of tumor of vertebral canal.....	1
Circumcision, erysipelas.....	1	Nephrectomy.....	1	Removal of gall stones.....	1
Circumcision, congenital phymosis, retention of urine.....	1	Operation for epithelioma of lip.....	1	Removal of tumor.....	1
Curettage for molar pregnancy, septic peritonitis.....	1	Operation for removal of kidney, pyo-nephrosis.....	1	Removal of floating spleen, septic peritonitis.....	1
Cystotomy, uræmia.....	1	Operation for tumor of thyroid gland.....	1	Resection of rib.....	1
Cystotomy, supra-pubic, age.....	1	Operation for removal of portion of nasal septum, hemorrhage.....	1	Resection of knee-joint for extensive tubercular disease of knee, shock.....	1
Ectopia (vesical operation).....	1	Operation for fistula in ano, uræmia.....	1	Salpingo-oöphoritis.....	1
Extirpation of larynx, pneumonia.....	1	Operation for congenital malformation of rectum.....	1	Surgical shock, hæmorrhoids.....	1
Extirpation of larynx for epithelioma.....	1	Operation for spina bifida.....	1	Tenotomy, pyæmia, suppurative ankle joint.....	1
Gastrostomy for stricture of œsophagus.....	1	Operation for pyosalpinx.....	2	Trephining for old injury of brain, abscess of brain.....	1
Hysterectomy.....	2	Operation for epithelioma of tongue, erysipelas.....	1	Urethrotomy, cystitis.....	1
Hysterectomy, supra-pubic.....	1	Operation for rupture of umbilicus.....	1	Urethrotomy, urethral stricture.....	1
Hysterectomy, uterine fibroid.....	5	Operation for cleft palate.....	1	Vaccination, erysipelas.....	1
Hysterectomy, septic peritonitis.....	1	Operation for stricture of urethra, peritonitis.....	1		
Hysterectomy, for retroflexion of uterus.....	1	Operation for cystic calculus.....	1		
Hysterectomy, supra-vaginal.....	3	Operation for necrosis of astragalus.....	1		
				Total deaths from surgical operations.....	116

[illegible]

Ages of Suicides.

UNITED STATES.		FOREIGN.		5-15 YEARS.		15-25.		25-45.		45-65.		65 AND OVER.		TOTAL BY SEXES.		TOTAL, BOTH SEXES.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
49	22	141	27	..	..	21	7	101	32	62	9	6	1	190	49	239

Deaths of Non-residents in 1890, by Months, According to Place of Death.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Hotels, etc	6	5	4	9	7	3	1	4	6	1	3	2	51
Hospitals.....	31	25	32	35	30	29	29	28	24	34	26	25	348
Private dwellings	7	3	3	5	4	4	6	3	1	7	6	12	61
Tenements.....	15	4	3	8	10	3	3	14	10	9	16	12	107
Other places *.....	7	8	6	6	9	6	5	6	6	5	5	5	74
Total	66	45	48	63	60	45	44	55	47	56	56	56	641

* Streets, station-houses, stores, offices, rivers, etc.

Table showing the Increase or Decrease in 1890 from Certain Causes Comprising about 82 per cent. of all Deaths as Compared with the Average Annual Number of Deaths from the Same Causes for the previous Ten Years, Increased to Correspond with the Increase of Population.

CAUSES OF DEATH.	AVERAGE FOR 10 YEARS, 1880-1889, INCLUSIVE.	SAME INCREASED FOR INCREASE OF POPULATION.	DEATHS IN 1890.	INCREASE IN 1890.	DECREASE IN 1890.
Small-pox.....	99.1	116	2	....	114
Measles.....	653.1	767	730	....	37
Scarlatina.....	1,012.2	1,189	408	....	781
Typhus Fever.....	30.3	36	....	....	36
Whooping-cough.....	451.6	531	487	....	44
Diphtheria.....	1,608.2	1,888	1,262	....	626
Typhoid Fever, including Typho- malarial Fever.....	460.3	541	352	....	189
Diarrhoeal Diseases.....	3,716.3	4,365	3,346	....	1,019
Cancer.....	758.9	892	954	62	....
Phthisis and other tuberculous diseases ..	5,918.5	6,952	6,340	....	612
Premature Birth	671.8	789	744	....	45
Diseases of the Nervous System *.....	3,183.1	3,739	3,210	....	529
" Circulatory System.....	1,798.7	2,113	2,139	26	....
Diseases of the Respiratory System, including Croup.....	6,409.7	7,529	8,353	824	....
Diseases of the Urinary System	2,218.4	2,606	2,592	....	14
Child Birth and Puerperal Fever	404.9	476	383	....	93
Accident.....	1,110.5	1,315	1,449	134	....
Homicide.....	63.7	75	61	....	14
Suicide	206.3	242	239	....	3
All other causes	6,150.4	7,224	7,052	....	172
Total	36,935.0	43,385	40,103	1,046	4,328
Balance.....	....	....	....	....	3,282

* Sunstroke included from 1880 to 1887, excluded from 1888 to 1890, inclusive.

The table thus shows a saving of 3,282 lives of persons in 1890, who would have died during the year if the mortality had been equal to the average annual mortality for the previous ten years.

Interments of Deceased Persons for Six Years ending December 31, 1890.

LOCATION OF INTERMENTS.	1885.	1886.	1887.	1888.	1889.	AVERAGE FOR FIVE YEARS PRECEDING 1890.	1890.
City Cemetery.....	3,447	3,733	3,936	3,956	3,815	3,777.4	3,907
Cemeteries outside of New York City	30,265	31,848	33,276	34,352	33,961	32,740.4	34,495
Cemeteries inside of New York City..	1,984	1,749	1,726	1,834	1,807	1,820.0	1,828
Ward's Island.....	143	115	150	178	108	138.8	31
Total interments.....	35,696	37,330	38,938	40,142	39,583	38,337.8	40,230
Percentage of pauper burials to total..	9.66	10.00	10.11	9.85	9.64	9.85	9.71

SUMMARIES FOR PREVIOUS YEARS.

The following tables have been compiled from records on file in the Health Department. Changes in classification have rendered it at times difficult, and in some cases impossible, to complete tables which should present figures admitting of rigid comparison for successive years, but it is believed that all possible sources of error or misapprehension are indicated in the foot-notes :

Population from 1628 to Date, with Dates and Numbers of Censuses.

YEAR.	POPULATION.	AUTHORITY.
1628.....	270	City Inspector's Report, New York, 1861.
1656.....	1,000	"
1664.....	1,500	"

YEAR.	POPULATION.	AUTHORITY.
1697.....	4,302	Census (Noah Webster in "American Magazine," New York, March, 1788).
1703.....	4,375	City Inspector's Report, New York, 1861.
1712.....	5,841	"
1723.....	7,248	"
1731.....	8,622	"
1737.....	10,664	"
1746.....	11,717	"
1749.....	13,294	"
1756.....	13,046	Noah Webster, loc. cit.
1771.....	21,862	"
1786.....	23,614	"
1790.....	33,131	U. S. Census, August 1.
1800.....	60,515	"
1810.....	96,373	"
1814.....	95,519	New York State Census, June 1.
1820.....	123,706	U. S. Census, August 1
1825.....	166,086	New York State Census, July 1 (?).
1830.....	202,589	U. S. Census, June 1.
1835.....	270,089	New York State Census, July 1 (?).
1840.....	312,710	U. S. Census, June 1.
1845.....	371,223	New York State Census, July 1.
1850.....	515,547	U. S. Census, June 1.
1855.....	629,904	New York State Census, June 1.
1860.....	813,669	U. S. Census, June 1.
1865.....	726,386	New York State Census, June 1.
1870.....	942,292	U. S. Census, June 1.
1875.....	*1,041,886	New York State Census, June 1.
1880.....	1,206,299	U. S. Census, June 1.
1890.....	1,627,227	U. S. Census, June 1 (preliminary announcement).

NOTE.—A city census, taken by order of the Common Council in 1805 (date uncertain), gave the population as 75,770; a second, taken under similar auspices in 1816 (date uncertain), gave the population variously as 93,634 and 100,610.

* On January 1, 1874, a portion of Westchester County, comprising the present Twenty-third and Twenty-fourth Wards, was annexed to the City of New York. The population of this annexed district June 1, 1875, according to the New York State census, was 36,194.

Population of New York City from 1790 to 1890. Estimated for July 1 in each year.

YEAR.	POPULATION.	YEAR.	POPULATION.	YEAR.	POPULATION.
1790.....	32,962	1824.....	156,471	1858.....	734,892
1791.....	35,009	1825.....	166,086	1859.....	772,558
1792.....	37,182	1826.....	172,978	1860.....	812,154
1793.....	39,491	1827.....	180,157	1861.....	794,905
1794.....	41,943	1828.....	187,634	1862.....	778,023
1795.....	44,548	1829.....	195,421	1863.....	761,500
1796.....	47,314	1830.....	203,532	1864.....	745,327
1797.....	50,252	1831.....	215,381	1865.....	729,498
1798.....	53,372	1832.....	227,920	1866.....	767,979
1799.....	56,686	1833.....	241,188	1867.....	808,489
1800.....	60,206	1834.....	255,230	1868.....	851,137
1801.....	63,081	1835.....	270,089	1869.....	896,034
1802.....	66,094	1836.....	278,275	1870.....	943,300
1803.....	69,250	1837.....	286,719	1871.....	955,921
1804.....	72,557	1838.....	295,400	1872.....	968,710
1805.....	76,022	1839.....	304,353	1873.....	981,671
1806.....	79,653	1840.....	313,578	1874.....	1,030,607
1807.....	83,456	1841.....	324,342	1875.....	1,044,396
1808.....	87,442	1842.....	335,475	1876.....	1,075,132
1809.....	91,618	1843.....	346,991	1877.....	1,107,597
1810.....	95,993	1844.....	358,902	1878.....	1,140,617
1811.....	95,957	1845.....	371,223	1879.....	1,174,621
1812.....	95,920	1846.....	396,686	1880.....	1,209,268
1813.....	95,884	1847.....	423,896	1881.....	1,246,011
1814.....	95,848	1848.....	452,972	1882.....	1,283,870
1815.....	99,952	1849.....	484,043	1883.....	1,322,880
1816.....	104,232	1850.....	517,246	1884.....	1,363,075
1817.....	108,695	1851.....	538,490	1885.....	1,404,401
1818.....	113,350	1852.....	560,607	1886.....	1,447,166
1819.....	118,204	1853.....	583,632	1887.....	1,491,137
1820.....	123,266	1854.....	607,603	1888.....	1,536,444
1821.....	130,840	1855.....	632,559	1889.....	1,583,120
1822.....	138,879	1856.....	664,980	1890.....	1,631,232
1823.....	147,413	1857.....	699,062		

Census Population from 1865 to 1880, inclusive, and Estimated Population July 1, from 1865 to 1890, inclusive, by Age and Sex.

CENSUS POPULATION.

YEAR.	AGE.			SEX.		
	Under 5 Years.	Over 5 Years.	Total.	Male.	Female.	Total.
1865.....	95,020	631,366	726,386	344,165	382,221	726,386
1870.....	111,205	831,087	942,292	457,117	485,175	942,292
*1875.....	128,162	913,724	1,041,886	506,922	534,964	1,041,886
1880.....	140,327	1,065,972	1,206,299	590,514	615,785	1,206,299

ESTIMATED POPULATION.

	AGE.			SEX.		
	Under 5 Years.	Over 5 Years.	Total.	Male.	Female.	Total.
1865.....	95,266	634,232	729,498	345,775	383,723	729,498
1866.....	98,293	669,686	767,979	365,708	402,271	767,979
1867.....	101,416	707,073	808,489	386,793	421,696	808,489
1868.....	104,639	746,498	851,137	409,094	442,043	851,137
1869.....	107,964	788,070	896,034	432,680	463,354	896,034
1870.....	111,395	831,905	943,300	457,626	485,674	943,300
1871.....	113,735	842,186	955,921	464,003	491,918	955,921
1872.....	116,124	852,586	968,710	470,468	498,242	968,710
1873.....	118,563	863,108	981,671	477,024	504,647	981,671
1874.....	125,712	904,895	1,030,607	501,211	529,396	1,030,607
1875.....	128,353	916,043	1,044,396	508,194	536,202	1,044,396
1876.....	130,727	944,805	1,075,532	523,942	551,590	1,075,532
1877.....	133,146	974,451	1,107,597	540,178	567,419	1,107,597
1878.....	135,606	1,005,011	1,140,617	556,917	583,700	1,140,617
1879.....	138,117	1,036,504	1,174,621	574,175	600,446	1,174,621
1880.....	140,673	1,068,595	1,209,268	591,967	617,301	1,209,268
1881.....	144,947	1,101,064	1,246,011	609,954	636,057	1,246,011
1882.....	149,351	1,134,519	1,283,870	628,487	655,383	1,283,870
1883.....	153,889	1,168,991	1,322,880	647,583	675,297	1,322,880
1884.....	158,565	1,204,510	1,363,075	667,259	695,816	1,363,075
1885.....	163,383	1,241,018	1,404,401	687,533	716,868	1,404,401
1886.....	168,347	1,278,819	1,447,166	708,423	738,743	1,447,166
1887.....	173,462	1,317,675	1,491,137	729,948	761,189	1,491,137
1888.....	178,733	1,357,711	1,536,444	752,127	784,317	1,536,444
1889.....	184,164	1,398,956	1,583,120	774,980	808,140	1,583,120
1890.....	189,760	1,441,472	1,631,232	798,529	832,703	1,631,232

* Population of annexed district—Twenty-third and Twenty-fourth Wards—36,194, of which 4,750 were under 5 and 31,444 over 5 years of age, 17,740 males and 18,454 females.

NOTE.—The population since 1880 in this table is subject to future revision, having been estimated for July 1, in accordance with the preliminary announcement of the result of the U. S. Census of June 1, 1890, viz.: 1,627,227 and the relative numbers of the sexes having been assumed to be the same as in 1880.

Population of New York City by Wards.

WARD.	1860.	1865.	1870.	1875.	1880.	1890.	
						*U. S. Census.	†Police Census.
First.....	18,148	9,852	14,463	14,298	17,939	11,105	12,075
Second.....	2,506	1,114	1,312	1,012	1,608	922	1,510
Third.....	3,757	3,367	3,715	2,874	3,582	3,757	3,418
Fourth.....	21,994	17,352	23,748	20,828	20,996	17,764	19,337
Fifth.....	22,337	18,205	17,150	15,951	15,845	12,351	12,949
Sixth.....	26,696	19,754	21,153	19,861	20,196	22,993	23,058
Seventh.....	39,982	36,962	44,818	45,636	50,066	57,231	62,139
Eighth.....	39,406	30,098	34,013	32,465	35,879	31,169	41,890
Ninth.....	44,385	38,504	47,609	49,403	54,596	54,654	60,243
Tenth.....	29,004	31,537	41,431	41,757	47,554	57,514	64,076
Eleventh.....	59,571	58,953	64,230	63,855	68,778	75,708	83,337
Twelfth.....	30,651	28,259	47,497	60,510	81,800	244,793	275,587
Thirteenth.....	32,917	26,388	33,364	34,013	37,797	45,882	51,649
Fourteenth.....	28,080	23,382	26,436	26,453	30,171	28,038	30,752
Fifteenth.....	27,587	25,572	27,587	25,529	31,882	25,185	32,707
Sixteenth.....	45,176	41,972	48,359	48,233	52,188	49,250	61,419
Seventeenth.....	72,954	79,563	95,365	101,075	104,837	102,668	107,737
Eighteenth.....	57,462	47,613	59,593	61,195	66,611	63,100	70,299
Nineteenth.....	32,795	39,945	86,090	118,727	158,191	232,978	257,766
Twentieth.....	67,519	61,884	75,407	79,764	86,015	84,218	93,844
Twenty-first.....	49,017	38,669	56,703	58,831	66,536	62,295	78,689
Twenty-second.....	61,725	47,361	71,349	83,420	111,606	156,526	184,979
Twenty-third.....	.....	.....	.....	24,320	28,338	53,621	60,445
Twenty-fourth.....	.....	.....	.....	11,874	13,288	19,779	20,810
Total.....	813,669	726,386	942,292	1,041,886	1,206,299	1,513,501	1,710,715

* June 1, 1890. † Oct., 1890. ‡ Twenty-third and Twenty-fourth Wards annexed on January 1, 1874.

Deaths and Still-births, from 1804 to 1890, inclusive.

YEAR.	DEATHS.	*STILL-BIRTHS.	YEAR.	DEATHS.	STILL-BIRTHS.	YEAR.	DEATHS.	STILL-BIRTHS.
1804.....	2,084	41	1833.....	5,689	392	*1862.....	23,150	.....
1805.....	2,297	47	1834.....	8,907	492	*1863.....	26,617	.....
1806.....	2,174	51	1835.....	7,096	474	*1864.....	25,792	.....
1807.....	2,236	76	1836.....	8,068	500	*1865.....	25,767	.....
1808.....	1,950	64	1837.....	8,626	550	*1866.....	26,815	.....
1809.....	2,038	70	1838.....	7,911	520	1867.....	23,159	2,279
1810.....	2,073	94	1839.....	7,910	592	1868.....	24,889	2,195
1811.....	2,431	93	1840.....	8,469	606	1869.....	25,167	2,215
1812.....	2,503	81	1841.....	9,093	584	1870.....	27,175	2,254
1813.....	2,335	76	1842.....	9,154	707	1871.....	26,976	2,276
1814.....	1,884	93	1843.....	8,659	687	1872.....	32,647	2,322
1815.....	2,511	102	1844.....	8,890	767	1873.....	29,084	2,312
1816.....	3,000	88	1845.....	10,122	862	1874.....	28,727	2,261
1817.....	2,409	118	1846.....	11,411	883	1875.....	30,709	2,274
1818.....	3,106	159	1847.....	14,844	944	1876.....	29,152	2,290
1819.....	3,178	168	1848.....	14,892	1,027	1877.....	26,203	2,164
1820.....	3,522	189	1849.....	22,605	1,168	1878.....	27,008	2,192
1821.....	3,422	174	1850.....	15,826	1,152	1879.....	28,342	2,191
1822.....	3,212	205	1851.....	20,738	1,286	1880.....	31,937	2,362
1823.....	3,551	223	1852.....	20,196	1,405	1881.....	38,624	2,462
1824.....	4,224	250	1853.....	21,979	1,575	1882.....	37,924	2,658
1825.....	4,920	244	1854.....	28,473	1,615	1883.....	34,011	2,697
1826.....	4,961	302	1855.....	24,448	1,564	1884.....	35,034	2,908
1827.....	5,139	291	1856.....	21,748	1,556	1885.....	35,682	2,968
1828.....	4,843	338	1857.....	22,811	1,558	1886.....	37,351	3,050
1829.....	4,734	300	1858.....	23,269	1,498	1887.....	38,933	3,100
1830.....	5,522	339	1859.....	22,745	1,331	1888.....	40,175	3,239
1831.....	6,347	372	1860.....	24,760	1,638	1889.....	39,679	3,349
1832.....	10,257	384	*1861.....	24,525	.....	1890.....	40,103	3,315

* Statistics of Still-births from 1861 to 1866 imperfect or missing.

† Number of deaths registered and on file in the Health Department.

‡ Number of deaths stated in City Inspector's Report of 1861 and in excess of number registered.

NOTE.—Previous to 1851 registration of burials within the city limits was not required by law, and the deaths registered were only of those buried outside of the city, or voluntarily reported when buried within the city. The excess of deaths reported for several years, as given above, over the number actually registered in this office, is probably to be accounted for by the collection of statistics of interments from the cemeteries within the city limits. It is therefore evident that the death-rates previous to 1851 are below the actual rates.

Deaths from Small-pox, Cholera, Yellow Fever and Hydrophobia, from 1804 to 1865, inclusive.

	1804.	1805.	1806.	1807.	1808.	1809.	1810.	1811.	1812.	1813.
Small-pox.....	169	62	48	29	62	66	4	117	21	2
Cholera.....	..	..	..	..	..	..	..	..	..	..
Yellow Fever.....	..	270	..	..	..	13	..	..	..	..
Hydrophobia.....	..	..	..	..	..	..	..	..	..	..

	1814.	1815.	1816.	1817.	1818.	1819.	1820.	1821.	1822.	1823.
Small-pox.....	2	94	179	14	19	..	..	..	..	18
Cholera.....	..	..	..	..	..	..	..	..	..	..
Yellow Fever.....	..	..	..	1	..	23	..	3	166	1
Hydrophobia.....	2	..	..	..	..	..	1	..	..	..

	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	1833.
Small-pox.....	394	40	58	149	93	16	176	224	89	25
Cholera.....	..	..	..	..	..	..	..	..	3,513	..
Yellow Fever.....	..	..	..	..	..	..	..	..	..	..
Hydrophobia.....	..	..	..	..	..	..	1	1	..	1

	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.	1843.
Small-pox.....	233	351	173	170	91	69	234	220	181	119
Cholera.....	971	..	..	..	..	2	1	..	..	..
Yellow Fever.....	..	..	..	..	..	2	..	..	..	..
Hydrophobia.....	..	2	3	3	2	2	..	1	..	..

	1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.
Small-pox.....	20	425	141	53	585	372	241	586	516	681	624
Cholera.....	15	6	..	..	2	5,071	57	..	374	33	2,509
Yellow Fever.....	..	..	..	..	..	..	..	..	1	5	6
Hydrophobia.....	1	..	..	..	7	2	4	..	1	1	..

	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.
Small-pox.....	107	396	434	511	62	289	616	269	78	394	674
Cholera.....	19	8	11	5	9	18	12	9	9	12	10
Yellow Fever.....	2	13	..	5	4	2	..	..	..	2	..
Hydrophobia.....	4	3	2	..	2	..	5	1	3	1	3

* The number of deaths from yellow fever in the year 1798, as reported to Mayor Varick, was 714.

NOTE.—These diseases have been selected from the confessedly imperfect records of the years preceding the organization of the Health Department as being diseases of such bold characteristics and exciting so great public interest as to make it probable that the record of them is complete.

Annual Number of Deaths from Prominent Causes and Deaths in Institutions for Twenty-five Years ending December 31, 1890.

CAUSES OF DEATH AND DEATHS IN INSTITUTIONS.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Cerebro-spinal Meningitis.....	18	33	34	42	32	48	782	200	158	146	127	116	97	108	170	461	238	223	210	202	223	203	173	145	136
Diphtheria	435	250	277	328	308	238	446	1,151	1,665	2,329	1,750	951	1,007	671	1,390	2,249	1,525	1,009	1,090	1,325	1,727	2,167	1,914	1,686	1,262
Typhoid Fever.....	514	347	329	378	422	251	336	313	305	376	325	343	321	268	372	594	516	625	476	405	433	421	364	397	352
Malarial Fevers.....	175	173	132	128	213	279	326	263	265	246	195	250	285	300	336	457	386	371	308	297	286	250	270	228	176
Measles	153	499	200	526	298	409	463	306	319	167	362	155	272	244	479	429	913	716	762	736	668	767	591	470	730
Scarlatina	806	655	861	966	975	791	990	1,045	879	514	891	983	1,039	1,477	618	1,964	2,066	744	608	559	371	589	1,361	1,242	408
Small-pox.....	44	19	26	203	293	805	929	117	484	1,280	315	14	2	25	31	451	259	12	....	26	31	99	81	1	2
Typhus Fever	433	169	137	125	96	65	86	39	14	28	20	17	4	4	3	160	65	15	27	15	14	....	4	....	....
Whooping-cough.....	114	155	217	358	201	465	565	268	489	407	406	440	382	537	277	286	658	327	490	495	575	188	573	647	487
Diarrhoeal Diseases	4,880	3,139	3,837	3,134	3,956	3,653	5,197	4,097	3,569	3,738	3,782	3,557	2,945	2,965	3,947	4,270	4,050	3,398	3,679	3,426	3,494	3,762	3,489	3,648	3,346
" under 5 years.....	2,856	2,590	3,322	2,676	3,511	3,250	4,680	3,634	3,227	3,352	3,413	3,187	2,598	2,592	3,469	2,710	3,479	2,897	3,160	2,892	2,990	3,252	3,051	3,135	2,997
Cancer	269	293	315	304	355	335	392	425	416	424	459	495	570	572	659	706	732	678	731	754	779	832	870	848	954
Diabetes	13	16	8	22	24	25	25	13	14	31	19	35	42	37	44	43	46	68	68	63	82	105	117	118	130
Aneurysm.....	46	48	60	64	77	68	73	77	76	89	76	94	87	77	70	68	83	81	75	86	77	85	70	62	64
Heart Diseases	680	664	615	686	699	813	894	860	883	985	992	880	1,068	1,164	1,153	1,289	1,477	1,693	1,662	1,800	1,894	2,018	1,880	1,970	1,978
Insanity.....	16	26	34	50	61	67	65	55	59	34	56	60	52	66	112	125	119	122	93	110	116	130	249	298	252
All diseases of the Nervous System.....	3,876	3,260	3,560	2,976	3,275	2,677	3,479	2,811	2,451	2,436	2,663	2,378	2,410	2,486	2,788	3,274	2,968	2,810	3,018	3,241	3,123	3,589	3,529	3,491	3,210
Bronchitis	557	695	803	877	855	964	1,040	1,068	1,065	1,111	1,214	1,033	1,184	1,263	1,375	1,511	1,583	1,435	1,485	1,605	1,701	1,838	1,892	1,814	1,987
Croup.....	368	333	342	483	421	466	675	732	594	758	527	472	499	522	910	1,038	729	644	748	855	968	889	639	605	521
Phthisis	3,481	3,256	3,414	3,364	4,030	4,186	4,274	4,134	4,034	4,172	4,194	4,044	4,466	4,343	4,706	5,312	5,247	5,290	5,235	5,196	5,477	5,260	5,260	5,179	5,492
Pneumonia	1,388	1,434	1,668	2,100	1,836	1,834	2,150	2,328	2,398	2,802	2,542	2,148	2,288	2,554	2,822	3,261	3,472	3,409	3,159	3,650	3,656	3,707	4,288	4,075	4,989
Cirrhosis of Liver.....	74	79	103	100	120	150	192	165	163	198	204	185	174	199	234	256	233	265	239	254	266	280	261	305	329
Bright's Disease	412	403	534	557	787	947	949	876	828	909	958	923	919	1,027	1,029	1,187	1,241	1,195	1,163	1,188	1,210	1,128	1,147	1,763	2,024
Premature Birth.....	385	319	342	406	475	552	604	576	536	549	548	500	506	573	626	644	617	627	681	621	732	771	670	729	744
Puerperal Diseases	223	182	222	224	278	381	476	427	393	370	342	298	300	359	407	426	407	416	438	394	371	355	442	393	383
Alcoholism	128	108	110	278	302	220	314	254	227	168	126	100	127	198	219	269	223	222	179	161	210	222	203	230	276
Sunstroke	310	5	196	26	238	21	320	34	19	19	206	21	52	41	116	134	103	83	107	146	42	216	96	32	62
Accidents	884	635	733	797	834	1,071	1,108	968	1,008	967	902	820	809	837	1,107	1,059	1,099	1,100	1,055	1,078	1,176	1,288	1,085	1,148	1,449
Homicide	18	29	46	37	45	65	69	73	59	62	55	57	58	48	58	65	76	62	55	59	63	70	57	72	61
Suicide.....	54	82	98	102	101	114	144	118	180	155	150	148	142	117	152	166	199	161	229	207	223	235	247	244	239
Deaths in Institutions .....	....	....	4,218	4,065	4,945	5,189	5,800	4,755	4,759	5,174	4,758	4,250	4,313	4,700	5,518	7,102	7,449	6,955	6,791	6,845	7,128	7,374	7,774	7,981	8,315
" Lunatic Asylums.....	....	....	163	150	161	205	222	231	246	282	274	261	258	252	271	343	335	315	345	404	444	431	422	448	419
" Almshouses.....	....	....	150	86	140	124	83	81	96	92	128	242	274	280	237	321	433	437	439	369	459	369	336	424	510
" Prisons.....	....	....	37	43	73	107	102	99	95	99	103	69	110	72	84	114	103	97	88	149	150	150	129	85	112

* Exclusive of 53 killed in riot July 12.

† Inclusive of Typho-Malarial Fever.

‡ The Vaccinating Corps was organized as a separate branch of the Department on September 29, 1874, in accordance with chapter 635, Laws of 1874, passed June 15.

§ Number stated in printed annual report for 1873, 2,702; discrepancy caused by transfer of deaths from simple Cerebro-Spinal Meningitis, from Zymotic to Nervous Causes. Sunstroke included from 1866 to 1887, excluded from 1888 to 1890, inclusive.

Deaths from Infrequent Diseases by Years, from 1866 to and including 1890.

CAUSE OF DEATH.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Addison's disease.....	1	3	1	1	..	2	3	2	3	..	3	4	4	3	1	3	..	..	..	..	6	5	2
Basedow's disease (Exophthalmic goitre).....	1	..	1	1	..	1	..	..	..	1	..	3	1	..	..	1	..	..	4	5	2
Beri-beri.....	1	..	..	..	..	..	..	..	..	..
Bulbar paralysis (Glossolabio-laryngeal).....	1	1	..	3	1	1	..	..	..	1	1	3	4	2	..
Elephantiasis (arabum).....	2	..	1	1	1	..	1	..	2	..	..	3	1	1	..	2	1	1	..
Fleeting kidney.....	1	..	..	..	..	..	..	..	..
Glanders.....	1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Hodgkin's disease (Lymphadenoma).....	1	..	..	1	1	2	..	..	..	..	..	8	3	2
Hydatids of liver.....	2	1	..	1	..	1	1	..	..	..	..	2	1	..	..	..	..	..	..	..	..
Hydrophobia*.....	2	4	1	5	3	7	6	..	5	..	5	4	2	..	..	3	2	1	1	..	..	1	..	1	1
Ichthyosis.....	1	..	..	..	..	..	..	..	..
Influenza	2	..	1	2	..	3	2	..	..	1	..	..	..	..	..	..	..	..	7	314
Leprosy.....	1	..	1	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..
Malignant pustule.....	2	3	4	4	2	1	4	1	1	4	1	3	2	1	2	1	1	1	..	1	..	2	1	4	4
Meniere's disease.....	1	..	..	..	..
Myxoedema.....	1	..	..	..	..	..	..	..	..
Progressive Muscular Atrophy	1	2	..	3	..	1	2	2	6	..	..	..	..	2	5	3
Relapsing fever.....	184	6	3	2	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Sclerema.....	..	1	2	2	3	1	1	..	..	..	1	1	1	..	..	..	1	1	..	..	..	..	..	..	1
Scleroderma.....	1	1	..	..	..	2	..	..	..	..	..	..	..	2
Trichinosis	1	..	2	..	..	..	..	..	1	..	..	1	..	1	2	..	..	..	1	..	..	1	1	..
Yellow-fever.....	..	3	1	1	3	2	..	3	..	..	1	1	..	2	1	..	..	..	3	1	1	..	3	..	..

* In 1874 there was a death reported as due to Lyssophobia in addition to the 5 deaths from Hydrophobia.

Deaths by Kerosene, Chloroform, Ether, Illuminating Gas, Railroad, Elevated Railroad, Horse and Cable Cars, Street Vehicles, Judicial Execution and Electric Current, from 1870 to 1890, inclusive.

CAUSES OF DEATH—ACCIDENTS.	1870.
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Death-rate and Still-birth Rate Per 1,000 of the Estimated or Enumerated Population from 1804 to 1890, Inclusive.

(For the years previous to 1851 these death-rates are too low).

YEAR.	DEATH-RATE.	STILL-BIRTH RATE.	YEAR.	DEATH-RATE.	STILL-BIRTH RATE.	YEAR.	DEATH-RATE.	STILL-BIRTH RATE.	YEAR.	DEATH-RATE.	STILL-BIRTH RATE.	YEAR.	DEATH-RATE.	STILL-BIRTH RATE.
1804.....	28.72	.57	1822.....	23.12	1.48	1840.....	27.01	1.93	1857.....	32.63	2.23	1874.....	27.87	2.19
1805.....	30.22	.62	1823.....	24.09	1.51	1841.....	28.04	1.80	1858.....	31.66	2.04	1875.....	29.39	2.18
1806.....	27.29	.64	1824.....	27.00	1.60	1842.....	27.29	2.09	1859.....	30.95	1.81	1876.....	27.11	2.13
1807.....	26.79	.92	1825.....	29.62	1.47	1843.....	24.96	1.98	1860.....	30.49	2.02	1877.....	23.65	1.95
1808.....	22.30	.73	1826.....	28.68	1.75	1844.....	24.77	2.14	1861.....	30.85	....	1878.....	23.68	1.92
1809.....	22.24	.76	1827.....	28.52	1.62	1845.....	27.27	2.32	1862.....	29.75	....	1879.....	24.13	1.87
1810.....	21.60	.98	1828.....	25.81	1.80	1846.....	28.77	2.23	1863.....	34.95	....	1880.....	26.41	1.95
1811.....	25.34	.97	1829.....	24.22	1.54	1847.....	35.02	2.23	1864.....	34.60	....	1881.....	37.99	1.98
1812.....	26.10	.84	1830.....	27.13	1.67	1848.....	32.88	2.27	1865.....	35.32	....	1882.....	29.54	2.07
1813.....	24.35	.79	1831.....	29.47	1.73	1849.....	46.70	2.41	1866.....	34.92	....	1883.....	25.71	2.04
1814.....	19.66	.97	1832.....	45.00	1.68	1850.....	30.60	2.23	1867.....	28.64	2.82	1884.....	25.70	2.13
1815.....	25.12	1.02	1833.....	23.59	1.63	1851.....	38.51	2.39	1868.....	29.25	2.58	1885.....	25.40	2.11
1816.....	28.77	.84	1834.....	34.90	1.93	1852.....	36.02	2.51	1869.....	28.09	2.47	1886.....	25.81	2.11
1817.....	22.16	1.09	1835.....	26.27	1.76	1853.....	37.65	2.76	1870.....	28.81	2.39	1887.....	26.11	2.08
1818.....	27.40	1.40	1836.....	28.99	1.80	1854.....	46.86	2.66	1871.....	28.22	2.38	1888.....	26.15	2.11
1819.....	26.88	1.42	1837.....	30.08	1.92	1855.....	38.65	2.47	1872.....	33.70	2.40	1889.....	25.06	2.12
1820.....	20.46	1.53	1838.....	26.78	1.76	1856.....	32.70	2.34	1873.....	29.63	2.36	1890.....	24.58	2.03
1821.....	26.15	1.33	1839.....	25.99	1.95									

Deaths in New York City by Month and Age from 1871 to 1890 inclusive.

YEAR.	TOTAL.			JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.		
	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.
1871.....	12,971	14,005	26,976	1,033	1,192	2,225	881	1,108	1,989	1,044	1,297	2,341	899	1,289	2,188	994	1,289	2,283
1872.....	16,188	16,459	32,647	944	1,280	2,224	1,069	1,373	2,442	1,325	1,519	2,844	1,315	2,622	2,937	1,333	1,626	2,959
1873.....	14,182	14,902	29,084	1,013	1,374	2,387	971	1,204	2,175	991	1,414	2,405	968	1,258	2,226	936	1,372	2,308
1874.....	13,956	14,771	28,727	992	1,190	2,182	883	1,182	2,065	979	1,326	2,305	979	1,377	2,356	912	1,270	2,182
1875.....	14,848	15,861	30,709	1,120	1,681	2,801	1,033	1,376	2,409	1,105	1,527	2,632	1,019	1,422	2,441	1,037	1,348	2,385
1876.....	14,210	14,942	29,152	1,101	1,283	2,384	1,216	1,304	2,520	1,238	1,491	2,729	1,053	1,312	2,375	985	1,205	2,190
1877.....	12,307	13,896	26,203	797	1,198	1,995	742	1,081	1,823	867	1,317	2,184	795	1,247	2,042	810	1,212	2,022
1878.....	12,410	14,598	27,008	951	1,299	2,250	938	1,117	2,055	993	1,366	2,359	988	1,222	2,210	841	1,160	2,001
1879.....	12,777	15,565	28,342	1,054	1,652	2,706	923	1,353	2,276	1,119	1,475	2,594	860	1,395	2,255	855	1,236	2,091
1880.....	14,650	17,287	31,937	908	1,394	2,302	875	1,309	2,184	977	1,351	2,328	963	1,510	2,473	1,131	1,493	2,624
1881.....	17,737	20,887	38,624	1,281	1,867	3,148	1,175	1,674	2,849	1,255	1,863	3,123	1,300	2,013	3,313	1,302	1,899	3,201
1882.....	17,520	20,404	37,924	1,643	1,850	3,493	1,574	1,715	3,289	1,639	1,867	3,506	1,437	1,955	3,392	1,443	1,903	3,346
1883.....	13,856	20,155	34,011	1,007	1,791	2,798	939	1,646	2,585	1,129	2,071	3,200	1,139	1,830	2,969	1,123	1,856	2,979
1884.....	15,272	19,762	35,034	921	1,659	2,580	988	1,623	2,611	1,024	1,802	2,826	1,065	1,654	2,719	1,047	1,714	2,761
1885.....	15,267	20,415	35,682	1,197	1,768	2,965	1,249	1,817	3,066	1,327	2,017	3,344	1,197	1,900	3,097	1,110	1,827	2,937
1886.....	16,121	21,230	37,351	1,180	1,799	2,979	1,038	1,729	2,767	1,224	2,168	3,392	1,075	1,850	2,925	965	1,794	2,759
1887.....	16,766	22,167	38,933	1,520	1,987	3,507	1,293	1,676	2,969	1,285	1,962	3,247	1,171	2,116	3,287	1,245	1,947	3,192
1888.....	17,358	22,817	40,175	1,193	1,891	3,084	1,237	1,954	3,191	1,535	2,479	4,014	1,290	2,058	3,348	1,280	2,052	3,332
1889.....	17,152	22,527	39,679	1,466	1,909	3,375	1,441	1,886	3,327	1,634	2,144	3,778	1,544	2,049	3,593	1,272	1,893	3,165
1890.....	16,305	23,798	40,103	1,288	3,457	4,745	1,073	1,915	2,988	1,205	2,134	3,339	1,310	1,920	3,230	1,255	1,933	3,188

YEAR.	JUNE.			JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.		
	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.	Under 5 Years.	Over 5 Years.	Total.
1871.....	1,137	989	2,126	1,826	1,255	3,081	1,453	1,111	2,564	1,227	1,052	2,279	877	1,133	2,010	764	1,080	1,844	836	1,210	2,046
1872.....	1,675	1,253	2,928	2,954	1,560	4,514	1,753	1,325	3,078	1,172	1,194	2,366	940	1,182	2,122	807	1,183	1,990	901	1,342	2,243
1873.....	955	1,115	2,071	2,435	1,175	3,610	1,768	1,176	2,944	1,281	1,183	2,464	991	1,181	2,172	929	1,214	2,143	943	1,236	2,179
1874.....	942	1,062	2,004	2,084	1,108	3,192	1,788	1,185	2,973	1,331	1,129	2,460	1,058	1,245	2,303	965	1,304	2,269	1,043	1,393	2,436
1875.....	1,051	1,187	2,238	2,394	1,262	3,656	1,785	1,176	2,961	1,444	1,195	2,639	939	1,201	2,140	887	1,153	2,040	1,034	1,333	2,367
1876.....	1,064	1,075	2,139	2,708	1,456	4,164	1,572	1,178	2,750	1,003	1,081	2,084	725	1,224	1,949	689	1,116	1,805	846	1,217	2,063
1877.....	981	1,002	1,983	2,114	1,186	3,300	1,566	1,118	2,684	1,148	1,033	2,181	946	1,186	2,132	753	1,135	1,888	788	1,181	1,969
1878.....	1,000	1,123	2,123	1,863	1,211	3,074	1,281	1,170	2,451	1,001	1,119	2,120	914	1,234	2,148	778	1,235	2,013	862	1,342	2,204
1879.....	1,138	1,122	2,260	1,809	1,300	3,109	1,307	1,108	2,415	1,048	1,114	2,162	955	1,163	2,118	859	1,330	2,189	850	1,317	2,167
1880.....	2,101	1,434	3,535	1,980	1,400	3,380	1,347	1,323	2,670	1,074	1,299	2,373	1,073	1,496	2,569	1,045	1,516	2,561	1,176	1,762	2,938
1881.....	1,516	1,485	3,001	2,619	1,677	4,296	1,808	1,599	3,407	1,675	1,589	3,264	1,290	1,687	2,977	1,088	1,702	2,790	1,428	1,827	3,255
1882.....	1,327	1,553	2,880	2,758	1,740	4,498	1,751	1,504	3,255	1,185	1,411	2,596	951	1,639	2,590	876	1,551	2,427	936	1,716	2,652
1883.....	1,276	1,428	2,704	2,345	1,705	4,050	1,293	1,610	2,903	1,062	1,401	2,463	829	1,555	2,384	785	1,558	2,343	929	1,704	2,633
1884.....	1,437	1,518	2,955	2,276	1,582	3,858	1,657	1,493	3,150	1,399	1,531	2,930	1,208	1,612	2,820	1,061	1,716	2,807	1,209	1,778	2,987
1885.....	1,290	1,534	2,824	2,516	1,796	4,312	1,476	1,515	2,991	1,163	1,484	2,647	872	1,520	2,392	822	1,542	2,364	1,048	1,695	2,743
1886.....	1,165	1,556	2,722	2,499	1,699	4,198	1,560	1,687	3,247	1,317	1,450	2,767	1,275	1,702	2,977	1,290	1,786	3,076	1,532	1,970	3,502
1887.....	1,538	1,686	3,224	2,629	1,964	4,593	1,604	1,676	3,280	1,351	1,691	3,045	1,012	1,775	2,787	975	1,784	2,759	1,140	1,903	3,043
1888.....	1,667	1,781	3,448	2,518	1,741	4,259	1,844	1,750	3,594	1,418	1,544	2,962	1,099	1,871	2,970	984	1,716	2,700	1,293	1,970	3,263
1889.....	1,712	1,609	3,321	2,502	1,831	4,333	1,593	1,766	3,359	1,220	1,579	2,799	926	1,798	2,724	836	1,750	2,586	1,006	2,313	3,319
1890.....	1,762	1,723	3,485	2,432	1,822	4,254	1,598	1,734	3,332	1,284	1,598	2,882	1,048	1,680	2,728	938	1,810	2,748	1,112	2,072	3,184

Death-rate by Age and Sex, from 1866 to 1890.

YEAR.	AGE.		SEX.		YEAR.	AGE.		SEX.	
	Under 5 Years.	5 Years Old and Over.	Male.	Female.		Under 5 Years.	5 Years Old and Over.	Male.	Female.
1866.....	128.91	21.12	39.07	31.14	1879.....	92.52	15.01	25.79	22.54
1867.....	120.81	15.42	31.76	25.80	1880.....	104.14	16.18	28.43	24.47
1868.....	124.88	15.84	32.51	26.22	1881.....	122.37	18.97	33.89	28.23
1869.....	119.10	15.62	30.90	25.46	1882.....	117.31	17.98	31.97	27.20
1870.....	119.69	16.64	31.63	26.15	1883.....	90.05	17.24	28.07	23.45
1871.....	114.05	16.63	31.15	25.46	1884.....	96.32	16.41	27.58	23.91
1872.....	139.40	19.31	36.83	30.75	1885.....	93.44	16.45	27.51	23.39
1873.....	119.61	17.27	32.10	27.29	1886.....	95.76	16.60	28.61	23.12
1874.....	111.02	16.32	30.03	25.82	1887.....	96.66	16.82	28.77	23.56
1875.....	115.68	17.31	31.44	27.47	1888.....	97.12	16.80	28.66	23.74
1876.....	108.70	15.81	29.45	24.88	1889.....	93.13	16.10	27.47	22.76
1877.....	92.43	14.26	25.22	22.17	1890.....	85.93	16.51	26.84	22.42
1878.....	91.51	14.52	25.13	22.29					

These rates are calculated upon the population corresponding to the heading of each column, and not upon the entire population of the city.

Alcoholism.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	21	14	16	20	24	21	16	14	17	18	12	27	220
1872.....	26	24	30	24	37	16	29	36	25	18	25	24	314
1873.....	34	20	20	24	23	18	19	25	25	19	9	9	254
1874.....	11	14	12	22	25	26	19	24	26	24	7	17	227
1875.....	24	14	19	10	11	12	15	11	14	11	14	13	168
1876.....	14	8	9	9	8	12	16	12	6	8	14	10	126
1877.....	6	9	11	11	10	7	10	19	7	7	6	6	100
1878.....	7	7	15	9	7	9	5	20	9	12	11	16	127
1879.....	22	11	13	9	14	13	16	22	21	19	20	18	198
1880.....	19	14	19	18	20	16	16	19	11	20	19	28	219
1881.....	17	20	25	16	22	14	28	27	19	25	29	27	269
1882.....	20	21	15	19	20	11	21	12	16	19	29	20	223
1883.....	21	15	16	20	27	19	24	22	16	15	12	15	222
1884.....	12	12	11	20	16	17	14	18	15	10	12	22	179
1885.....	15	17	13	12	11	11	19	10	20	9	12	12	161
1886.....	9	10	18	11	10	15	31	26	17	17	28	18	210
1887.....	15	13	14	23	20	17	33	29	17	15	13	13	222
1888.....	14	13	17	11	16	26	25	27	12	23	10	9	203
1889.....	18	8	20	11	26	22	24	16	15	30	15	25	230
1890.....	32	22	21	30	15	14	20	17	29	20	20	16	276

Bright's Disease and Nephritis.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	77	86	101	100	102	89	82	82	82	79	77	73	1,030
1872.....	72	75	99	113	100	76	81	78	89	73	75	98	1,029
1873.....	83	72	92	86	91	74	88	87	71	68	90	76	985
1874.....	85	60	111	70	88	58	65	86	77	83	100	92	975
1875.....	109	97	90	94	86	81	92	85	82	85	93	113	1,107
1876.....	86	111	130	106	92	83	106	86	72	83	84	93	1,132
1877.....	93	65	112	106	104	81	90	85	97	105	107	94	1,139
1878.....	86	88	108	106	104	96	94	99	76	90	97	117	1,161
1879.....	144	113	119	111	120	101	125	85	92	102	120	116	1,348
1880.....	107	106	87	127	123	127	114	117	106	128	113	163	1,418
1881.....	144	134	135	165	143	136	157	121	119	161	142	144	1,701
1882.....	161	173	161	165	168	146	139	146	163	142	146	146	1,856
1883.....	157	159	166	143	175	146	157	150	154	155	153	149	1,854
1884.....	148	168	164	170	164	160	177	141	160	165	160	151	1,928
1885.....	196	173	183	192	196	170	176	150	154	164	165	166	2,095
1886.....	179	156	212	191	192	142	173	208	186	185	178	212	2,214
1887.....	196	177	207	231	202	216	221	184	176	188	175	202	2,375
1888.....	189	208	238	197	233	179	188	186	138	185	186	215	2,342
1889.....	225	250	216	229	179	171	215	198	151	189	182	232	2,437
1890.....	241	163	219	200	218	207	217	172	162	205	193	213	2,410

This table includes all acute and chronic forms of nephritis.

Bronchitis.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	93	88	97	89	101	59	53	52	69	81	81	101	964
1872.....	95	101	135	134	87	64	59	38	57	73	80	117	1,040
1873.....	122	123	107	110	93	54	54	38	44	56	114	128	1,068
1874.....	111	111	127	108	94	52	47	51	67	76	101	120	1,065
1875.....	149	110	137	110	93	55	57	44	69	90	90	107	1,111
1876.....	120	139	178	107	81	65	58	82	63	89	99	133	1,214
1877.....	115	127	129	94	72	59	50	42	56	88	90	111	1,033
1878.....	119	130	142	123	113	67	57	49	69	95	122	93	1,184
1879.....	159	130	145	114	95	63	64	51	71	111	126	134	1,263
1880.....	106	122	140	138	131	102	43	82	72	112	126	195	1,375
1881.....	166	169	153	159	120	93	81	69	86	106	135	174	1,511
1882.....	218	169	188	152	167	103	78	67	76	92	133	140	1,583
1883.....	155	132	163	174	145	79	59	68	77	87	110	166	1,435
1884.....	158	131	148	137	124	84	79	78	75	118	160	193	1,485
1885.....	157	180	210	163	137	105	93	76	89	93	124	178	1,605
1886.....	203	178	190	127	119	88	85	76	101	142	164	228	1,701
1887.....	218	168	206	180	159	109	81	98	132	151	142	194	1,838
1888.....	191	200	227	181	168	129	111	97	111	144	158	184	1,892
1889.....	182	217	234	159	133	107	96	104	105	120	129	128	1,814
1890.....	391	190	229	201	163	116	94	98	96	121	136	152	1,987

Cancer.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	28	20	35	26	34	20	32	24	26	24	40	24	333
1872.....	30	34	31	26	44	37	26	34	34	29	32	35	392
1873.....	40	29	32	35	31	32	50	38	45	30	29	34	425
1874.....	41	33	37	39	38	32	30	32	36	40	31	27	416
1875.....	36	30	45	40	36	40	38	33	37	29	33	26	423
1876.....	32	36	37	27	42	45	36	36	40	34	37	57	459
1877.....	40	39	42	38	41	33	46	52	40	38	39	47	495
1878.....	44	47	51	45	48	55	56	41	58	46	40	39	570
1879.....	44	42	48	50	44	47	57	57	50	47	43	49	572
1880.....	45	54	67	55	62	55	61	49	52	50	56	53	659
1881.....	66	58	44	60	73	60	46	59	56	70	85	59	706
1882.....	75	48	63	66	51	68	69	57	53	67	52	63	732
1883.....	59	52	56	50	71	63	57	62	57	51	58	51	678
1884.....	58	57	74	65	69	61	61	61	46	53	61	65	731
1885.....	55	68	67	46	62	69	66	60	56	68	69	68	754
1886.....	53	73	78	62	65	70	62	67	49	69	64	67	779
1887.....	82	49	59	70	63	80	68	73	66	92	56	74	832
1888.....	75	67	80	89	78	78	46	62	73	84	64	74	870
1889.....	58	51	76	68	72	72	77	85	68	73	70	78	848
1890.....	92	61	80	78	102	80	78	72	81	65	79	86	954

Croup.*

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total
1871.....	49	36	47	51	32	22	17	19	23	49	64	57	466
1872.....	72	64	67	42	41	30	12	27	44	72	100	97	675
1873....	80	93	68	63	48	40	25	32	43	80	81	79	732
1874.....	61	75	52	62	32	28	23	32	25	52	69	83	594
1875.....	89	76	89	62	50	48	34	26	45	77	89	73	758
1876.....	76	56	62	52	36	24	15	16	29	58	40	63	527
1877.....	36	50	50	37	38	21	28	12	36	50	59	55	472
1878.....	65	60	70	54	40	26	15	14	21	44	43	47	499
1879.....	46	44	50	31	32	20	12	21	39	51	97	79	522
1880.....	70	72	70	68	54	53	44	43	57	108	139	132	910
1881.....	116	94	108	109	81	80	60	63	54	80	90	103	1,038
1882.....	105	79	108	80	70	46	31	24	16	49	52	69	729
1883.....	76	53	65	57	48	32	30	41	53	54	70	65	644
1884.....	49	65	58	70	62	44	30	47	42	82	98	101	748
1885.....	70	81	69	66	79	62	50	46	48	68	91	118	855
1886.....	97	87	102	72	56	64	60	49	48	89	126	118	968
1887.....	115	93	105	98	95	57	27	22	47	67	82	81	889
1888.....	92	77	76	51	57	48	28	29	37	32	45	69	639
1889.....	69	67	69	61	61	42	35	25	38	43	55	40	605
1890.....	46	59	56	65	44	34	28	26	24	32	53	54	521

Diphtheria.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	34	27	27	17	20	13	12	16	18	14	17	23	238
1872.....	33	30	32	25	35	24	20	24	46	52	60	65	446
1873.....	71	51	48	60	76	99	91	133	143	164	163	1,151	1,665
1874.....	140	97	111	115	102	99	109	103	108	201	251	229	1,665
1875.....	232	196	180	189	165	195	167	147	175	206	210	267	2,329
1876.....	274	242	209	158	186	130	81	79	68	103	102	118	1,750
1877.....	72	70	84	79	67	50	56	53	85	111	116	108	951
1878.....	132	94	105	90	81	72	50	47	55	75	101	105	1,007
1879.....	97	69	58	36	46	46	32	39	30	71	76	71	671
1880.....	72	77	65	81	76	61	89	97	125	199	234	214	1,390
1881.....	212	160	180	164	190	209	197	173	173	203	178	210	2,249
1882.....	182	169	181	154	156	133	95	78	63	88	97	93	1,525
1883.....	104	87	88	92	92	82	66	73	62	82	81	100	1,009
1884.....	79	82	73	77	83	92	70	62	55	127	139	151	1,090
1885.....	108	121	121	115	102	115	101	71	87	87	122	175	1,325
1886.....	155	149	134	124	142	130	133	104	85	165	188	218	1,727
1887.....	205	170	180	173	228	218	154	103	143	161	197	234	2,167
1888.....	218	171	232	162	232	173	155	116	60	100	131	164	1,914
1889.....	200	187	208	228	186	164	102	85	62	80	67	117	1,686
1890.....	110	117	132	121	123	107	97	66	61	80	107	141	1,262

Heart Diseases.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	79	58	69	80	84	54	57	60	54	58	73	87	813
1872.....	95	77	86	75	84	77	62	64	57	69	77	71	894
1873.....	76	56	80	63	77	75	55	66	73	67	86	81	860
1874.....	77	76	63	88	87	59	63	59	62	87	71	91	883
1875.....	102	88	70	95	85	77	72	73	67	82	70	104	985
1876.....	86	74	85	84	77	75	90	70	76	94	77	102	992
1877.....	84	61	99	71	75	68	63	61	53	78	72	94	879
1878.....	106	82	106	102	86	80	66	62	91	89	85	113	1,068
1879.....	115	137	121	102	80	93	81	94	81	81	102	77	1,164
1880.....	123	93	104	99	99	94	86	81	74	96	83	121	1,153
1881.....	134	106	109	130	134	96	88	90	102	93	101	166	1,289
1882.....	131	102	130	156	137	121	126	92	86	111	142	143	1,477
1883.....	160	157	146	147	150	125	132	122	118	129	138	169	1,693
1884.....	153	130	158	135	162	129	118	109	111	136	160	161	1,662
1885.....	155	164	172	183	168	135	137	126	121	130	144	165	1,800
1886.....	183	180	186	165	154	154	144	122	119	121	169	197	1,894
1887.....	162	178	196	184	168	143	149	144	188	149	173	184	2,018
1888.....	174	153	176	168	172	143	139	126	148	171	163	147	1,880
1889.....	165	167	189	158	186	135	148	151	132	151	175	213	1,970
1890.....	184	155	196	176	194	162	146	143	122	151	167	182	1,978

Malarial Fevers.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1881.....	26	35	64	56	52	33	50	59	76	66	48	40	605
1882.....	36	28	34	40	39	28	45	63	81	56	44	37	540
1883.....	22	37	54	41	52	31	70	63	44	50	39	22	525
1884.....	27	37	25	18	31	23	37	44	34	57	39	23	395
1885.....	24	39	27	33	36	37	34	41	41	35	24	27	408
1886.....	26	34	37	37	43	25	19	33	29	44	35	32	394
1887.....	25	22	25	23	22	32	32	36	43	33	25	30	348
1888.....	23	23	23	24	22	18	21	21	29	20	26	20	270
1889.....	21	11	11	19	10	15	15	35	26	30	19	16	228
1890.....	17	10	9	8	15	20	12	23	16	15	12	19	176

In this table typho-malarial fever is included, excepting in 1888, 1889 and 1890, during which years it is included in the tables of typhoid fever.

Measles.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	108	80	53	44	38	24	28	17	4	..	9	4	409
1872.....	13	48	45	46	65	83	84	41	3	14	17	14	463
1873.....	25	29	20	17	36	40	56	23	5	21	13	21	306
1874.....	28	28	38	41	43	43	45	18	15	8	6	6	319
1875.....	8	3	7	6	16	23	27	18	8	5	13	33	167
1876.....	42	63	67	55	45	34	27	2	5	14	5	3	352
1877.....	4	1	4	8	26	28	24	17	7	12	4	20	155
1878.....	36	38	54	56	33	18	10	5	8	2	5	7	272
1879.....	..	1	4	12	11	26	28	24	20	13	31	74	244
1880.....	100	92	69	73	70	21	21	9	7	1	6	10	479
1881.....	18	21	38	35	63	93	38	29	12	5	15	62	429
1882.....	140	142	122	101	140	79	69	25	8	22	21	44	913
1883.....	60	50	81	108	103	92	77	46	16	21	21	41	716
1884.....	36	29	35	41	93	117	124	57	36	26	70	98	762
1885.....	150	119	119	98	84	73	52	17	5	2	11	6	736
1886.....	5	2	8	10	17	26	58	36	21	48	166	271	668
1887.....	293	181	96	43	33	23	29	6	7	10	22	24	767
1888.....	26	23	18	29	54	86	55	36	38	42	98	591	591
1889.....	117	87	73	60	29	18	8	3	5	18	23	470	470
1890.....	24	32	50	109	129	107	63	45	20	28	48	75	730

Diseases of Nervous System.*

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	227	201	246	241	250	220	255	256	188	208	179	206	2,677
1872.....	207	274	350	337	344	286	584	305	204	184	184	220	3,479
1873.....	279	227	314	253	236	200	281	226	227	208	166	194	2,811
1874.....	218	209	215	210	209	211	218	216	172	193	179	181	2,451
1875.....	209	188	227	218	199	205	259	219	207	157	151	197	2,435
1876.....	209	218	222	227	182	175	506	220	178	172	170	184	2,663
1877.....	159	178	200	193	221	204	268	208	197	190	170	160	2,378
1878.....	207	167	227	206	154	201	331	212	182	176	163	184	2,410
1879.....	245	192	230	175	203	220	268	194	202	190	162	205	2,486
1880.....	218	199	229	221	294	294	275	227	207	207	211	206	2,788
1881.....	277	269	312	334	285	226	258	197	279	236	215	256	3,274
1882.....	265	241	252	273	244	262	384	229	212	194	191	221	2,968
1883.....	229	226	267	249	235	225	332	210	221	182	105	228	2,810
1884.....	238	222	267	275	233	283	261	275	297	217	203	247	3,018
1885.....	261	281	304	269	256	256	438	246	222	213	212	243	3,241
1886.....	258	253	290	293	266	255	319	262	204	240	217	266	3,123
1887.....	261	277	300	286	319	296	500	322	253	269	228	278	3,589
1888.....	212	267	286	327	298	402	307	357	320	264	256	329	3,625
1889.....	300	303	369	302	289	307	336	265	244	243	257	308	3,523
1890.....	303	262	305	313	271	279	325	276	219	246	204	269	3,272

* In this table Sunstroke is included throughout.

Phthisis.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	403	375	407	371	345	292	347	306	328	345	308	359	4,186
1872.....	343	390	424	380	359	310	351	345	319	346	324	373	4,274
1873.....	388	354	405	385	371	300	295	307	333	318	343	335	4,134
1874.....	313	340	356	375	350	270	284	322	331	364	344	382	4,034
1875.....	386	374	428	428	333	274	325	304	317	333	303	362	4,172
1876.....	358	350	415	344	339	309	373	324	347	358	337	340	4,194
1877.....	356	337	361	357	342	297	338	323	318	341	329	345	4,044
1878.....	391	355	417	353	355	345	354	384	342	393	374	403	4,466
1879.....	417	389	408	393	332	301	346	286	334	367	389	381	4,343
1880.....	402	375	412	394	365	351	385	380	376	408	399	459	4,706
1881.....	494	424	468	484	450	357	407	396	428	465	477	462	5,312
1882.....	456	437	479	491	474	376	443	383	400	464	404	440	5,247
1883.....	463	440	553	493	473	363	450	396	371	405	409	473	5,290
1884.....	412	432	470	447	433	416	406	419	397	467	470	466	5,235
1885.....	475	450	530	475	443	375	401	415	415	439	380	397	5,196
1886.....	490	412	521	511	495	423	439	443	374	432	459	478	5,447
1887.....	522	438	486	504	437	411	390	366	404	425	419	438	5,260
1888.....	412	445	568	520	463	351	413	468	350	461	398	451	5,260
1889.....	445	430	485	426	417	376	422	440	422	412	384	520	5,179
1890.....	797	512	476	418	422	368	428	413	424	400	394	440	5,499

Scarlet Fever.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	107	77	86	73	72	52	66	55	20	47	65	71	791
1872.....	95	107	103	126	131	113	75	27	25	47	65	76	990
1873.....	80	86	78	83	110	86	99	55	49	71	102	146	1,045
1874.....	116	100	114	80	78	81	58	51	52	48	45	56	879
1875.....	71	66	49	55	60	46	34	14	15	20	33	51	514
1876.....	65	80	100	134	108	99	56	26	25	33	74	91	891
1877.....	105	93	95	120	92	102	68	54	52	60	60	82	983
1878.....	111	96	110	97	93	87	57	54	35	60	102	197	1,099
1879.....	251	225	254	186	159	119	90	36	50	31	41	35	1,477
1880.....	34	33	25	38	46	30	20	27	24	54	119	168	618
1881.....	178	176	150	185	194	139	152	108	95	125	145	317	1,964
1882.....	403	401	337	291	234	154	69	44	26	26	37	44	2,066
1883.....	80	65	94	93	129	87	37	27	28	32	35	35	744
1884.....	53	60	64	68	68	54	48	21	25	19	50	78	608
1885.....	72	73	77	77	71	53	35	16	4	14	24	43	559
1886.....	49	43	42	49	41	29	25	15	11	18	23	23	371
1887.....	46	41	54	55	56	55	33	21	30	44	55	99	589
1888.....	109	116	123	136	145	138	84	79	66	65	112	188	1,361
1889.....	221	208	249	229	150	69	30	9	12	19	17	29	1,242
1890.....	47	41	58	36	32	37	24	14	15	12	40	52	408

Small-pox.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	24	64	115	110	97	98	88	57	23	23	36	70	805
1872.....	105	105	116	149	185	124	48	14	7	12	31	33	929
1873.....	39	22	7	6	17	12	3	1	..	2	6	2	117
1874.....	4	7	11	28	34	27	34	34	43	44	78	140	484
1875.....	150	121	101	104	180	178	157	65	42	50	64	68	1,280
1876.....	72	72	50	48	26	26	9	3	2	4	..	3	315
1877.....	1	..	4	4	1	3	1	..	..	..	..	..	14
1878.....	..	..	1	..	1	..	..	..	..	..	..	..	2
1879.....	..	..	..	2	1	8	9	4	..	..	1	..	25
1880.....	..	..	..	2	..	2	..	2	2	4	19	31	31
1881.....	31	20	44	52	77	67	32	30	11	22	20	45	451
1882.....	61	65	51	30	26	18	6	1	..	..	1	..	259
1883.....	..	..	3	5	4	..	..	..	..	..	..	..	12
1884.....	..	..	..	..	..	..	..	..	..	..	..	..	..
1885.....	..	..	..	..	..	3	2	..	5	3	8	5	26
1886.....	5	6	6	6	5	2	..	..	..	1	..	..	31
1887.....	10	15	10	12	26	5	7	4	5	2	2	1	99
1888.....	4	3	14	28	18	10	1	1	..	1	1	..	81
1889.....	..	1	..	..	..	..	..	..	..	..	..	..	1
1890.....	..	..	2	..	..	..	..	..	..	..	..	..	2

* Vaccinating Corps organized September 27, 1874, under act of Legislature passed June 15, 1874.

Suicide.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	4	6	11	10	6	14	12	9	12	12	8	10	114
1872.....	14	10	14	11	18	8	21	11	14	14	6	3	144
1873.....	10	11	8	14	13	6	4	11	14	11	6	10	118
1874.....	7	8	14	11	25	19	18	16	19	10	17	16	180
1875.....	19	4	8	12	20	24	19	12	12	9	8	8	155
1876.....	12	7	13	12	16	18	16	18	8	9	12	9	150
1877.....	11	6	6	15	18	11	18	11	9	12	16	15	148
1878.....	14	6	13	12	5	12	14	17	10	11	13	15	142
1879.....	8	12	9	12	16	12	8	8	7	9	10	6	117
1880.....	9	8	9	18	20	18	18	9	10	8	17	8	152
1881.....	8	5	13	13	27	6	16	17	15	16	13	17	166
1882.....	14	18	20	26	18	19	17	14	15	14	14	10	199
1883.....	14	8	10	11	15	7	20	20	13	18	11	14	161
1884.....	9	23	22	23	20	24	22	14	23	13	17	19	229
1885.....	11	11	16	24	27	22	18	13	19	14	14	18	207
1886.....	22	18	20	21	21	19	23	14	16	12	17	20	223
1887.....	10	16	22	18	24	15	29	23	19	20	21	18	235
1888.....	18	16	21	25	28	22	19	14	15	24	24	21	247
1889.....	22	18	17	33	22	21	22	13	16	19	20	21	244
1890.....	28	22	21	21	15	21	18	17	23	14	26	13	239

Sunstroke.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	1	4	5	7	4	..	..	..	..	21
1872.....	2	13	235	63	6	..	..	..	320
1873.....	2	6	24	2	..	..	..	..	34
1874.....	4	12	3	..	..	..	..	19
1875.....	9	7	..	3	..	..	..	19
1876.....	1	6	187	11	1	..	..	..	206
1877.....	3	..	8	10	..	..	..	..	21
1878.....	5	43	2	2	..	..	..	52
1879.....	7	18	16	..	..	..	..	41
1880.....	23	35	39	10	9	..	..	..	116
1881.....	9	1	18	49	55	2	..	..	134
1882.....	12	79	11	1	..	..	..	103
1883.....	1	12	65	5	..	..	..	..	83
1884.....	1	9	5	17	75	..	..	..	107
1885.....	6	127	13	..	..	..	..	146
1886.....	4	23	15	..	..	..	..	42
1887.....	1	4	152	59	..	..	..	..	216
1888.....	65	11	10	1	..	..	..	96
1889.....	7	14	..	1	..	..	..	32
1890.....	7	29	25	1	..	..	..	62

* Typhoid Fever.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	18	13	15	15	14	8	16	28	29	33	24	26	239
1872.....	18	15	26	21	21	21	34	57	51	30	40	30	364
1873.....	22	15	19	14	26	16	16	43	48	25	29	21	294
1874.....	24	16	24	16	10	16	13	25	32	33	39	27	275
1875.....	26	16	19	23	19	18	22	40	68	42	34	20	347
1876.....	21	19	16	20	18	16	21	35	41	29	28	19	283
1877.....	14	21	6	8	26	12	16	33	43	32	35	29	275
1878.....	14	13	6	9	13	7	20	38	35	40	25	25	245
1879.....	18	10	7	11	9	9	10	30	18	28	9	19	178
1880.....	10	17	17	16	12	14	23	22	32	30	29	19	241
1881.....	17	10	27	38	30	18	33	42	72	59	53	47	446
1882.....	23	18	20	17	18	10	29	44	50	70	38	25	362
1883.....	19	18	24	22	15	22	31	63	79	90	66	22	471
1884.....	16	22	16	10	16	18	25	49	62	66	54	35	389
1885.....	16	11	10	14	16	17	19	32	49	50	34	26	294
1886.....	12	9	28	13	9	5	22	37	55	59	43	33	325
1887.....	28	13	21	11	11	16	33	51	53	38	26	22	323
1888.....	12	13	14	17	17	11	35	42	81	52	37	33	364
1889.....	27	15	21	18	17	19	31	71	57	57	40	24	397
1890.....	20	28	14	12	11	11	31	49	64	49	34	29	352

* Exclusive of Typho-Malarial Fever, excepting in 1888 and 1889 and 1890 when it was included.

Typhus Fever.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1871.....	7	3	2	5	9	7	3	5	8	5	7	4	65
1872.....	9	18	10	9	6	3	4	8	6	8	4	1	86
1873.....	4	..	3	5	4	5	2	..	7	4	3	2	39
1874.....	2	3	1	..	..	..	..	2	1	1	..	4	14
1875.....	3	..	2	6	2	..	2	4	3	3	1	2	28
1876.....	..	1	2	1	4	..	3	4	3	..	1	1	20
1877.....	3	1	3	2	..	..	4	1	1	2	..	..	17
1878.....	..	..	..	..	2	1	1	..	..	..	..	..	4
1879.....	..	..	1	..	..	..	..	1	1	1	..	..	4
1880.....	..	..	..	..	..	1	..	..	..	1	1	..	3
1881.....	..	1	5	54	33	18	31	11	3	1	1	2	166
1882.....	..	5	14	11	11	13	3	5	1	2	..	..	69
1883.....	..	..	1	2	3	..	2	2	..	..	2	3	15
1884.....	1	..	8	4	8	3	2	1	..	..	..	..	27
1885.....	1	1	..	..	1	..	2	1	..	2	2	5	15
1886.....	2	3	5	1	..	1	..	1	..	..	1	..	14
1887.....	..	..	..	..	..	..	..	..	..	..	..	..	..
1888.....	..	1	..	1	1	1	..	..	..	..	..	..	4
1889.....	..	..	..	..	..	..	..	..	..	..	..	..	..
1890.....	..	..	..	..	..	..	..	..	..	..	..	..	..

Deaths in New York City, by Age and Sex, since 1865.

YEAR.	TOTAL BY SEXES.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5 YEARS.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 YEARS AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	14,287	12,528	4,260	3,576	1,434	1,254	1,154	993	6,848	5,823	766	679	936	1,044	2,916	2,544	1,947	1,418	874	1,020
1867.....	12,281	10,878	4,099	3,298	1,446	1,382	1,056	971	6,601	5,651	604	491	722	771	2,169	2,046	1,530	1,108	655	811
1868.....	13,300	11,589	4,394	3,763	1,480	1,408	1,035	987	6,909	6,158	651	538	767	799	2,532	2,045	1,665	1,140	776	909
1869.....	13,369	11,798	4,002	3,403	1,504	1,402	1,345	1,203	6,851	6,008	728	567	704	798	2,496	2,131	1,822	1,291	768	1,003
1870.....	14,475	12,700	4,534	3,849	1,429	1,274	1,156	1,091	7,119	6,214	661	525	839	888	2,871	2,506	2,067	1,493	918	1,074
1871.....	14,452	12,574	4,287	3,707	1,459	1,248	1,148	1,122	6,894	6,077	682	588	924	893	2,990	2,516	2,048	1,458	914	992
1872.....	17,327	15,320	5,260	4,531	1,754	1,588	1,620	1,435	8,634	7,554	980	916	1,109	1,058	3,384	2,893	2,260	1,688	960	1,211
1873.....	15,313	13,771	4,649	4,029	1,444	1,289	1,439	1,332	7,532	6,650	922	819	869	970	2,928	2,565	2,093	1,580	969	1,187
1874.....	15,060	13,667	4,445	3,834	1,479	1,339	1,508	1,351	7,432	6,524	880	903	822	845	2,781	2,512	2,172	1,603	973	1,280
1875.....	15,979	14,730	4,569	3,971	1,628	1,508	1,596	1,576	7,793	7,055	916	987	916	1,010	3,025	2,624	2,280	1,660	1,049	1,394
1876.....	15,432	13,720	4,506	3,664	1,659	1,416	1,544	1,421	7,709	6,501	830	752	825	927	2,869	2,433	2,133	1,712	1,066	1,385
1877.....	13,624	12,579	3,986	3,433	1,301	1,194	1,232	1,161	6,519	5,788	721	619	763	893	2,496	2,273	2,082	1,656	1,043	1,350
1878.....	13,997	13,011	3,828	3,272	1,387	1,229	1,378	1,316	6,593	5,817	716	708	743	890	2,600	2,402	2,274	1,800	1,071	1,394
1879.....	14,807	13,535	4,145	3,425	1,319	1,199	1,415	1,274	6,879	5,898	789	701	794	944	2,807	2,591	2,339	1,891	1,199	1,510
1880.....	16,831	15,106	4,810	3,915	1,581	1,420	1,521	1,403	7,912	6,738	815	788	941	969	3,213	2,880	2,618	2,122	1,332	1,609
1881.....	20,671	17,953	5,358	4,333	1,915	1,769	2,235	2,127	9,508	8,229	1,327	1,310	1,212	1,171	3,981	3,205	3,114	2,290	1,529	1,748
1882.....	20,096	17,828	5,378	4,489	1,864	1,722	2,075	1,992	9,317	8,203	1,089	1,051	1,145	1,169	3,978	3,072	3,066	2,477	1,501	1,856
1883.....	18,174	15,837	4,700	3,968	1,459	1,201	1,305	1,223	7,464	6,392	871	833	1,186	1,218	3,919	3,168	3,202	2,405	1,532	1,821
1884.....	18,401	16,633	5,206	4,430	1,578	1,411	1,366	1,281	8,150	7,122	786	782	1,137	1,126	3,652	3,218	3,154	2,526	1,522	1,859
1885.....	18,916	16,766	5,035	4,268	1,584	1,420	1,540	1,420	8,159	7,108	832	796	1,078	1,167	3,932	3,243	3,320	2,649	1,595	1,803
1886.....	20,269	17,082	5,529	4,301	1,712	1,476	1,607	1,496	8,848	7,273	853	791	1,172	1,112	4,269	3,195	3,520	2,660	1,607	2,051
1887.....	20,997	17,936	5,578	4,505	1,686	1,552	1,767	1,678	9,031	7,735	942	922	1,277	1,116	4,462	3,343	3,542	2,828	1,743	1,992
1888.....	21,558	18,617	5,648	4,763	1,750	1,573	1,879	1,745	9,277	8,081	1,003	973	1,284	1,256	4,590	3,394	3,644	2,857	1,760	2,056
1889.....	21,289	18,390	5,730	4,797	1,716	1,594	1,719	1,596	9,165	7,987	935	882	1,200	1,273	4,555	3,371	3,692	2,879	1,742	1,998
1890.....	21,435	18,668	5,598	4,690	1,647	1,605	1,414	1,351	8,659	7,646	745	722	1,270	1,232	4,947	3,699	3,935	3,197	1,879	2,172

NOTE.—These ages have been selected as representing approximately the progressive stages of human life, viz.: infancy, childhood, youth, maturity, decline, and old age.

Deaths from Alcoholism in New York City by Age and Sex.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	96	32	..	..	..	..	..	..	..	..	..	..	6	1	54	20	34	9	2	2
1867.....	77	31	..	..	..	..	..	..	..	..	..	..	3	1	44	21	27	9	3	..
1868.....	83	27	..	..	..	..	..	..	..	..	..	..	7	1	43	15	27	9	1	2
1869.....	181	97	..	..	..	..	..	..	..	..	..	..	7	12	111	61	55	22	8	2
1870.....	206	96	..	..	..	..	..	..	..	..	..	..	7	4	120	67	70	22	9	3
1871.....	159	61	..	..	..	..	..	..	..	..	..	..	5	5	95	38	51	17	8	1
1872.....	218	95	..	..	..	..	..	..	..	..	..	..	9	5	127	67	73	22	9	2
1873.....	180	74	..	..	..	..	..	..	..	..	..	..	5	8	104	49	67	14	4	3
1874.....	179	48	..	..	..	..	1	..	1	..	..	..	4	3	114	31	54	12	6	2
1875.....	116	52	..	..	..	..	..	..	..	..	..	..	8	4	64	32	41	14	3	2
1876.....	89	37	..	..	..	..	..	..	..	..	..	..	4	4	44	20	37	11	4	2
1877.....	73	27	..	..	..	..	..	..	..	..	..	..	2	2	37	13	28	11	6	1
1878.....	87	40	..	..	..	..	..	..	..	..	..	..	1	3	43	29	39	7	4	1
1879.....	132	66	..	..	..	..	..	..	..	..	..	..	2	6	83	35	41	25	6	..
1880.....	152	67	..	..	..	..	..	..	..	..	..	..	3	3	83	43	53	16	8	5
1881.....	192	77	..	..	..	..	..	..	..	..	1	..	8	4	111	45	68	28	4	..
1882.....	162	61	..	..	..	..	..	..	..	..	..	..	5	2	94	37	57	21	6	1
1883.....	164	58	..	..	..	..	..	..	..	..	..	..	8	4	96	34	58	18	2	2
1884.....	128	51	..	..	..	..	..	..	..	..	..	..	9	6	76	29	40	15	3	1
1885.....	128	33	..	..	..	..	..	..	..	..	..	..	6	2	69	22	50	9	3	..
1886.....	180	30	..	..	..	..	..	..	..	..	1	..	4	1	117	17	48	11	10	1
1887.....	175	47	..	..	..	..	..	..	..	..	1	..	5	2	111	33	53	8	5	4
1888.....	160	43	..	..	..	..	..	..	..	..	..	..	6	3	102	25	48	13	4	2
1889.....	179	51	..	..	..	..	2	..	2	..	2	..	4	7	118	29	51	10	4	3
1890.....	219	57	..	..	..	..	1	..	1	..	2	..	6	2	145	40	61	15	4	..

Deaths from Bright's Disease in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	242	170	2	2	2	3	11	4	15	9	14	11	23	26	94	53	76	47	20	24
1867.....	225	178	1	..	2	..	5	1	8	1	11	6	18	29	84	87	86	44	18	11
1868.....	301	233	1	1	3	2	10	9	14	12	8	10	25	25	122	100	89	56	43	30
1869.....	330	217	2	2	3	2	14	7	19	11	21	19	25	31	117	71	112	66	36	29
1870.....	432	355	2	2	5	1	13	7	20	10	14	5	39	43	144	139	150	115	65	43
1871.....	501	446	2	1	3	2	16	3	21	6	14	14	29	33	180	188	184	159	73	40
1872.....	523	426	3	..	3	1	7	7	13	8	16	21	36	35	201	168	185	140	72	51
1873.....	431	445	..	..	2	1	0	11	8	12	13	9	27	36	158	182	173	149	52	57
1874.....	419	399	2	2	2	2	6	8	10	12	12	11	18	36	146	163	185	113	58	64
1875.....	461	448	2	4	..	..	5	5	7	9	7	9	27	42	166	175	193	152	61	61
1876.....	516	442	1	..	1	3	6	4	8	7	16	9	27	31	183	165	233	171	79	59
1877.....	493	430	2	..	2	..	9	5	13	5	18	15	22	31	173	166	194	142	73	71
1878.....	499	420	2	1	2	1	15	3	19	5	17	14	29	37	158	130	196	157	80	77
1879.....	526	501	3	..	1	1	10	8	14	9	14	14	36	35	181	185	208	183	73	75
1880.....	540	489	2	..	2	..	6	1	10	1	15	10	24	28	179	180	233	186	79	84
1881.....	655	532	6	1	2	..	9	4	17	5	15	13	31	28	204	179	275	208	113	99
1882.....	640	501	2	4	1	2	10	11	13	17	12	12	28	41	230	204	259	218	98	109
1883.....	601	534	2	..	4	4	6	2	12	6	14	16	28	28	229	172	266	211	112	101
1884.....	609	554	3	2	3	2	9	8	15	12	14	12	23	44	190	175	259	210	108	101
1885.....	658	530	4	4	1	1	6	2	11	7	14	12	26	45	197	159	278	220	102	87
1886.....	627	583	3	2	2	1	4	6	9	9	6	8	27	24	191	175	265	229	128	138
1887.....	581	547	1	2	2	2	4	5	7	9	13	8	28	27	182	137	227	214	124	114
1888.....	585	562	1	4	2	1	10	7	13	12	18	14	33	41	171	178	244	222	105	91
1889.....	969	794	4	2	4	1	10	5	18	8	11	13	36	49	313	241	408	305	183	171
1890.....	1,089	935	1	2	1	..	8	7	10	9	10	6	33	57	306	252	450	321	219	200

Deaths from Bronchitis in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	301	256	163	123	46	29	18	24	227	176	6	9	2	2	13	20	27	20	26	29
1867.....	375	320	184	140	81	53	34	25	299	218	8	6	3	6	23	23	25	25	17	42
1868.....	403	400	186	176	63	58	36	45	285	279	10	10	5	1	28	18	33	39	42	53
1869.....	465	412	231	155	71	76	56	48	358	279	7	11	1	1	22	16	39	29	38	76
1870.....	413	442	243	186	52	60	31	44	326	290	7	11	4	5	12	21	29	33	35	82
1871.....	492	472	259	238	79	67	35	44	373	349	12	6	3	5	15	12	30	36	59	64
1872.....	504	536	269	234	75	89	41	36	385	359	5	13	2	4	20	18	40	44	52	98
1873.....	525	543	295	258	79	75	33	42	407	375	8	11	4	6	19	16	34	38	53	97
1874.....	533	532	278	238	68	71	41	47	387	356	5	10	1	5	28	16	50	37	62	108
1875.....	585	526	307	233	97	54	45	44	449	331	6	9	1	1	16	19	48	44	65	122
1876.....	629	585	331	241	89	71	44	44	464	356	8	8	2	4	15	16	47	53	53	148
1877.....	462	571	238	234	64	61	30	39	332	334	11	9	1	1	22	24	36	49	60	154
1878.....	610	574	334	268	97	67	49	42	480	377	10	10	1	3	20	18	37	54	62	112
1879.....	593	670	305	292	75	73	42	43	422	408	13	12	3	2	18	24	53	49	84	173
1880.....	704	671	352	283	84	93	46	48	482	424	12	11	7	2	31	31	68	69	104	134
1881.....	778	733	404	311	108	103	68	69	580	483	17	15	7	4	27	23	46	73	101	135
1882.....	787	796	426	344	110	123	61	80	597	547	11	15	4	6	23	29	62	60	90	148
1883.....	763	672	386	279	100	96	49	37	535	412	13	6	5	4	30	28	59	82	121	140
1884.....	723	762	377	304	99	101	41	40	517	445	10	19	8	6	27	29	64	97	97	166
1885.....	801	804	388	327	129	92	52	47	569	466	11	11	8	16	38	28	71	78	104	205
1886.....	872	829	413	324	122	112	77	68	612	504	14	9	8	9	53	43	81	91	104	173
1887.....	926	912	453	361	114	102	63	79	630	542	12	21	15	15	48	47	99	110	122	177
1888.....	955	937	518	398	102	115	49	63	669	576	14	13	13	8	36	47	106	101	117	192
1889.....	908	906	459	362	137	120	62	56	658	538	13	11	15	23	46	50	73	114	103	170
1890.....	965	1,022	498	447	145	154	78	65	721	666	19	14	11	16	49	53	86	118	79	155

Deaths from Cancer in New York City by Age and Sex.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	74	195	..	2	..	..	..	2	..	4	3	2	1	5	13	58	36	96	21	30
1867.....	89	204	1	..	..	..	..	..	1	..	..	2	2	..	26	73	46	97	14	32
1868.....	84	231	..	..	..	..	1	1	1	1	..	1	3	3	20	68	44	109	16	49
1869.....	78	226	..	..	..	..	1	1	1	1	..	..	1	1	21	76	37	111	18	37
1870.....	110	245	..	..	..	..	..	..	..	..	1	2	1	4	23	72	70	122	15	45
1871.....	93	242	..	..	..	..	..	1	..	1	..	3	..	2	22	79	56	127	15	30
1872.....	114	278	..	1	..	1	2	1	2	3	1	..	3	3	23	98	61	131	24	43
1873.....	138	287	1	..	2	..	..	2	3	2	2	..	5	6	38	93	68	142	23	44
1874.....	124	292	..	..	1	..	2	..	3	..	4	1	5	5	23	92	63	149	26	45
1875.....	147	277	..	..	..	..	..	..	..	..	2	1	3	4	25	84	81	149	36	39
1876.....	152	307	..	..	1	1	..	1	1	2	..	1	5	5	31	86	90	149	25	64
1877.....	153	342	1	..	..	..	..	..	1	..	2	1	5	6	33	102	77	163	35	70
1878.....	182	388	2	..	..	..	..	..	2	..	1	1	3	2	37	102	104	209	35	74
1879.....	193	379	..	..	..	..	2	..	2	..	2	1	4	5	39	106	102	184	44	83
1880.....	219	440	..	..	1	1	3	1	4	2	3	..	4	4	45	119	117	235	46	80
1881.....	244	462	..	1	1	1	2	3	2	5	1	1	7	4	49	127	129	239	56	86
1882.....	265	467	..	1	1	..	2	1	3	2	2	..	10	5	58	141	137	235	55	84
1883.....	221	457	1	..	..	1	2	1	3	2	3	2	4	5	36	144	128	219	47	85
1884.....	263	468	1	1	..	..	1	2	2	3	..	1	7	3	46	144	152	237	56	100
1885.....	288	526	..	1	..	1	2	..	2	2	..	5	4	2	45	146	124	287	53	84
1886.....	257	522	..	1	..	1	4	2	4	4	1	2	4	9	53	136	145	262	50	109
1887.....	278	554	..	..	..	..	1	..	1	..	1	3	10	6	63	148	137	309	66	88
1888.....	284	586	..	..	1	1	1	1	2	2	1	1	1	9	57	160	157	304	66	110
1889.....	276	572	..	..	1	..	1	..	2	..	4	1	4	8	52	164	149	297	65	102
1890.....	356	598	1	1	..	..	3	2	4	3	3	1	6	7	70	171	186	298	87	118

Deaths from Croup in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	190	178	50	30	54	48	72	81	176	159	14	19	..	..	..	..	..	..	..	..
1867.....	168	165	35	30	49	49	69	73	153	152	15	12	..	1	..	..	..	..	..	..
1868.....	179	163	35	20	54	45	75	84	164	149	15	14	..	..	..	..	..	..	..	..
1869.....	235	228	45	43	69	56	120	108	234	207	21	21	..	..	..	..	..	..	..	..
1870.....	209	212	27	35	66	55	97	101	190	191	19	20	..	1	..	..	..	..	..	..
1871.....	244	222	31	23	77	62	119	113	227	198	16	23	..	1	1	..	..	..	..	..
1872.....	342	333	49	39	96	90	163	160	308	289	32	42	1	1	1	..	..	1	..	..
1873.....	376	356	54	48	104	84	178	174	336	306	38	48	..	1	1	..	..	1	1	..
1874.....	317	277	51	32	72	73	165	131	288	236	29	40	..	1	..	..	..	..	..	..
1875.....	376	382	42	25	109	116	180	196	331	337	42	44	2	..	1	..	..	1	..	..
1876.....	290	237	38	27	105	65	132	123	275	215	15	21	..	..	..	1	..	..	..	..
1877.....	257	215	34	24	69	66	128	106	231	196	26	19	..	..	..	..	..	..	..	..
1878.....	278	221	36	20	81	64	125	114	242	198	34	22	..	..	1	..	1	..	..	1
1879.....	267	255	33	23	78	69	124	124	235	216	32	36	..	1	..	1	..	..	..	1
1880.....	481	429	49	35	117	111	251	219	417	365	64	63	..	..	..	1	..	..	..	..
1881.....	562	476	64	36	141	118	272	253	477	407	84	68	1	..	..	1	..	..	..	..
1882.....	364	365	34	39	104	97	182	177	320	313	43	51	1	..	..	1	..	..	..	..
1883.....	350	294	45	34	109	67	161	149	315	250	35	43	..	1	..	..	..	..	..	..
1884.....	398	350	51	25	109	98	181	183	341	306	56	43	1	..	..	1	..	..	..	..
1885.....	434	421	40	42	126	99	222	230	388	371	44	49	1	1	1	..	..	..	..	..
1886.....	528	440	77	54	143	124	242	201	462	379	64	61	..	..	1	..	1	..	..	..
1887.....	479	410	75	37	138	121	221	203	434	361	43	47	..	1	2	1	..	..	..	..
1888.....	346	293	54	39	103	80	156	139	313	258	33	34	..	1	..	..	..	..	..	..
1889.....	316	289	40	33	82	92	156	128	278	253	37	32	..	1	..	2	..	1	1	..
1890.....	267	254	32	24	76	70	125	135	233	229	34	23	..	2	..	..	..	..	..	..

Deaths from Diarrhœal Diseases in New York City by Age and Sex.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	2,455	2,425	1,022	880	373	351	129	101	1,524	1,332	107	99	108	161	338	455	291	261	87	117
1867.....	1,630	1,509	914	820	362	352	78	64	1,354	1,236	31	18	28	24	109	114	78	67	30	50
1868.....	1,958	1,879	1,182	1,127	436	416	93	68	1,711	1,611	22	25	21	21	88	76	75	81	41	65
1869.....	1,682	1,452	1,035	850	318	291	97	85	1,450	1,226	34	16	23	25	73	76	64	65	38	44
1870.....	2,015	1,941	1,338	1,276	396	372	64	65	1,798	1,713	22	12	12	13	63	71	75	60	45	72
1871.....	1,896	1,757	1,306	1,182	353	301	53	55	1,712	1,538	14	12	9	13	48	66	65	68	48	60
1872.....	2,682	2,515	1,834	1,708	494	451	104	89	2,432	2,248	22	16	16	22	65	64	93	73	54	92
1873.....	2,117	1,980	1,474	1,326	350	357	63	64	1,887	1,747	17	16	15	11	68	52	78	74	52	80
1874.....	1,834	1,735	1,288	1,212	331	288	63	45	1,682	1,545	24	11	9	7	33	51	53	54	33	67
1875.....	1,876	1,862	1,347	1,280	303	313	48	61	1,698	1,654	16	12	4	9	37	57	56	56	65	74
1876.....	1,974	1,808	1,368	1,220	363	341	68	53	1,799	1,614	17	19	10	13	44	33	52	63	52	66
1877.....	1,818	1,739	1,261	1,171	330	304	61	60	1,652	1,535	21	16	7	9	37	39	49	70	52	70
1878.....	1,550	1,395	1,043	926	291	229	59	50	1,393	1,205	12	11	9	13	33	32	43	60	60	74
1879.....	1,551	1,414	1,060	945	258	228	58	43	1,376	1,216	21	18	11	9	36	28	50	67	57	76
1880.....	2,094	1,953	1,443	1,235	371	298	59	63	1,873	1,596	44	24	17	10	40	49	63	68	57	106
1881.....	2,247	2,023	1,550	1,322	351	331	69	87	1,970	1,740	36	21	26	15	46	60	89	79	80	108
1882.....	2,140	1,910	1,475	1,257	300	294	88	65	1,863	1,616	47	34	17	17	75	60	68	93	70	90
1883.....	1,739	1,659	1,223	1,146	243	178	57	50	1,523	1,374	31	24	19	21	47	59	58	80	61	101
1884.....	1,907	1,772	1,344	1,205	293	229	39	50	1,676	1,484	20	20	18	21	46	47	66	92	81	108
1885.....	1,802	1,624	1,238	1,143	208	189	69	48	1,515	1,380	48	21	21	14	64	55	81	74	73	80
1886.....	1,851	1,643	1,302	1,080	268	231	55	54	1,625	1,365	22	15	8	19	68	38	68	90	60	116
1887.....	1,979	1,783	1,437	1,229	258	234	45	49	1,740	1,512	26	17	14	21	66	55	68	86	65	92
1888.....	1,796	1,693	1,343	1,188	221	207	44	48	1,668	1,443	12	13	10	15	48	53	70	87	48	82
1889.....	1,886	1,762	1,387	1,211	230	242	40	25	1,657	1,478	21	15	15	25	55	44	75	96	63	104
1890.....	1,758	1,588	1,312	1,131	252	233	33	36	1,597	1,400	5	13	11	13	38	43	50	64	57	55

Deaths from Diphtheria in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	226	209	42	41	59	52	96	75	197	168	19	25	4	5	2	5	3	4	1	2
1867.....	131	119	29	31	30	39	51	34	113	102	11	13	..	2	4	2	3	..	..	..
1868.....	148	129	38	23	33	28	50	50	121	101	20	25	1	1	3	1	3	1	..	..
1869.....	158	170	21	25	41	45	72	68	134	138	19	26	1	1	1	4	3	1	..	..
1870.....	155	153	21	15	42	31	63	69	126	115	23	30	2	1	2	5	1	1	..	1
1871.....	115	123	16	14	29	31	49	44	94	89	17	29	2	3	1	1	..	..	1	1
1872.....	215	231	23	18	46	42	100	110	169	170	43	55	2	1	1	3	..	..	..	2
1873.....	573	578	41	48	83	79	255	247	379	374	173	194	9	2	8	3	2	3	1	1
1874.....	775	890	56	58	155	139	345	378	556	575	196	293	8	8	10	8	4	4	1	2
1875.....	1,140	1,189	103	81	230	214	535	527	868	822	255	344	6	10	8	9	3	4	..	..
1876.....	886	864	83	76	216	163	396	407	695	646	172	192	9	11	4	11	5	3	1	1
1877.....	504	447	46	37	104	102	243	194	393	333	97	106	6	5	6	2	1	1	1	..
1878.....	489	518	55	33	98	100	228	242	381	375	101	134	3	3	3	1	1	4	..	1
1879.....	331	340	35	30	75	64	160	166	270	260	54	68	2	6	5	5	..	1	..	..
1880.....	673	717	52	42	163	140	325	352	540	534	125	175	1	3	6	3	1	2	..	..
1881.....	1,111	1,138	101	95	230	226	518	505	849	826	240	279	13	19	7	9	2	4	..	1
1882.....	772	753	79	63	187	147	328	356	594	566	157	168	10	6	7	7	3	4	1	2
1883.....	486	523	52	43	115	107	195	224	362	374	113	122	4	14	7	9	..	4	..	..
1884.....	541	549	52	44	121	117	243	253	416	414	107	123	9	5	5	6	2	1	2	..
1885.....	644	681	64	52	130	147	306	321	502	520	132	151	5	3	4	4	1	2	..	1
1886.....	865	862	82	63	186	167	408	413	676	643	178	200	4	6	7	10	..	2	..	1
1887.....	1,138	1,029	89	62	245	181	551	523	835	766	229	229	15	18	7	12	2	2	..	2
1888.....	975	939	66	79	222	204	470	438	758	721	191	202	12	10	10	4	2	2	2	..
1889.....	865	821	96	71	205	181	383	371	689	623	163	181	5	10	5	6	..	1	3	..
1890.....	653	609	67	47	157	118	395	297	529	462	117	129	1	7	4	9	1	2	1	..

Deaths from Heart Disease in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	377	303	12	12	4	..	9	5	25	17	30	35	28	37	123	78	112	73	59	63
1867.....	363	301	17	11	1	..	9	11	27	22	28	35	35	35	109	85	109	83	55	41
1868.....	344	271	8	8	2	1	3	2	13	11	29	28	38	28	98	92	107	66	59	46
1869.....	358	328	5	4	4	2	5	3	14	9	26	41	33	37	115	95	124	89	46	57
1870.....	357	342	3	3	..	3	7	..	10	6	25	43	35	30	124	107	97	89	66	67
1871.....	440	373	3	4	4	..	8	9	15	13	35	35	37	43	139	116	156	110	58	56
1872.....	477	417	5	4	..	..	5	3	10	7	20	32	48	43	150	120	172	129	77	86
1873.....	449	411	8	8	..	..	5	5	13	13	25	32	35	42	152	131	143	115	81	78
1874.....	451	432	13	7	..	1	9	3	22	11	22	30	43	41	117	118	164	134	83	98
1875.....	432	493	3	5	1	..	2	4	6	9	29	52	41	45	176	118	153	157	87	112
1876.....	497	495	5	2	2	1	5	8	12	11	27	33	43	50	148	126	175	153	92	122
1877.....	453	427	8	5	3	..	2	2	13	7	28	32	23	36	125	106	182	135	82	111
1878.....	556	512	9	8	1	1	2	2	12	11	19	34	32	59	184	125	219	173	90	110
1879.....	599	565	9	5	..	1	4	4	13	10	36	40	40	48	178	143	217	204	115	120
1880.....	581	572	7	14	3	..	6	1	16	15	35	32	50	41	161	151	204	202	115	131
1881.....	668	621	7	7	3	1	6	7	16	15	41	61	57	50	195	150	241	226	118	119
1882.....	763	714	10	7	2	3	8	7	20	17	52	35	54	61	233	178	273	253	131	170
1883.....	858	835	4	9	2	2	9	6	15	17	55	83	60	66	256	196	304	283	168	190
1884.....	824	838	9	7	..	..	2	9	11	16	37	65	88	79	211	231	335	283	142	164
1885.....	943	857	9	8	2	2	9	7	20	17	65	74	71	82	267	200	335	319	185	165
1886.....	971	923	16	9	2	2	14	14	32	25	51	67	84	69	250	241	384	316	170	205
1887.....	1,048	970	20	6	5	3	7	8	32	17	49	73	71	85	311	229	374	342	211	224
1888.....	968	912	16	8	1	2	9	8	26	18	44	52	77	88	280	207	364	320	177	227
1889.....	1,031	939	15	12	4	4	13	9	32	25	50	63	72	72	276	222	391	349	210	208
1890.....	1,023	955	10	6	2	1	11	7	23	14	42	74	88	82	266	234	397	350	207	201

Deaths from Insanity in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	7	9	..	..	..	..	..	..	..	..	..	..	..	4	4	3	2	2	1	..
1867.....	14	12	..	..	..	..	..	..	..	..	..	..	..	1	10	6	4	5	..	..
1868.....	9	25	..	..	..	..	..	..	..	..	1	..	..	3	3	16	5	6	..	..
1869.....	24	26	..	..	..	..	..	..	..	..	..	..	2	3	16	12	6	8	..	3
1870.....	30	31	..	..	..	..	..	..	..	..	..	..	6	4	11	13	12	11	1	3
1871.....	37	30	..	..	..	..	..	1	..	1	..	..	4	3	16	12	13	7	4	7
1872.....	39	26	..	..	..	..	..	..	..	1	..	..	2	2	22	10	8	9	6	5
1873.....	32	23	..	..	..	..	..	..	..	..	..	..	1	..	19	9	8	8	4	6
1874.....	28	31	..	..	..	..	..	..	..	..	1	..	3	3	12	12	8	6	5	9
1875.....	16	18	..	..	..	..	..	..	..	..	..	..	1	3	4	9	8	4	3	2
1876.....	29	27	..	..	..	..	1	..	1	..	1	1	4	3	15	11	3	8	5	4
1877.....	33	27	..	..	..	..	..	..	..	..	..	..	2	2	19	7	10	11	2	7
1878.....	26	26	..	..	..	1	..	..	..	1	..	..	1	2	13	7	12	10	..	6
1879.....	38	28	..	..	..	..	..	..	..	..	..	..	4	..	16	12	13	11	5	5
1880.....	53	59	..	..	..	..	1	..	1	..	1	1	3	11	22	23	20	15	7	9
1881.....	53	72	..	..	..	..	..	..	..	2	..	3	8	18	31	17	24	13	9	9
1882.....	53	66	..	..	..	..	1	..	1	..	1	1	7	7	29	21	10	27	6	10
1883.....	62	60	..	..	..	..	..	..	..	..	..	..	6	4	19	23	27	24	10	9
1884.....	41	52	..	..	..	..	..	..	..	..	..	..	3	5	20	21	14	19	4	7
1885.....	51	59	..	..	..	..	..	..	..	..	..	..	4	4	17	22	17	21	13	12
1886.....	40	76	..	..	..	..	..	..	..	..	..	..	4	5	16	23	9	27	11	21
1887.....	40	90	..	..	..	..	..	..	..	..	..	..	4	3	22	40	9	22	5	25
1888.....	139	110	..	..	..	..	..	..	..	..	..	..	8	9	70	39	47	35	14	27
1889.....	200	98	..	..	..	..	..	..	..	..	..	..	6	3	78	31	88	47	28	17
1890.....	162	90	..	..	..	..	..	..	..	..	..	..	4	4	81	33	50	31	27	22

Deaths from Malarial Fevers in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	167	75	5	3	8	6	14	16	27	25	74	15	16	9	36	14	11	6	3	6
1867.....	100	73	6	11	5	2	19	8	30	21	10	8	10	10	27	13	15	12	8	9
1868.....	75	57	5	5	3	8	9	13	17	26	10	9	7	3	21	12	12	6	8	1
1869.....	67	61	5	6	5	8	12	7	22	21	12	11	2	5	17	7	10	11	4	6
1870.....	108	105	5	10	15	5	13	16	33	31	14	10	13	14	26	21	14	20	8	9
1871.....	143	136	14	9	10	11	22	36	46	56	17	15	17	8	32	18	18	15	13	24
1872.....	139	187	13	12	12	12	21	27	46	51	19	34	14	25	31	32	21	28	8	17
1873.....	135	128	9	12	15	6	15	22	39	40	18	12	13	15	26	27	28	19	11	15
1874.....	130	135	13	14	12	20	23	20	48	54	19	18	11	10	18	21	22	13	12	19
1875.....	114	132	17	13	14	17	20	16	51	46	14	18	9	11	17	24	14	13	9	20
1876.....	91	104	11	13	9	8	12	23	32	44	17	5	9	6	18	19	9	18	6	12
1877.....	133	117	17	7	13	11	26	22	56	40	12	12	9	13	20	21	24	18	12	13
1878.....	140	145	13	12	18	11	33	35	64	58	27	24	7	7	19	20	15	20	8	16
1879.....	144	156	22	21	20	9	25	19	67	49	23	22	11	11	17	29	14	31	12	14
1880.....	164	172	17	20	21	16	34	33	72	69	28	27	7	8	22	29	20	22	15	17
1881.....	225	232	28	19	22	18	40	32	90	69	28	33	22	20	35	51	28	27	22	32
1882.....	189	197	27	17	15	15	30	31	72	63	18	21	13	20	40	37	24	31	22	25
1883.....	177	194	27	20	22	17	26	26	75	63	22	17	14	18	38	40	20	34	8	22
1884.....	156	152	19	13	20	16	21	18	60	47	20	20	14	11	27	31	23	29	12	14
1885.....	131	166	12	13	14	12	24	35	50	60	15	22	7	14	32	33	18	21	9	16
1886.....	138	148	14	10	8	16	28	19	50	45	18	15	9	16	27	27	20	28	14	17
1887.....	120	130	16	9	14	14	18	24	48	47	17	18	8	8	17	25	15	21	15	11
1888.....	153	117	9	6	11	6	23	16	43	28	17	16	20	18	43	28	21	23	9	4
1889.....	111	117	11	6	13	6	12	17	36	29	12	10	9	15	29	28	18	22	7	13
1890.....	74	102	8	6	4	7	13	12	25	25	8	5	5	4	16	29	13	25	7	14

In this table typho-malarial fever is not included.

Deaths from Measles in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	93	60	15	13	45	21	24	20	84	54	9	5	..	..	..	1	..	..	..	..
1867.....	272	227	66	42	113	97	70	75	249	214	22	12	1	..	..	1	..	..	..	..
1868.....	98	102	38	27	31	35	23	30	92	92	6	8	..	2	..	..	..	..	..	..
1869.....	271	255	74	62	102	95	83	74	259	231	11	20	..	4	1	..	..	..	..	..
1870.....	165	133	42	22	57	51	54	49	153	122	11	10	..	..	..	2	..	..	..	..
1871.....	213	196	60	42	78	76	61	67	199	185	14	8	..	3	..	..	..	..	..	..
1872.....	244	219	68	61	84	72	79	69	231	202	12	15	1	1	..	1	..	..	..	..
1873.....	141	165	40	50	46	59	43	46	129	155	10	7	1	1	1	2	..	..	..	..
1874.....	167	152	49	46	60	49	45	40	154	135	11	12	2	1	..	4	..	..	..	..
1875.....	76	91	12	22	31	35	25	26	68	83	8	8	..	..	..	..	..	..	..	..
1876.....	194	168	44	40	68	61	59	55	171	156	22	9	..	1	1	2	..	..	..	..
1877.....	87	68	34	14	27	25	20	20	81	59	6	8	..	..	..	1	..	..	..	..
1878.....	134	138	39	42	45	38	41	44	125	124	8	11	..	1	1	2	..	..	..	..
1879.....	130	114	33	16	48	47	36	38	117	101	12	12	..	1	1	..	..	..	..	..
1880.....	256	243	82	53	86	81	75	71	443	205	13	17	..	..	..	1	..	..	..	..
1881.....	210	219	52	62	71	73	70	67	193	202	16	14	..	2	1	1	..	..	..	..
1882.....	443	470	113	131	149	150	145	147	407	428	33	33	3	3	..	6	..	..	..	..
1883.....	371	345	109	83	131	136	91	90	331	309	35	28	3	3	2	5	..	..	..	..
1884.....	415	347	108	105	163	120	119	99	390	324	23	19	..	2	1	2	1	..	..	..
1885.....	375	361	103	107	145	140	99	86	347	333	26	24	..	3	1	1	1	..	..	..
1886.....	346	322	93	77	156	127	76	95	325	299	16	22	2	1	3	..	..	..	..	..
1887.....	387	380	119	110	138	140	109	101	366	351	16	22	3	4	2	2	..	1	..	..
1888.....	325	266	100	87	116	103	87	63	303	253	19	8	..	2	3	2	..	1	..	..
1889.....	234	236	66	55	95	89	51	76	212	220	18	14	4	..	..	2	..	..	..	..
1890.....	385	345	121	99	139	141	105	87	365	327	16	16	..	..	3	1	1	..	..	..

* Deaths from Diseases of the Nervous System in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	2,183	1,693	853	719	241	207	177	151	1,271	1,077	111	89	79	77	356	201	246	144	120	105
1867.....	1,818	1,442	777	596	248	239	185	155	1,210	990	82	86	57	52	197	121	188	113	84	80
1868.....	2,090	1,470	812	588	259	236	172	154	1,243	978	92	81	71	45	317	155	242	118	125	93
1869.....	1,649	1,327	633	521	220	186	149	124	1,002	831	84	53	48	32	204	132	203	137	108	142
1870.....	1,887	1,388	747	546	200	155	131	132	1,078	833	72	52	56	43	302	159	261	165	118	136
1871.....	1,462	2,677	540	447	151	144	114	111	805	702	71	63	57	62	177	130	219	130	133	128
1872.....	1,975	1,504	628	521	198	197	197	139	1,023	857	130	100	77	44	304	176	294	158	147	169
1873.....	1,523	1,179	553	435	148	145	122	86	823	666	82	64	55	33	183	115	225	151	155	150
1874.....	1,332	1,119	493	397	144	132	91	82	728	631	51	43	32	18	141	103	225	143	155	181
1875.....	1,278	1,158	522	421	157	144	78	94	757	659	47	39	27	29	118	114	196	145	133	172
1876.....	2,492	1,171	515	419	169	140	107	99	791	658	58	43	32	28	256	115	196	164	159	163
1877.....	1,270	1,108	497	415	147	148	82	94	726	657	45	25	30	30	139	82	185	147	145	167
1878.....	1,296	1,114	433	384	146	145	97	86	676	615	46	44	17	25	149	107	240	170	168	153
1879.....	1,378	1,108	463	368	134	137	92	75	689	580	49	37	29	35	172	113	263	168	176	175
1880.....	1,590	1,198	529	403	157	141	93	79	779	623	43	41	42	47	263	108	278	189	185	190
1881.....	1,861	1,413	565	445	197	163	124	110	886	713	69	69	58	49	303	150	351	232	194	195
1882.....	1,638	1,330	525	396	151	156	111	79	787	631	55	55	45	26	261	137	308	233	182	248
1883.....	1,593	1,217	452	359	153	119	110	68	715	546	57	43	42	49	243	134	330	229	206	216
1884.....	1,627	1,391	524	405	140	137	96	79	760	621	57	59	57	40	249	160	314	261	190	250
1885.....	1,799	1,442	531	408	162	143	123	88	821	639	55	58	50	40	282	166	374	285	217	254
1886.....	1,747	1,376	561	408	159	122	86	86	806	616	47	47	55	32	250	155	351	284	238	242
1887.....	1,999	1,590	564	449	159	153	104	105	827	707	71	48	57	44	356	191	411	318	277	282
1888.....	1,058	1,571	588	465	207	163	114	119	909	747	58	59	47	51	299	167	373	296	272	251
1889.....	1,932	1,559	574	430	170	170	123	105	867	705	51	56	34	44	265	155	454	330	261	269
1890.....	1,750	1,460	496	371	145	137	102	90	743	598	60	49	42	40	250	172	391	318	264	283

* Sunstroke included from 1866 to 1887, excluded from 1888 to 1890, inclusive.

Deaths from Phthisis in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	1,791	1,690	41	37	27	30	45	24	113	91	46	65	318	360	813	771	412	289	89	114
1867.....	1,648	1,608	45	32	31	30	21	39	97	101	46	37	269	324	778	775	368	294	89	77
1868.....	1,812	1,602	21	11	34	32	24	25	79	68	37	45	301	344	869	766	426	292	100	87
1869.....	1,748	1,616	2	4	22	21	28	29	52	54	42	40	270	334	857	796	419	286	108	106
1870.....	2,097	1,933	22	16	32	21	30	31	84	68	49	52	314	393	995	927	533	382	131	111
1871.....	2,233	1,953	39	35	40	29	32	29	111	93	47	47	343	350	1,130	988	494	359	108	116
1872.....	2,176	2,098	26	18	29	29	36	34	91	81	37	56	366	378	1,108	1,074	474	385	100	124
1873.....	2,121	2,013	28	19	15	23	30	32	73	74	26	52	348	418	1,039	992	507	357	128	120
1874.....	2,096	1,938	19	23	21	23	25	21	65	67	35	61	338	344	1,039	966	497	387	102	113
1875.....	2,200	1,972	22	28	22	21	32	25	76	74	49	65	368	439	1,084	932	515	345	108	117
1876.....	2,192	2,002	23	21	26	22	22	32	71	75	48	68	380	434	1,099	941	483	375	111	109
1877.....	2,051	1,993	27	20	23	24	22	30	72	74	32	42	343	450	974	937	516	376	114	114
1878.....	2,256	2,210	44	34	29	26	31	28	104	88	25	45	381	456	1,060	1,062	513	431	113	128
1879.....	2,280	2,063	36	28	31	20	28	18	95	66	28	44	389	472	1,127	1,006	538	369	103	106
1880.....	2,446	2,260	48	30	23	22	29	19	100	71	43	63	432	486	1,196	1,133	561	378	114	129
1881.....	2,913	2,399	39	29	24	28	26	19	89	76	47	66	478	499	1,172	1,259	674	385	153	114
1882.....	2,841	2,406	43	48	20	29	28	40	91	117	34	59	471	507	1,431	1,117	667	471	147	135
1883.....	2,847	2,443	33	32	26	26	26	29	85	87	33	56	487	528	1,416	1,189	698	440	128	143
1884.....	2,835	2,400	57	56	22	18	24	30	103	104	36	55	498	460	1,399	1,221	662	428	137	132
1885.....	2,802	2,394	50	41	29	24	36	20	115	85	36	63	441	493	1,444	1,213	655	435	111	105
1886.....	3,149	2,323	68	40	35	21	28	24	131	85	38	48	488	505	1,618	1,173	721	389	153	128
1887.....	3,000	2,260	55	44	28	41	23	15	106	100	43	52	520	476	1,565	1,133	643	378	123	121
1888.....	3,013	2,247	39	40	16	18	23	18	78	76	34	66	480	523	1,631	1,111	632	379	108	92
1889.....	2,990	2,189	32	19	30	23	17	17	79	59	44	66	462	511	1,599	1,105	700	332	106	116
1890.....	3,160	2,332	30	31	24	23	22	21	76	75	22	70	503	498	1,710	1,199	715	405	124	85

Deaths from Pneumonia in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	764	624	219	194	102	87	75	62	376	343	19	17	47	41	123	87	126	79	53	57
1867.....	773	661	270	182	112	119	79	85	461	386	33	24	37	30	95	80	109	77	38	64
1868.....	870	798	303	263	127	144	78	89	508	496	26	27	29	48	139	93	121	80	47	54
1869.....	1,144	936	318	302	168	152	146	127	632	581	64	39	48	30	164	116	181	97	55	93
1870.....	1,046	790	295	225	146	118	85	69	527	412	31	26	44	33	183	137	183	100	78	81
1871.....	1,022	812	251	228	153	116	102	101	506	446	28	39	35	32	183	106	177	105	93	84
1872.....	1,238	912	320	221	171	122	124	100	615	443	37	57	54	31	224	131	221	142	87	118
1873.....	1,357	971	367	295	170	123	100	100	637	518	41	42	72	44	277	139	228	127	102	101
1874.....	1,333	1,063	356	277	167	135	92	105	615	517	44	45	58	42	252	151	263	165	103	143
1875.....	1,558	1,244	356	299	201	181	106	117	663	597	46	42	65	56	334	179	319	177	131	193
1876.....	1,359	1,183	352	294	194	168	141	114	687	576	57	43	51	58	234	177	229	168	101	151
1877.....	1,171	977	292	268	165	125	103	91	560	484	41	38	59	49	206	123	209	160	96	118
1878.....	1,204	1,084	310	280	200	179	139	126	649	585	43	42	46	35	170	133	192	149	104	120
1879.....	1,411	1,143	351	239	161	161	126	120	638	520	56	51	69	42	261	163	246	194	141	173
1880.....	1,552	1,270	370	293	184	188	150	126	704	607	53	59	77	52	293	188	239	211	136	153
1881.....	1,836	1,425	400	307	232	203	191	157	823	667	67	72	77	53	310	213	357	227	152	193
1882.....	1,976	1,496	441	329	250	210	192	168	883	707	61	69	114	61	429	219	322	261	167	179
1883.....	1,947	1,462	370	305	210	175	146	143	726	623	66	73	112	74	448	243	438	251	157	193
1884.....	1,767	1,392	378	328	216	215	161	124	755	667	61	66	82	67	388	209	338	234	143	149
1885.....	2,043	1,607	398	323	252	196	170	164	820	683	51	57	123	82	454	277	396	315	199	193
1886.....	2,063	1,593	456	353	259	193	148	150	863	696	66	70	126	79	463	256	389	268	156	224
1887.....	2,059	1,648	448	352	232	198	169	177	849	727	61	69	119	81	472	268	377	283	181	220
1888.....	2,422	1,866	480	435	286	232	218	177	984	844	87	81	150	76	537	305	481	334	183	226
1889.....	2,306	1,763	502	422	266	230	187	160	955	812	82	51	136	114	581	279	406	313	146	192
1890.....	2,739	2,230	552	435	310	325	207	209	1,069	969	84	69	183	127	720	416	516	303	187	256

Deaths from Scarlet Fever in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	420	386	36	34	76	94	210	178	322	304	96	77	2	3	..	2	..	..	..	..
1867.....	328	327	25	27	54	48	179	182	258	257	63	68	4	1	3	1	..	..	..	..
1868.....	417	444	34	29	73	68	200	205	307	302	103	119	3	10	4	10	..	3	..	..
1869.....	488	478	36	47	105	92	246	223	387	362	88	106	10	5	3	5	..	..	..	..
1870.....	499	476	39	43	102	88	235	246	376	377	116	88	5	8	2	3	..	..	..	..
1871.....	397	394	28	22	69	51	205	225	302	293	85	91	5	7	5	3	..	..	..	..
1872.....	521	469	43	31	91	69	249	242	383	342	122	109	4	6	12	12	..	..	..	..
1873.....	570	475	37	39	99	72	297	224	433	335	127	124	7	11	3	5	..	..	..	..
1874.....	476	403	34	29	79	56	234	181	347	266	119	117	5	11	4	9	1	..	..	..
1875.....	264	252	30	19	52	39	115	117	197	175	55	64	8	9	2	4	..	..	..	..
1876.....	447	444	32	27	84	76	222	208	338	311	103	122	2	7	4	4	..	..	..	..
1877.....	489	494	32	34	85	75	236	253	353	362	131	123	4	4	..	5	1	..	..	..
1878.....	516	583	24	36	106	100	265	290	395	426	111	143	4	7	6	4	..	2	..	1
1879.....	782	695	52	34	145	134	404	351	601	519	173	161	8	7	..	8	..	..	..	..
1880.....	323	295	18	15	66	54	180	152	264	221	54	70	2	2	3	2	..	..	..	..
1881.....	956	1,008	47	50	164	152	467	492	678	694	258	278	9	19	10	16	1	1	..	1
1882.....	1,072	994	63	53	196	142	529	489	788	684	240	262	24	25	18	23	2	..	..	..
1883.....	367	377	36	31	68	63	167	174	271	268	88	84	5	16	2	9	1	..	..	..
1884.....	314	294	30	25	67	55	133	125	230	205	64	72	11	14	9	2	..	1	..	..
1885.....	295	264	29	21	67	52	129	118	225	191	63	64	3	6	4	3	..	..	..	..
1886.....	198	173	14	10	46	34	101	96	161	140	33	30	2	..	1	3	..	..	1	..
1887.....	297	292	13	12	57	58	169	151	239	221	52	66	4	3	2	1	..	1	..	..
1888.....	689	672	48	39	113	100	347	351	508	490	163	173	11	3	7	6	..	..	..	..
1889.....	622	620	23	43	131	95	325	298	479	436	118	147	14	23	10	14	1	..	..	..
1890.....	201	207	9	14	35	40	99	102	143	156	53	45	2	2	1	4	..	..	..	..

Deaths from Small-pox in New York City by Age and Sex.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	29	15	6	1	3	4	1	2	10	7	1	1	4	2	10	4	4	1	..	..
1867.....	12	7	3	3	..	..	2	..	5	3	..	2	3	1	3	1	1	..	..	..
1868.....	15	11	4	4	..	2	5	1	9	7	..	..	..	1	5	2	1	1	..	..
1869.....	104	99	19	28	18	13	22	27	59	68	9	11	6	13	23	7	6	..	1	..
1870.....	167	126	32	37	17	10	26	24	75	71	16	14	21	12	44	32	11	6	..	1
1871.....	454	351	74	58	34	33	53	43	161	134	58	58	84	63	131	77	19	17	1	2
1872.....	548	381	85	60	40	38	60	52	185	150	54	52	111	76	168	83	24	16	6	4
1873.....	67	50	15	16	1	4	2	3	18	23	7	3	10	9	26	14	5	1	1	..
1874.....	281	203	57	42	33	31	45	28	135	101	25	26	39	28	72	39	8	7	2	2
1875.....	709	571	114	110	86	70	110	108	310	288	71	70	110	70	181	108	34	30	3	5
1876.....	179	136	25	25	13	11	19	26	57	62	12	12	28	28	64	26	17	8	1	..
1877.....	10	4	..	1	1	..	1	..	2	1	..	..	..	1	5	..	2	2	1	..
1878.....	1	1	..	1	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..
1879.....	13	12	2	1	2	3	5	1	9	5	1	3	..	1	2	2	1	1	..	..
1880.....	19	12	3	2	2	3	..	..	5	5	1	..	1	3	10	3	2	1	..	..
1881.....	262	189	25	39	28	22	34	34	87	95	26	26	59	30	78	30	18	7	3	1
1882.....	142	117	21	18	10	14	32	21	63	53	12	16	15	21	40	21	11	5	1	1
1883.....	8	4	..	1	1	..	..	..	1	1	1	..	1	3	3	..	2	..	..	..
1884.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1885.....	16	10	3	1	..	1	5	4	8	6	4	1	..	1	3	2	1	..	..	..
1886.....	22	9	4	4	1	..	3	3	8	7	3	2	1	..	8	..	2	..	..	..
1887.....	62	37	11	7	4	6	7	9	22	22	4	8	14	4	15	1	6	2	1	..
1888.....	58	23	8	5	4	3	4	4	16	12	3	3	10	1	27	4	2	2	..	1
1889.....	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
1890.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..

* Vaccinating Corps organized September 29, 1874, in accordance with act of Legislature passed June 15, 1874.

Deaths from Suicide in New York City by Sex and Age.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	40	14	..	..	..	..	..	..	..	..	..	..	6	2	21	8	12	4	1	..
1867.....	63	19	..	..	..	..	..	..	..	..	..	..	8	7	37	8	14	3	4	1
1868.....	69	29	..	..	..	..	..	..	..	..	3	..	4	5	35	15	25	9	2	..
1869.....	76	26	..	..	..	..	..	..	..	..	..	..	7	2	34	19	31	4	4	1
1870.....	79	22	..	..	..	..	..	..	..	..	..	..	6	2	39	11	29	8	5	1
1871.....	85	29	..	..	..	..	..	..	..	..	2	..	15	5	40	13	26	6	4	3
1872.....	111	33	..	..	..	..	..	..	..	..	1	..	17	6	56	19	30	7	7	1
1873.....	82	36	..	..	..	..	..	..	..	..	1	..	8	7	54	17	13	10	6	2
1874.....	140	40	..	..	..	..	..	..	..	..	1	..	11	9	77	17	47	12	4	2
1875.....	123	32	..	..	..	..	..	..	..	..	..	..	12	10	60	12	45	6	6	4
1876.....	114	36	..	..	..	..	..	..	..	..	..	..	8	4	52	20	48	11	6	1
1877.....	123	25	..	..	..	..	..	..	..	..	..	..	20	3	62	16	32	6	9	..
1878.....	116	26	..	..	..	..	..	..	..	..	..	..	8	6	53	9	49	7	6	4
1879.....	100	17	..	..	..	..	..	..	..	..	..	..	10	1	53	8	31	7	6	1
1880.....	120	32	..	..	..	..	..	..	..	..	..	..	15	3	58	20	38	7	9	2
1881.....	133	33	..	..	..	..	..	..	..	..	..	1	9	6	78	11	37	12	9	3
1882.....	161	38	..	..	..	..	..	..	..	..	2	..	16	10	75	17	57	11	11	..
1883.....	134	27	..	..	..	..	..	..	..	..	..	..	15	7	27	7	70	11	22	2
1884.....	189	40	..	..	..	..	..	..	..	..	..	..	17	8	94	20	57	10	21	2
1885.....	167	40	..	..	..	..	..	..	..	..	..	..	26	9	74	18	60	7	7	6
1886.....	172	51	..	..	..	..	..	..	..	..	..	..	13	10	82	22	64	17	13	2
1887.....	183	52	..	..	..	..	..	..	..	..	..	..	23	15	94	22	50	15	16	..
1888.....	202	45	..	..	..	..	..	..	..	..	1	..	22	14	87	21	80	8	12	2
1889.....	200	44	..	..	..	..	..	..	..	..	1	..	31	13	81	18	71	11	16	2
1890.....	190	49	..	..	..	..	..	..	..	..	..	..	21	7	100	32	62	9	7	1

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	221	89	..	1	1	..	..	1	1	2	..	..	24	12	139	50	48	18	9	7
1867.....	4	1	..	..	..	..	..	..	..	..	1	..	1	..	1	1	1	..	..	..
1868.....	159	37	..	4	..	1	..	2	..	7	1	..	23	4	99	18	34	6	2	2
1869.....	24	2	..	..	1	..	..	..	1	..	1	1	2	..	16	1	4	..	..	..
1870.....	181	57	9	4	1	1	1	..	11	5	2	..	15	6	93	29	50	11	4	6
1871.....	17	4	..	1	..	1	1	..	1	2	1	..	1	..	9	1	4	1	1	..
1872.....	220	100	10	6	4	1	3	2	17	9	6	3	16	11	118	49	59	18	4	10
1873.....	25	9	2	3	1	2	3	1	6	6	1	..	5	1	10	1	3	1	..	..
1874.....	15	4	1	..	..	..	..	..	1	..	..	..	1	1	8	2	5	..	..	1
1875.....	11	8	1	1	..	..	..	2	1	3	1	1	..	1	4	2	3	..	2	1
1876.....	155	51	11	2	3	1	3	1	17	4	1	4	5	6	99	16	28	13	5	8
1877.....	16	5	1	1	..	1	1	1	2	3	2	..	1	1	4	..	5	..	2	1
1878.....	40	12	7	2	..	1	..	2	7	5	2	..	2	..	18	3	8	2	3	2
1879.....	34	7	2	2	1	..	..	..	3	2	4	..	..	..	20	2	6	2	1	1
1880.....	78	38	11	10	2	2	2	..	15	12	2	2	8	5	38	5	12	11	3	3
1881.....	108	26	8	6	2	1	4	2	14	9	3	2	12	..	52	4	24	6	3	5
1882.....	78	25	5	8	1	3	2	2	8	13	1	..	7	3	44	4	16	4	2	1
1883.....	60	23	3	9	..	..	5	..	8	9	1	1	5	5	31	3	11	3	4	2
1884.....	75	32	5	5	4	1	2	1	11	7	2	..	8	2	36	9	17	5	1	9
1885.....	108	38	10	5	1	1	2	..	13	6	2	2	4	2	60	11	26	11	3	6
1886.....	31	11	1	2	..	1	1	..	2	3	1	1	4	1	14	1	9	4	1	1
1887.....	173	43	11	10	3	2	2	2	16	14	2	..	14	4	105	10	33	11	3	4
1888.....	66	30	9	10	2	1	2	1	13	12	1	3	5	1	31	4	11	5	5	5
1889.....	24	8	5	5	1	1	1	1	7	7	2	..	2	..	7	..	4	1	2	..
1890.....	47	15	1	4	1	2	..	2	2	8	..	..	5	..	27	2	8	5	5	..

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	286	228	2	2	2	3	18	18	22	23	45	13	72	57	103	67	34	32	10	6
1867.....	172	175	2	2	8	3	16	14	26	19	21	26	27	38	48	56	36	28	14	8
1868.....	181	148	..	..	3	3	9	11	12	14	31	27	47	38	57	39	26	21	8	9
1869.....	210	168	1	..	2	..	14	11	17	11	32	25	50	45	62	51	36	28	13	8
1870.....	225	197	2	3	..	2	9	11	11	16	27	28	54	43	85	73	39	21	9	16
1871.....	164	87	1	2	2	1	5	1	8	4	22	19	47	30	60	26	22	6	5	2
1872.....	220	166	1	1	6	2	7	9	14	12	44	30	55	56	76	43	25	18	6	7
1873.....	181	132	2	1	3	..	12	7	17	8	13	20	50	37	67	37	27	25	7	5
1874.....	159	146	..	4	1	3	5	1	6	8	29	24	50	42	46	49	22	25	6	7
1875.....	199	177	1	..	5	1	5	5	11	6	27	38	42	47	75	55	36	20	8	11
1876.....	180	145	1	2	3	2	13	6	17	10	19	21	53	40	64	44	18	21	9	9
1877.....	171	172	..	1	4	3	13	7	17	11	28	27	47	40	50	60	23	24	6	10
1878.....	163	158	1	..	2	2	10	12	13	14	24	28	50	36	49	53	21	22	6	5
1879.....	125	143	2	..	4	2	9	8	15	10	25	23	29	32	35	45	17	25	4	8
1880.....	202	170	1	3	2	3	10	12	13	18	23	32	60	39	73	45	23	28	10	8
1881.....	350	244	..	..	2	1	15	19	17	20	40	32	103	85	125	67	50	28	15	12
1882.....	267	249	2	..	1	4	9	11	12	15	29	33	82	80	102	90	35	22	7	9
1883.....	356	269	1	4	2	2	11	15	14	21	46	42	121	91	127	78	39	25	9	12
1884.....	267	209	1	..	3	1	9	7	13	8	31	23	76	60	110	83	32	29	5	6
1885.....	229	176	1	1	1	4	7	7	9	12	29	18	68	59	87	57	32	27	4	3
1886.....	237	196	4	2	2	..	18	8	24	10	21	29	72	55	85	62	29	32	6	8
1887.....	235	186	1	..	1	2	5	13	7	15	15	26	79	42	101	69	25	25	8	9
1888.....	235	129	..	1	1	..	9	2	10	3	18	21	80	44	97	43	26	14	4	4
1889.....	228	169	1	1	1	1	10	4	12	6	22	19	70	54	95	64	25	18	4	8
1890.....	201	151	1	..	2	2	5	4	8	6	19	21	53	43	87	59	25	19	9	3

*Including typho-malarial fever.

[illegible]

Deaths from Whooping-cough in New York City by Age and Sex.

YEAR.	TOTAL.		UNDER 1 YEAR.		1 AND UNDER 2.		2 AND UNDER 5.		TOTAL UNDER 5.		5 AND UNDER 15.		15 AND UNDER 25.		25 AND UNDER 45.		45 AND UNDER 65.		65 AND OVER.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1866.....	48	66	23	27	16	22	8	15	47	64	1	2	..	..	..	..	..	..	..	..
1867.....	65	90	39	45	18	26	8	16	65	87	..	3	..	..	..	..	..	..	..	..
1868.....	89	128	53	64	27	43	8	18	88	125	1	3	..	..	..	..	..	..	..	..
1869.....	152	206	74	98	46	63	26	39	146	200	6	6	..	..	..	..	..	..	..	..
1870.....	79	122	44	61	16	38	18	22	78	121	1	1	..	..	..	..	..	..	..	..
1871.....	196	269	103	136	65	78	26	49	194	263	2	6	..	..	..	..	..	..	..	..
1872.....	261	304	135	143	66	75	50	72	251	290	10	14	..	..	..	..	..	..	..	..
1873.....	117	151	56	79	29	41	31	29	116	149	1	1	..	..	..	..	..	1	..	..
1874.....	214	275	110	151	58	69	45	49	213	269	1	4	..	..	..	..	..	1	..	1
1875.....	185	222	114	123	50	55	19	40	183	218	2	4	..	..	..	..	..	..	..	..
1876.....	178	228	97	113	40	59	35	49	172	221	5	6	..	1	1	..	..	..	..	..
1877.....	189	251	98	112	47	75	39	53	184	240	5	11	..	..	..	..	..	..	..	..
1878.....	159	223	86	113	37	63	33	42	156	218	3	4	..	..	..	..	..	..	..	..
1879.....	253	284	128	132	69	87	49	55	246	274	7	10	..	..	..	..	..	..	..	..
1880.....	134	143	64	60	38	53	30	26	132	139	2	4	..	..	..	..	..	..	..	..
1881.....	135	151	73	63	33	54	23	30	129	147	6	4	..	..	..	..	..	..	..	..
1882.....	289	369	155	187	80	90	46	78	281	355	8	13	..	..	..	..	..	..	..	..
1883.....	169	158	80	88	45	37	35	28	160	153	8	3	1	1	..	..	..	1	..	..
1884.....	226	264	131	139	56	68	30	50	217	257	9	7	..	..	..	..	..	..	..	..
1885.....	216	279	118	127	57	81	39	62	214	270	2	9	..	..	..	..	..	..	..	..
1886.....	261	314	144	159	70	88	40	57	254	304	7	10	..	..	..	..	..	..	..	..
1887.....	87	101	49	48	23	30	13	18	85	96	2	4	..	..	..	1	..	..	..	..
1888.....	238	335	119	163	58	89	47	65	224	317	14	17	..	..	..	1	..	..	..	..
1889.....	285	362	167	173	67	97	49	81	283	351	2	11	..	..	..	..	..	..	..	..
1890.....	213	274	115	133	49	79	40	56	204	268	7	6	1	..	1	..	..	..	..	..

Births and Marriages from 1847 to 1890, inclusive.
(Record incomplete.)

YEAR.	BIRTHS.	MARRIAGES.	YEAR.	BIRTHS.	MARRIAGES.	YEAR.	BIRTHS.	MARRIAGES.
1847*.....	317	185	1865.....	5,332	2,733	1878.....	25,709	7,629
1848.....	170	199	1866.....	10,006	5,792	1879.....	25,573	8,446
1853†.....	10,157	3,203	1867.....	12,535	7,144	1880.....	27,536	9,002
1854.....	17,979	5,595	1868.....	12,590	6,926	1881.....	26,130	10,077
1855.....	14,145	4,199	1869.....	13,947	8,695	1882.....	27,321	11,085
1856.....	16,199	3,633	1870.....	14,524	7,983	1883.....	28,972	11,556
1857.....	18,427	3,710	1871.....	20,821	8,646	1884.....	30,527	11,805
1858.....	13,340	3,642	1872.....	22,068	9,008	1885.....	30,030	11,716
1859.....	9,035	3,100	1873.....	22,683	8,871	1886.....	31,319	12,216
1860.....	12,454	4,241	1874.....	25,747	8,397	1887.....	34,023	13,740
1861.....	10,004	2,993	1875.....	23,813	7,565	1888.....	36,136	14,533
1862.....	7,612	2,896	1876.....	23,744	7,099	1889.....	37,527	14,400
1863.....	6,426	3,272	1877.....	25,569	7,129	1890.....	39,250	14,992
1864.....	5,877	2,775						

* First year of registration.

† From July 1 to December 1.

Births by Sex and Race since 1847, the First Year of Registration.
(Record incomplete.)

YEAR.	TOTAL.	MALE.	FEMALE.	UNKNOWN.	WHITE.	COLORED.	NOT STATED.
1847.....	314	169	145	..	313	1	..
1848.....	174	96	78	..	173	1	..
1849.....	..	..	..	..	..	..	..
1850.....	..	..	..	..	..	..	..
1851.....	5	3	2	..	5	..	..
1852.....	..	..	..	..	..	..	..
1853.....	9,287	4,899	4,379	9	9,174	112	1
1854.....	17,076	8,816	8,246	14	16,858	218	..
1855.....	13,371	6,961	6,399	11	13,210	161	..
1856.....	15,603	8,182	7,400	21	15,417	186	..
1857.....	17,680	9,063	8,602	15	17,558	122	..
1858.....	12,132	6,380	5,739	13	12,069	63	..
1859.....	8,128	4,219	3,881	20	8,080	48	..
1860.....	5,998	3,154	2,833	11	5,961	37	..
1861.....	9,809	5,072	4,748	49	9,798	71	..
1862.....	7,633	3,927	3,633	13	7,607	26	..
1863.....	6,373	3,287	3,071	15	6,335	38	..
1864.....	5,689	2,968	2,708	13	5,652	28	..
1865.....	111	61	50	..	111	..	..
1866.....	10,117	5,202	4,905	10	10,025	87	5
1867.....	12,569	6,397	6,164	8	12,405	164	..
1868.....	12,672	6,531	6,136	5	12,564	108	..
1869.....	13,947	7,096	6,835	16	13,755	192	..
1870.....	14,524	7,560	6,910	54	14,353	169	2
1871.....	20,821	10,749	10,032	40	20,595	226	..
1872.....	22,068	11,282	10,763	23	21,769	299	..

YEAR.	TOTAL.	MALE.	FEMALE.	UNKNOWN.	WHITE.	COLORED.	NOT STATED.
1873.....	22,683	11,707	10,917	59	22,465	218	..
1874.....	25,747	13,276	12,387	84	25,514	233	..
1875.....	23,813	12,054	11,669	90	23,559	253	1
1876.....	23,744	12,114	11,550	80	23,493	241	..
1877.....	25,569	13,074	12,495	..	25,266	303	..
1878.....	25,729	13,154	12,575	..	25,381	348	..
1879.....	25,573	13,269	12,303	1	25,236	337	..
1880.....	27,536	14,356	13,179	1	27,174	362	..
1881.....	26,130	13,359	12,771	..	25,761	369	..
1882.....	27,321	14,065	13,253	3	26,992	329	..
1883.....	28,972	14,894	14,078	..	28,617	355	..
1884.....	30,527	15,495	15,029	3	30,109	418	..
1885.....	30,030	15,524	14,503	3	29,678	352	..
1886.....	31,319	16,191	15,127	1	30,935	384	..
1887.....	34,023	17,515	16,507	1	33,661	362	..
1888.....	36,136	18,538	17,598	..	35,744	392	..
1889.....	37,527	19,269	18,258	..	37,097	430	..
1890.....	39,250	20,298	18,952	..	38,818	432	..

Marriages Reported, by Months, since 1866.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1866.....	256	228	220	274	461	523	601	554	604	767	683	612	5,799
1867.....	557	493	517	636	766	727	580	530	645	674	578	441	7,141
1868.....	509	547	469	615	744	635	524	584	584	623	658	374	6,921
1869.....	687	621	565	883	832	709	656	608	998	620	822	694	8,695
1870.....	717	580	734	500	702	804	590	538	628	662	1,049	481	7,981
1871.....	636	640	523	654	830	749	583	651	901	894	808	777	8,641
1872.....	723	713	515	864	833	767	699	639	779	885	863	728	9,001
1873.....	778	687	645	776	852	853	649	606	781	825	733	686	8,871
1874.....	639	622	611	765	806	781	655	538	723	830	737	690	8,391
1875.....	583	579	489	724	736	677	649	518	620	710	732	548	7,561
1876.....	610	654	541	566	623	652	471	521	580	735	594	552	7,091
1877.....	555	526	526	585	693	619	510	504	596	706	692	617	7,121
1878.....	600	507	637	635	665	684	555	472	670	750	748	706	7,621
1879.....	673	589	530	664	754	752	615	515	717	976	888	773	8,441
1880.....	766	729	645	745	732	800	618	589	768	882	857	870	9,001
1881.....	700	670	838	750	918	950	735	709	827	1,027	1,073	850	10,071
1882.....	925	946	820	784	1,000	980	732	838	927	1,064	1,000	1,069	11,081
1883.....	964	783	863	1,001	1,124	1,068	850	809	910	1,162	986	1,036	11,551
1884.....	1,020	885	766	950	1,114	1,018	966	731	976	1,253	1,136	990	11,801
1885.....	1,000	915	901	957	992	1,052	816	748	978	1,170	1,106	1,081	11,711
1886.....	904	865	1,061	909	973	1,058	960	768	1,167	1,164	1,321	1,066	12,211
1887.....	1,043	978	1,088	1,090	1,133	1,242	1,007	1,000	1,170	1,335	1,434	1,220	13,741
1888.....	1,246	1,020	1,019	1,134	1,262	1,391	1,047	1,150	1,164	1,492	1,278	1,330	14,531
1889.....	1,202	1,090	1,133	1,056	1,300	1,332	1,042	1,019	1,240	1,326	1,436	1,224	14,401
1890.....	1,304	1,154	1,128	1,298	1,157	1,402	1,028	1,009	2,253	1,493	1,373	1,453	14,991

Birth-rate and Marriage-rate per 1,000, from 1847 to 1890, inclusive.

YEAR.	BIRTH-RATE.	MARRIAGE-RATE.	YEAR.	BIRTH-RATE.	MARRIAGE-RATE.	YEAR.	BIRTH-RATE.	MARRIAGE-RATE.
1847.....	....	....	1865.....	7.31	7.49	1878.....	22.56	13.37
1848.....	....	....	1866.....	13.03	15.09	1879.....	21.77	14.38
1853.....	....	....	1867.....	15.50	17.67	1880.....	22.77	14.89
1854.....	29.59	18.42	1868.....	14.79	16.28	1881.....	20.97	16.17
1855.....	22.36	13.28	1869.....	15.56	19.41	1882.....	21.28	17.27
1856.....	24.36	10.93	1870.....	15.40	16.93	1883.....	21.90	17.47
1857.....	26.36	10.61	1871.....	21.78	18.09	1884.....	22.39	17.32
1858.....	8.15	10.73	1872.....	22.78	18.60	1885.....	21.38	16.68
1859.....	11.69	8.03	1873.....	23.11	18.07	1886.....	21.63	16.88
1860.....	15.34	10.44	1874.....	24.98	16.29	1887.....	22.81	18.43
1861.....	12.58	7.53	1875.....	22.80	14.48	1888.....	23.52	18.92
1862.....	9.78	7.44	1876.....	22.08	13.20	1889.....	23.70	18.19
1863.....	8.44	8.59	1877.....	23.08	12.87	1890.....	24.06	18.38
1864.....	7.88	7.18						

NOTE.—These birth and marriage rates are given merely for the purpose of comparison, as the records are very incomplete.

Table of Maximum, Minimum and Mean Temperature and Rainfall in the Vicinity of New York City, at Fort Columbus from 1822 to 1854; Deaf and Dumb Asylum from 1855 to 1868, and New York Observatory, Central Park, from 1869 to date.

(Figures furnished by DANIEL DRAPER, Ph. D., Director of Central Park Observatory.)

YEAR.	TEMPERATURE—FAHR.					RAINFALL, IN INCHES (INCLUDING SNOW WATER).					Depth of Snow. (Inches.)
	Maximum.	Month.	Minimum.	Month.	Mean.	Maximum.	Month.	Minimum.	Month.	Total.	
1822.....	100	July....	—1	Jan....	54.2	....	....	....	....	....	....
1823.....	91	".....	3	{Feb..}	50.5	....	....	....	....	....	....
1824.....	96	".....	2	Feb....	52.1	....	....	....	....	....	....
1825.....	104	".....	—3	Dec....	54.4	....	....	....	....	....	....
1826.....	97	".....	—1	Jan....	52.5	....	....	....	....	....	....
1827.....	96	".....	0	".....	51.8	....	....	....	....	....	....
1828.....	99	".....	9	".....	54.	....	....	....	....	....	....
1829.....	95	".....	7	".....	52.5	....	....	....	....	....	....
1830.....	98	".....	5	".....	54.8	....	....	....	....	....	....
1831.....	98	Aug....	8	".....	51.6	....	....	....	....	....	....
1832.....	97	".....	1	".....	51.5	....	....	....	....	....	....
1833.....	94	July....	8	March..	51.5	....	....	....	....	....	....
1834.....	94	{July..}	6	Dec....	51.	....	....	....	....	....	....
1835.....	89	{Aug..}	—1	Jan....	49.6	....	....	....	....	....	....
1836.....	89	{July..}	0	Feb....	47.6	6.46	June....	.63	May....	27.57	....
1837.....	86	{Sept..}	10	{Jan..}	49.1	9.50	May....	2.10	Sept....	65.51	....
1838.....	94	{Aug..}	13	{Feb..}	50.3	4.96	Sept....	1.83	July....	41.90	....
1839.....	86	{July..}	6	Jan....	51.2	7.61	Dec....	.69	Jan....	42.97	....
1840.....	91	June....	2	".....	51.2	4.59	Oct....	1.00	Dec....	29.80	....
1841.....	92	".....	9	".....	51.2	5.30	Jan....	.80	Feb....	42.08	....
1842.....	85	{July..}	16	{Feb..}	53.4	4.30	Oct....	1.07	Jan....	33.98	....
1843.....	93	{Sept..}	9	Feb....	51.4	15.26	Aug....	.76	June....	41.37	....
1844.....	92	June....	3	Jan....	52.	6.00	July....	.55	April...	36.38	....
1845.....	99	July....	6	Feb....	53.3	4.87	Jan....	1.22	".....	34.08	....
1846.....	95	".....	5	".....	52.3	9.70	May....	.48	Sept....	48.91	....
1847.....	94	June....	12	{Nov..}	52.3	6.93	Aug....	1.53	April...	61.85	....
1848.....	91	{June..}	3	Jan....	52.3	7.28	May....	1.16	".....	36.80	....
1849.....	94	July....	0	".....	50.2	5.63	Oct....	.61	Jan....	31.74	....
1850.....	94	".....	9	Feb....	50.9	9.20	May....	2.33	Nov....	54.53	....
1851.....	93	".....	4	Dec....	52.1	6.94	April...	.90	June....	40.88	....
1852.....	93	".....	—2	Jan....	51.4	6.20	Aug....	2.06	Oct....	43.84	....
1853.....	98	June....	9	".....	52.2	6.80	Nov....	1.04	Dec....	52.20	....
1854.....	93	July....	5	Dec....	50.7	8.80	April...	.70	March..	45.18	....
1855.....	93	".....	—7	Feb....	50.7	7.37	Oct....	1.57	Sept....	51.76	....
1856.....	95	".....	—5	Jan....	50.5	6.73	Aug....	.66	Feb....	41.92	....
1857.....	90	Aug....	0	".....	52.1	9.05	April...	1.30	Nov....	53.88	....
1858.....	93	June....	—3	Feb....	53.1	6.42	June....	1.47	Mar....	52.87	....
1859.....	96	July....	—5	Jan....	53.1	8.21	Mar....	1.75	Oct....	57.28	....
1860.....	89	".....	—7	Feb....	52.9	7.57	Nov....	1.43	June....	45.17	....
1861.....	92	Aug....	—3	".....	53.8	8.09	".....	1.73	Dec....	56.52	....
1862.....	95	".....	8	Dec....	53.2	9.03	June....	1.91	".....	53.98	....
1863.....	90	June....	6	Feb....	54.2	8.60	July....	1.05	Sept....	57.03	....
1864.....	97	".....	8	".....	55.4	5.90	Dec....	2.04	Feb....	48.01	....
1865.....	95	July....	6	Jan....	55.5	10.42	June....	2.23	Aug....	62.86	....
1866.....	98	".....	—13	".....	52.1	10.09	Feb....	1.67	July....	51.68	....
1867.....	91	June....	4	".....	49.8	10.18	June....	.78	Sept....	54.61	....
1868.....	92	July....	0	Feb....	48.6	9.60	Sept....	2.01	Oct....	64.02	....
1869.....	94	Aug....	4	Mar....	51.4	6.87	Feb....	1.39	April...	46.47	30.67
1870.....	94	June....	9	{Feb..}	53.5	5.11	April...	1.83	May....	42.12	25.49
1871.....	92	May....	—2	Dec....	51.1	7.50	Oct....	2.07	Jan....	51.26	34.22
1872.....	95	July....	3	{Mar..}	51.0	7.83	July....	1.29	Feb....	42.49	40.37
1873.....	94	".....	—1	{Jan..}	50.9	9.56	Aug....	1.28	June....	47.99	40.93
1874.....	98	June....	3	Feb....	51.3	8.77	April...	1.70	Oct....	45.83	35.62

YEAR.	TEMPERATURE—FAHR.					RAINFALL, IN INCHES (INCLUDING SNOW WATER).					Depth of Snow. (Inches.)
	Maximum.	Month.	Minimum.	Month.	Mean.	Maximum.	Month.	Minimum.	Month.	Total.	
1875.....	93	June....	—3	Jan....	49.4	8.97	Aug....	1.33	May....	40.90	48.25
1876.....	98	July....	3	Dec....	51.8	8.79	Mar....	.94	Jan....	41.77	30.74
1877.....	92	".....	10	Mar....	52.7	8.14	Oct....	.68	Dec....	40.18	27.37
1878.....	94	".....	7	{Jan...}	53.5	7.97	Aug....	1.97	April...	48.66	13.74
1879.....	98	".....	—4	Jan....	52.3	7.95	".....	.43	Oct....	39.03	37.62
1880.....	96	May....	—6	Dec....	53.2	8.53	July....	.62	May....	36.64	27.62
1881.....	101	Sept....	—3	Feb....	52.3	5.81	Mar....	.86	Aug....	36.26	23.75
1882.....	93	July....	—6	Jan....	51.9	16.85	Sept....	1.14	".....	45.30	20.14
1883.....	95	".....	—1	Dec....	50.4	4.53	Oct....	1.49	Mar....	35.77	52.50
1884.....	91	{June..}	—3	".....	52.4	6.17	Dec....	.21	Sept....	52.25	31.50
1885.....	99	{Aug..}	—2	Feb....	51.1	5.67	Aug....	.41	".....	38.34	23.25
1886.....	94	July....	—4	".....	51.0	5.40	May....	.95	Aug....	39.38	31.00
1887.....	96	".....	4	Jan....	50.9	7.76	June....	.34	May....	43.99	31.87
1888.....	96	June....	0	".....	49.3	7.66	Aug....	1.53	July....	53.32	37.75
1889.....	91	{May..}	3	Feb....	52.7	11.89	July....	1.10	Dec....	57.16	21.00
1890.....	98	July....	7	Mar....	52.7	6.56	Oct....	.71	Nov....	45.63	29.63

HEALTH DEPARTMENT

HEALTH DEPARTMENT OF THE CITY OF NEW YORK,
NEW YORK, April 21, 1891.

The Board met, pursuant to adjournment.
Present—Commissioners Charles G. Wilson, Joseph D. Byrant, M. D., the President of the Board of Police.
The minutes of the last meeting were read and approved.

The Attorney and Counsel Presented the following Reports :
Weekly report of suits commenced and discontinued, judgments obtained and costs collected :
Orders received for prosecution 162
Attorney's notices issued 213
Nuisances abated before suit 71
Civil suits commenced for other causes 41
Nuisances abated after commencement of suit 19
Suits discontinued—By Board 27
Judgments for the Department—Civil suits 6
Judgments for the People—Criminal suits 5
Civil suits now pending 342
Criminal suits now pending 213
Money paid into the Court—Criminal suits \$110

Weekly report of cases wherein nuisances have been abated and recommendations that actions be discontinued.
On motion, it was
Resolved, That the actions against the following-named persons for violations of the Sanitary Code be discontinued, without costs, to wit :

NAMES.	No.	NAMES.	No.
Emanuel Lowinson.....	1826	Henry B. Fleggenheimer.....	59
James B. Brady.....	1842	William Kumer.....	75
Albert Zahn.....	2424	Charles Appleby.....	92
Mary Fitzsimmons.....	2634	George Blair.....	97
Mary Fitzsimmons.....	2655	John Baum.....	99
Leopold Rosenstock.....	3450	John B. Haskins.....	234
Louis Z. Bach.....	3555	William Frank.....	313
Leonard Albert.....	3599	John Gilmartin.....	374
Fritz Fletchinger.....	38	Henry Zahn.....	345
Barney McCabe.....	3179		

The Sanitary Committee Presented the following Reports :
Weekly report from Riverside Hospital (small-pox).
Weekly report from Riverside Hospital (fevers).
Weekly report from Reception Hospital.
Weekly report from Willard Parker Hospital.

Report on Changes in the Hospital Service.
Resolved, That the following changes in the hospital service be and are hereby approved :

NAMES.	POSITION.	SALARY.	APPOINTED. RESIGNED.	DATE.
Ellen Barnes.....	Ward Helper.....	\$168 00	Discharged.....	Apr. 12, 1891.
Catherine Armstrong, vice Connors	Helper.....	144 00	Appointed.....	" 14, "
Maria Bier.....	Laundress.....	168 00	Discharged.....	" 15, "
Maggie Walker, vice Barnes.....	Helper.....	168 00	Appointed.....	" 16, "
Tillie Clavin.....	Ward Helper.....	168 00	".....	" 16, "
Richard Ryan, vice Anderson.....	Orderly.....	360 00	".....	" 15, "
Sarah Miller, vice Walker.....	Helper.....	144 00	".....	" 18, "
Johanna Clancy, vice Bier.....	Laundress.....	168 00	".....	" 18, "

Report in respect to the importation of old rags—the Secretary was directed to forward a copy to the State Board of Health.
The Finance Committee presented the following bills, which were approved and ordered forwarded to the Comptroller for payment :

NAMES.	AMOUNT.	NAMES.	AMOUNT.
Church E. Gates & Co.....	\$12 45	C. P. Woodworth's Son & Co.....	\$56 53
"The Engineering Record".....	4 00	Consolidated Gas Co.....	02 37
Baker, Voorhis & Co.....	31 10	G. S. Verbury.....	1,006 20
Keuffel & Esser Co.....	3 00		

Ayes—The President, Commissioners Bryant and MacLean.
The following Communications were Received from the Sanitary Superintendent :
Weekly report of the Sanitary Superintendent.
Weekly report of the Chief Sanitary Inspector.
Weekly report of the Chemist and Assistant Chemist.
Weekly report of work performed by the Inspectors of Offensive Trades.
Weekly report on manure dumps.
Weekly reports on condition of offal and night-soil boats.
Weekly reports on condition of slaughter-houses.

Reports on overcrowding in tenement-houses.
Reports on applications for permits.
Reports on applications for relief from orders.
Report of an inspection of a box drain on the west side of the Harlem Railroad, between Travers and One Hundred and Eighty-eighth streets.
Report announcing the death of Sanitary Policeman Palmer and a request that another officer be detailed to fill the vacancy.
Report of the resignation of Sanitary Inspector Mersereau. On motion, the resignation was accepted, to take effect April 21, 1891.
Report on condition of premises No. 18 Pell street (lodging-house).

The following Communications were Received from the Chief Inspector of Contagious Diseases:

Weekly report of work performed by the Division of Contagious Diseases.
Weekly report of work performed by the Veterinarian.
Report on application for leave of absence.

The following Communications were Received from the Register of Records:

Weekly letters.
Weekly abstracts of births.
Weekly abstracts of still-births.
Weekly abstract of marriages.
Weekly mortuary statement.
Weekly abstract of deaths from contagious diseases.
Weekly report of Clerks.
Reports on delayed birth and marriage returns.
Report on application to file supplemental papers.

Overcrowding in Tenements.

Whereas, The Sanitary Superintendent has certified to this Board that the following tenement houses in the City of New York are so overcrowded that less than six hundred cubic feet of air space is afforded to each occupant in the said houses;

It is ordered, That the number of occupants in said tenement-houses be and are hereby reduced as follows:

NUMBER.	LOCATION.	FRONT OR REAR HOUSE	FLOOR.	LESSEE.	REDUCED TO	
					Adults.	Children.
474	No. 2 Jersey street.....		Second, r. s. f.	Donato Sparadara.....	1	..
475	"		Second, f. s. f.	Giuseppe Plamaway....	1	3
476	"		Third, e. s. f.	Mary Stewart.....	..	..
477	No. 4 Jersey street.....		Third, r. s. f.	Toney George.....	5	4
478	"		Fourth, w. s. f.	Dominico Monzenoa....	..	3
479	"		Fourth, e. s. f.	Toney Poppei.....	1	..
480	No. 6 Jersey street.....		Third, r. s. f.	Donato Matizzallo.....	1	4
481	No. 47 Ludlow street.....		Second, s. s. f.	Shener Rosenbaum.....	3	2
482	"		Third, s. s. f.	Har. inter Davidsinh.	2	3
483	"		Fourth, n. s. f.	Mendei Eudlich.....	3	2
484	"		Fourth, s. s. f.	Davis Nachison.....	3	2
485	No. 112 Mulberry street....		First, s. s. f.	Frank Capuano.....	8	..
486	"		First, n. s. f.	Rosato Teck.....	5	..
487	"		Second, n. s. f.	Leonardi Narch.....	8	..
488	"		Second, s. s. f.	Antoni Capano.....	8	..
489	"		Third, n. s. f.	Angelo E. macho.....	18	..
490	"		Third, s. s. f.	Michael Lando.....	8	..
491	"		Third, n. s. f.	Frank Mello.....	18	..
492	"		Fourth, n. s. f.	Joseph March.....	8	..
493	"		Fourth, s. s. f.	Joseph Much.....	1	5
494	"		Fourth, s. s. f.	Frank Lebero.....	8	..
495	"		Fifth, s. s. f.	Severa Meleao.....	7	1
496	"		Fifth, n. s. f.	Michael Marvalio.....	7	2
497	"		Fifth, s. s. f.	Allin Varello.....	7	2
498	"		Fifth, n. s. f.	Maria Perrat.....	7	2
499	No. 61 James street.....		Second, r. s. f.	Pasquale Cordasco.....	2	2
500	"		Third, f. s. f.	Alphonso Francero.....	5	2
501	"	Rear.....	First, s. s. f.	Frank Martin.....	4	..
502	"	"	First, n. s. f.	Antoni Genetelo.....	2	2
503	"	"	Second, n. s. f.	Dominico Pascerelli....	1	5
504	"	"	Third, n. s. f.	Feristani Lawle.....	2	3
505	"	"	Fourth, s. s. f.	Mike Cele.....	2	2
506	"	"	Fourth, n. s. f.	Francena Salva.....	2	2
507	No. 62 James street.....		Second, e. s. f.	Anton Lecour.....	1	1
508	"		Second, f. s. f.	Nicolo Bernedo.....	3	1
509	"	Rear.....	Fifth, e. s. f.	Rocco Bardo.....	2	2
510	No. 68 James street.....		Fourth, e. s. f.	Vincent Faria.....	1	6
511	"	Rear.....	Third, e. s. f.	Joe Vinella.....	1	5
512	No. 102 Mott street.....		Third, s. s. f.	Michael Gammalde.....	4	2
513	"		Fifth, s. s. f.	Aniani Peguli.....	3	3
514	No. 45 Delancey street.....		Second, w. s. f.	Barnet Goldstein.....	4	..
515	"		Fourth, e. s. f.	Henry Worden.....	3	2
516	"		Fourth, w. s. f.	Jacob Wanzimmer.....	3	2
517	No. 215 Hester street.....		Second, w. s. f.	John Pallot.....	4	2
518	"		Third, w. s. f.	Joseph Lumerno.....	4	..
519	"		Third, e. s. f.	Rachel Flumena.....	6	..
520	"		Third, r. s. f.	Pedro Chedamaro.....	3	5
521	"	Rear.....	Second, e. s. f.	David Winola.....	2	4
522	"	"	Second, w. s. f.	James Amenda.....	3	2
523	"	"	Third, e. s. f.	Peter Pendreson.....	4	1
524	"	"	Third, w. s. f.	Louis Pendock.....	4	..
525	"	"	Fourth, e. s. f.	Pasquale Guffello.....	3	1
526	"	"	Fourth, w. s. f.	Andrew Morrello.....	2	3
527	No. 59 James street.....		First, e. s. f.	Nicholas Bolsom.....	4	..
528	"		Third, w. s. f.	Salvator Grodo.....	4	2
529	"		Fourth, w. s. f.	Francisco Carniceo.....	4	1
530	"		Fourth, w. s. f.	Francisco Carniceo.....	4	1

Permits Granted.

No.	BUSINESS-MATTER OR THING GRANTED.	ON PREMISES AT
1320	To keep twenty-nine lodgers.....	No. 89 West Third street.
7146	To board and care for three children.....	No. 219 East Ninety-seventh street.
7147	To use smoke-house.....	No. 495 Tenth avenue.
7148	"	No. 3411 Third avenue.
7149	"	No. 3521 Third avenue.
7150	"	No. 3543 Third avenue.
7151	To board and care for one child.....	No. 427 West Twenty-sixth street.

Permits Denied.

No.	BUSINESS-MATTER OR THING DENIED.	ON PREMISES AT
618	To use driven well water.....	Nos. 64 and 66 North Moore street.
619	To board and care for one child.....	No. 355 East Seventy-sixth street.
620	To use smoke-house.....	No. 1720 Third avenue.
621	To retain and use manure box.....	No. 336 East Forty-sixth street.
622	To keep three chickens.....	No. 172 Cherry street.
623	To break baled manure and to empty barrels and tightly covered carts of loose manure upon boats at.....	Foot East Forty-sixth street.

Permits Revoked.

No.	BUSINESS-MATTER OR THING REVOKED.	ON PREMISES AT
5730	To retain and use manure-vault.....	No. 175 East One Hundred and Twentieth street.
6649	To use smoke-house.....	No. 25 Ninth avenue.
6799	"	No. 495 Tenth avenue.

Orders Suspended, Extended, Modified, Rescinded or Referred.

No. OF ORDER.	ON PREMISES AT	TIME EXTENDED TO	REMARKS.
799	Nos. 87 and 89 James street.....	.....	Rescinded.
2223	No. 250 East Fourth street.....	Oct. 1, 1891	Modified to allow the water-closet apartment on first floor to be connected to the ventilating shaft of the water-closets above, provided the said ventilating shaft be properly repaired as the order requires.
2516	No. 549 West Forty-fifth street.....	.....	.....
2727	No. 511 East Fifteenth street.....	May 15, 1891	.....
2875	No. 107 East Seventh street.....	" 15, "	.....
4024	No. 107 East Twenty-fourth street.....	" 1, "	.....
4270	No. 126 Hester street.....	.....	Modified not to require the removal of school sinks, provided said school sinks be connected directly with the house-drain, and the cesspool be disinfected, emptied and cleaned and filled with fresh earth.
4557	No. 70 Bedford street.....	May 1, 1891	.....
4579	No. 443 West Fiftieth street.....	.....	Rescinded, provided portion of order relating to ventilation of inner bedrooms into the adjoining rooms which communicate with the external air be complied with at once.
4779	Nos. 296 and 298 Rivington street.....	May 10, 1891	.....
4914	No. 20 Monroe street.....	" 1, "	.....
5110	No. 248 Stanton street.....	July 1, "	.....
5284	No. 46 Avenue D.....	.....	Suspended during the pleasure of the Board. Provided the defective drain be repaired and made gas and water tight throughout its entire length.
5393	No. 18 Oak street.....	July 1, 1891	Rescinded.
5444	Nos. 168 to 174 Thompson street.....	.....	Provided that all defects in croton and waste pipes be repaired and made tight, and all obstructions removed from waste pipe and the privy-house cleaned at once.
5507	Nos. 163 and 165 Division street.....	May 15, 1891	Rescinded.
5590	No. 26 Eighth avenue.....	.....	Rescinded.
5640	No. 337 East Eightieth street.....	.....	.....
5697	No. 639 East Ninth street.....	June 1, 1891	.....
5719	Nos. 190 and 192 Mulberry street.....	July 1, "	.....
5784	No. 197 Seventh avenue.....	May 15, "	.....
5794	Nos. 241 and 243 West Twenty-eighth street.	" 15, "	Provided the premises be kept in a cleanly condition.
5802	No. 100 East Twenty-eighth street.....	.....	Rescinded.
5804	No. 1763 Third avenue.....	May 15, 1891	.....
5811	(Nos. 200 and 202 E. Ninety-eighth street.) No. 588 Second avenue.....	.....	Extended during the pleasure of the Board for portion of order relating to water supply to the sink.
5874	Nos. 113 and 115 Washington street.....	June 1, 1891	.....
5888	No. 645 East Ninth street.....	July 1, "	.....
5899	Nos. 684 and 686 East One Hundred and Fifty-fourth street.....	June 15, "	.....
5914	Lot No. 188 Decatur avenue.....	May 15, "	.....
5933	No. 62 Morton street.....	" 1, "	.....
5930	No. 353 Second avenue.....	June 10, "	For inclosing and ventilating water-closet apartments, provided the balance of order be complied with.
6006	No. 616 East One Hundred and Fifty-fifth street.....	July 1, "	.....
6038	No. 1560 Avenue A.....	May 15, "	For portion of order relating to ventilating the rooms.
6040	Nos. 152 and 154 Bowery.....	.....	Suspended during the pleasure of the Board.
6058	No. 4 St. Luke's place.....	.....	Rescinded.
6099	No. 51 Market street.....	May 15, 1891	.....
6110	No. 163 East Seventy-third street.....	" 1, "	.....
6124	No. 513 Second avenue.....	.....	Modified not to require a new iron house-drain.
6136	No. 705 East Ninth street.....	July 1, 1891	.....
6171	No. 21 Charles street.....	" 1, "	.....
6173	No. 16 East Twenty-third street.....	.....	Modified to allow standard iron pipe instead of extra heavy pipe for the ventilating pipe, and extension of time was denied.
6227	No. 426 Greenwich street.....	May 15, 1891	Provided the cleaning and whitewashing be done at once.
6228	Nos. 438 and 440 Greenwich street.....	" 15, "	For plastering the cellar ceiling, provided balance of order be complied with at once, and further modification of order was denied.
6434	No. 666 East One Hundred and Thirty-sixth street.....	" 11, "	Provided the portions of order relating to hole in sink waste-pipe, the weep-pipes, trapping of the leader and hand holes of traps be complied with at once.
6260	No. 153 Baxter street.....	June 1, "	For plastering the cellar ceiling, provided balance of order be complied with at once.
6266	No. 300 East Forty-sixth street.....	" 10, "	.....
6275	No. 180 Greenwich street.....	Oct. 1, "	For plastering the cellar ceiling, provided balance of order be complied with at once.
6292	No. 304 West Thirty-ninth street.....	June 1, "	.....
6310	No. 48 Market street.....	June 1, "	For bedroom windows, provided the white-washing be done at once.
6326	No. 98 Orchard street.....	May 10, "	.....
6332	No. 136 Tenth avenue.....	" 10, "	Provided the premises are kept clean during the time.
6334	No. 1215 Third avenue.....	" 1, "	.....
6393	No. 332 East Fifty-ninth street.....	" 1, "	Provided the open joints of the waste-pipe from the sink be made gas-tight.
6411	No. 118 Centre street.....	" 1, "	.....
6435	No. 22 Clinton street.....	June 1, "	.....
6436	No. 624 Sixth street.....	May 15, "	.....
6442	No. 232 East Forty-seventh street.....	June 1, "	.....
6445	No. 238 East Forty-seventh street.....	" 1, "	.....
6451	Nos. 271 and 273 Greenwich street.....	Oct. 1, "	.....
6456	No. 676 Morris avenue.....	Aug. 1, "	Provided the torn and broken oil cloth removed from the hallway and stairs at once.
6603	No. 60 Henry street.....	May 1, "	Provided the vault be kept clean and in-offensive.
10101	No. 521 East Seventy-first street.....	Nov. 1, "	.....
11773	Northwest corner One Hundred and First street and Boulevard.....	.....	Extended during the pleasure of the Board.

Applications for Relief from Orders Denied.

No. OF ORDER.	ON PREMISES AT	No. OF ORDER.	ON PREMISES AT
1212	No. 443 East Houston street.	6061	No. 131 West Eleventh street.
3585	No. 1096 Second avenue.	6219	No. 113 Greenwich street.
3635	Nos. 128 to 132 West Thirtieth street.	6247	No. 51 East Sixty-first street.
3836	No. 223 East Seventy-fifth street.	6276	Nos. 444 and 446 Greenwich street.
4480	No. 176 Stanton street.	6360	No. 161 Mott street.
5314	No. 20 Baxter street.	6406	No. 14 Barclay street.
5419	Nos. 315 to 323 West Sixty-ninth street.	6410	No. 20 Avenue A.
5828	No. 346 East Eightieth street.	6452	No. 481 Greenwich street.
6043	No. 238 East Forty-sixth street.	20316	Albany Road and Broadway.

Communications from Other Departments.

Comptroller's office—Weekly statement.

A communication from the Department of Public Works in respect to a complaint of the escape of steam into sewer opposite Nos. 14, 16 and 35 Wall street.

A certificate of examination for the position of Temporary Assistant to the Resident Physician of Riverside Hospital was received from the Civil Service Boards.

Miscellaneous Communications.

A communication from the Real Estate Exchange, enclosing resolutions in respect to amendments to the Sanitary Code. Referred to the Secretary to answer.

A communication from Francis H. Smith, requesting an extension of time for the completion of sea-wall at North Brother Island.

Resolutions.

Resolved, That the Register of Records be and is hereby directed to record the following birth and marriage certificates:

NAMES.	RETURN.	DATE.
1. William Cairns.....	Born.....	Sept. 12, 1890
2. William George Johnes.....	".....	Dec. 10, "
3. Francis M. John.....	".....	" 18, "
4. Joseph N. Pickard.....	".....	" 25, "
5. Female child of D. and J. McCarthy.....	".....	Jan. 7, 1891
6. Male child of Michael and Meriah Manning.....	".....	" 9, "
7. Female child of John and Annie Connolly.....	".....	" 10, "
8. Mary A. McDonald.....	".....	" 22, "
9. William H. Purcell.....	".....	" 23, "
10. Edith H. Williams.....	".....	" 26, "
11. Janet Cameron.....	".....	" 29, "
12. Annie Coffey.....	".....	Feb. 3, "
13. Harry Eckstein.....	".....	" 6, "
14. Anastasia Bergin.....	".....	" 7, "
15. James McIntyre.....	".....	" 8, "
16. Mary Gull.....	".....	" 8, "
17. Bertha Gindra.....	".....	" 11, "
18. George J. Sowter.....	Married.....	July 6, 1889
19. Frederick W. Bleckwenn.....	".....	Dec. 14, "

Resolved, That permission is hereby given to file supplemental papers relating to

NAME.	RETURN.	DATE.
Samuel Nelms (correct name Nellans).....	Died.....	Dec. 16, 1890

Resolved, That a copy of the report of Sanitary Inspector Koen of an inspection of the box-drain on the west side of the Harlem Railroad, between Travers and One Hundred and Eighty-eighth streets, be forwarded to the Department of Street Improvements of the Twenty-third and Twenty-fourth Wards for the necessary action.

Resolved, That a copy of the report of Chief Inspector Bullard, in respect to the death of Sanitary Policeman Palmer, be forwarded to the Police Department, with the request that another officer be detailed to fill the vacancy.

Resolved, That the resolution of the Board of March 31, 1891, revoking Permit No. 1298, to keep a lodging-house at No. 18 Pell street, be and is hereby rescinded and permit restored.

Resolved, That the time for the completion of contract for building a sea-wall on North Brother Island be and is hereby extended to May 24, 1891.

Resolved, That George A. Dickson be and is hereby appointed a Temporary Assistant to the Resident Physician of Riverside Hospital, pursuant to the rules and regulations of the Civil Service Boards, with salary at the rate of \$25 per month.

Resolved, That this Board will hereafter grant no permits for manure vaults outside and in the vicinity of stables, but will require that provision be made for the care of manure within the stables, and for its prompt and frequent removal therefrom.

Resolved, That the Sanitary Superintendent be directed to instruct all Sanitary Inspectors and Sanitary Police Officers to keep under constant observation the manure vaults now permitted outside and in the vicinity of stables, and to report to the Board any such vaults as are offensive to residents in their neighborhood, or do not conform to the rules and regulations of this Department.

Resolved, That the attention of the Commissioner of Street Cleaning be respectfully called to the filthy and unsanitary condition of the streets east of the Bowery and south of Houston street.

Resolved, That the application of Kane & Wright for permit to break baled manure and to empty barrels of manure and tightly covered carts of loose manure upon boats moored at bulkhead and dock foot of Forty-sixth street, East river, be and is hereby denied.

Resolved, That no loose or unbaled manure shall be unloaded from manure carts or wagons or emptied from barrels or deposited on boats at the bulkhead and dock foot of East Forty-sixth street, after June 1, 1891.

Resolved, That leaves of absence be and are hereby granted as follows:

NAMES.	FROM	TO	REMARKS.
Inspector Purcell.....	April 14.....	April 18.....	On account of sickness.
Chief Inspector Collins.....	" 14.....	" 18.....	On account of sickness in family.

Resolved, That the pay-rolls of this Department, for the month of April, be and are hereby approved, and the President and Secretary directed to sign certificates and forward the same to the Comptroller for payment.

Resolved, That requisition be and is hereby made upon the Comptroller for the following sum of money, which is required to enable the Board of Health to pay to the Board of Police, for the month of April, the following amount for the salaries of officers and patrolmen detailed to the Board of Health, pursuant to the provisions of section 5, chapter 399, Laws of 1880, and section 296, chapter 410, Laws of 1882, as amended by chapter 84, Laws of 1887, being one-twelfth part of the amount, estimated, levied, raised and appropriated for the support and maintenance of the Sanitary Company of Police during the current year, to wit:

1 Sergeant, from April 1 to April 30.....	\$166 66
2 Roundsmen, from April 1 to April 30.....	216 66
41 Patrolmen, from April 1 to April 30.....	4,100 00
1 Patrolman, from April 1 to April 19.....	63 33
	<hr/> \$4,546 65

Ayes—The President, Commissioners Bryant and MacLean.

The following Communications were Received from the Chief Inspector of Plumbing and Ventilation:

Weekly report of work performed by the Division of Plumbing and Ventilation.
Weekly report on light and ventilation of tenement-houses, plumbing and drainage plans of new buildings.

Report on application for leave of absence.
Resolved, That the recommendations of the Chief Inspector of Plumbing and Ventilation be and the same are hereby approved.

Action of the Board on Plans for Plumbing and Drainage of the following Houses:

Resolved, That plans for plumbing and drainage of the following houses be and are hereby approved upon the conditions contained in the statement of the action of the Board attached to the specifications submitted with the plans, and the said plans and specifications are hereby modified in accordance therewith:

Plan No.	
12612.	For three dwellings, east side of Villa avenue, three hundred and seventy-five feet north of Potter place, as amended.
12628.	For store-house, Nos. 107 and 109 Bowery, as amended.
12634.	For one dwelling, east side of Sedgwick avenue, five hundred feet north of One Hundred and Sixty-first street, as amended. (See diagram.)
12724.	For two store buildings (front and rear), No. 140 Sullivan street, as amended.
12752.	For two tenements, south side Sixty-fourth street, one hundred feet east of Grand Boulevard, as amended.
12795.	For storage warehouse, east side of Seventh avenue, from Fifty-second to Fifty-third street, as amended.
12833.	For three dwellings, north side of Kingsbridge road, one hundred feet west of Arthur avenue, as amended.
12836.	For two tenements, south side of One Hundred and Second street, one hundred feet east of Boulevard, as amended.
12837.	For stable and dwelling, south side of One Hundred and Thirty-third street, one hundred and twenty-five feet west of Eighth avenue, as amended.
12848.	For hotel building, southwest corner of Madison avenue and Eighty-ninth street, as amended.
12856.	For one dwelling, west side of Nathalie avenue, seventy-five feet south of Nindham place, as amended.
12859.	For two tenements, south side of Ninety-fifth street, one hundred feet west of Columbus avenue, as amended.

12860.	For drainage, north side of Seventieth street, one hundred feet west of West End avenue.
12866.	For one tenement, No. 52 Forsyth street.
12861.	For two tenements, north side of Ninety-fourth street, one hundred feet west of Columbus avenue.
12863.	For store and dwelling, west side of Ninth avenue, one hundred feet south of Ninety-fourth street, as amended.
12869.	For shed and manure chute, No. 614 West Fifty-second street.
12871.	For two tenements, northwest corner of Willis avenue and One Hundred and Thirty-sixth street, as amended.
12875.	For one tenement, south side of One Hundred and Fourth street, one hundred and seventy-five feet east of Manhattan avenue.
12876.	For one tenement, south side of One Hundred and Thirteenth street, one hundred and forty-five feet east of First avenue, as amended.
12877.	For three tenements, south side of Fifty-first street, one hundred and twenty-seven feet east of Eighth avenue, as amended.
12879.	For three dwellings, north side of Ninety-first street, one hundred and fifty feet west of Madison avenue, as amended.
12882.	For beer storage house, east side of Fourth avenue, eighty-five feet north of Fiftieth street.
12883.	For two dwellings, west side of Decatur avenue, three hundred and forty-one feet north of Southern Boulevard, as amended.
12886.	For drainage, south side of One Hundred and Forty-seventh street, one hundred and seventy-five feet west of St. Nicholas avenue.
12765.	For two dwellings, south side of Seventy-seventh street, two hundred and twenty-five feet west of Eighth avenue, as amended.
12887.	For one tenement, No. 229 East Twenty-sixth street, as amended.
12888.	For seven dwellings, south side of One Hundred and Fourteenth street, one hundred and twenty feet west of Fifth avenue, as amended.
12889.	For eleven tenements, south side of One Hundred and Fifteenth street, one hundred and fifty feet east of Third avenue, conditionally.
12899.	For drainage, north side of Seventy-seventh street, four hundred and fifty-five feet west of Ninth avenue.
12911.	For drainage, one dwelling, north side of Seventy-sixth street, one hundred and twenty-five feet west of Central Park, West.
12912.	For storage-house, No. 531 West Thirty-second street.
12913.	For coal yard, south side of Ninety-second street, one hundred and fifty feet west of Boulevard, as amended.

Tabled for Amendment.

Resolved, That the following plans for plumbing and drainage be and are hereby tabled for amendment:

Plan No.	
12770-2.	For one tenement, northeast corner of West and Morton streets.
12862.	For one store, Nos. 259 and 261 Sixth avenue.
12771-2.	For two tenements, east side of West street, twenty-five feet north of Morton street.
12865.	For five tenements, southeast corner of Eighty-eighth street and Columbus avenue.
12867.	For eight tenements, south side of One Hundred and Eighteenth street, one hundred feet east of Eighth avenue.
12873.	For two tenements, north side of Eighty-fourth street, west of Eighth avenue.
12870.	For one dwelling, northwest corner of McComb's Dam road and Elliott street.
12874.	For four tenements, southeast corner of Amsterdam avenue and Ninety-first street.
12881.	For one dwelling, east side of Jackson avenue, one hundred and seventy-five feet south of One Hundred and Sixty-first street.
12884.	For shop and stable, No. 19 Vestry street.
12892.	For one tenement, northwest corner of Lenox avenue and One Hundred and Thirty-sixth street.
12893.	For four dwellings, south side of Seventy-second street, forty-four feet eleven inches west of Boulevard.
12894.	For one dwelling, northwest corner of Kingsbridge road and One Hundred and Eighty-first street.
12895.	For one church, No. 159 East One Hundred and Twelfth street.
12896.	For one stable, south side of One Hundred and Thirtieth street, two hundred and seventy-five feet east of Twelfth avenue.
12897.	For one store, No. 115 West One Hundred and Twenty-fifth street.

Amendments to Plumbing and Drainage Plans.

Resolved, That the following amendments to plumbing and drainage plans be and are hereby approved:

Plan No.	
11328.	For two dwellings, north side of One Hundred and Seventieth street, one hundred feet east of Eleventh avenue.
11392.	For three tenements, east side of Eighth avenue, twenty-four feet seven inches south of One Hundred and Twelfth street.
11496.	For store and lofts, Nos. 113 and 115 Prince street.
11625.	For ten dwellings, north and south sides of Eighty-sixth street, between West End avenue and Riverside Drive.
11631.	For office building, junction of Beaver and South William streets.
11674.	For one tenement, No. 457 West Seventeenth street.
12051.	For one stable, Nos. 616 and 618 West Fifty-second street.
12076.	For four tenements, north side of Eighty-eighth street, one hundred and twenty-five feet west of Tenth avenue.
12441.	For bank building, Sixth avenue and Sixteenth street.
12537.	For office building, east side of Washington street, from Cedar to Liberty street.
12611.	For one dwelling, east side of Lind avenue, seventy feet north of Devoe street.
12773.	For one dwelling, southeast corner of Aqueduct avenue and Buchanan place.
12846.	For one dwelling, west side of St. Nicholas avenue, twenty-five feet north of One Hundred and Twenty-first street, conditionally.
12852.	For one dwelling, south side of One Hundred and Second street, two hundred and five feet east of First avenue.

Violations to the Attorney.

Resolved, That the following violations of law in respect to plumbing and drainage of new houses be and are hereby referred to the Attorney:
Nos. 4242, 4266, 4301.

Action of the Board on Plans for Light and Ventilation of the following Tenement-houses:

Resolved, That the following plans for light and ventilation be and are hereby approved, upon the conditions described in the permits issued in each case, and the said plans and specifications are hereby modified in accordance therewith:

Plan No.	
8501-2.	For eleven tenements, south side of One Hundred and Fifteenth street, one hundred and fifty feet east of Third avenue.
8530.	For one tenement, southeast corner of King and Congress streets, as amended.
8566.	For one tenement, No. 120 East Eleventh street, as amended.
8567.	For two tenements, Nos. 116 and 118 East Eleventh street, as amended.
8570.	For four tenements, northeast corner of Courtland avenue and One Hundred and Fiftieth street, as amended.
8572.	For three tenements, (2) south side of One Hundred and Fifth street, eighty-five feet west of Fourth avenue, and (1) on north side of One Hundred and Fourth street, one hundred and five feet west of Fourth avenue, as amended.
8573.	For one tenement, No. 335 East Twenty-eighth street, as amended.
8574.	For three tenements, Nos. 450 to 454 East One Hundred and Forty-eighth street, as amended.
8578.	For three tenements, south side of Fifty-first street, one hundred and twenty-seven feet east of Eighth avenue.
8579.	For one tenement, No. 59 Bayard street.
8580.	For one tenement, northeast corner of Lexington avenue and Sixty-fourth street.
8581.	For one tenement, No. 61 Bayard street, as amended.
8582.	For five tenements, east side of Third avenue, one hundred feet north of One Hundred and Fifty-sixth street.
8584.	For one extension, No. 401 East Seventy-ninth street.
8585.	For three tenements, south side of One Hundred and Sixteenth street, two hundred and twenty-five feet east of Eighth avenue.
8586.	For one tenement, south side of One Hundred and Sixth street, two hundred feet west of First avenue, as amended.
8587.	For one tenement, No. 229 East Twenty-sixth street.
8588.	For three tenements, southwest corner of Kingsbridge road and Vanderbilt avenue.
8589.	For one tenement, No. 116 Waverley place.
8590.	For one tenement, No. 87 Henry street.
8596.	For four tenements, south side of One Hundred and Sixteenth street, one hundred feet east of Park avenue.
8597.	For two tenements (1) on northwest corner of Willis avenue and One Hundred and Thirty-fifth street, and (1) southwest corner of Willis avenue and One Hundred and Thirty-sixth street.

3d. In reference to certain claims transmitted for collection and requesting copies of the lease in connection therewith. The Secretary directed to comply with said request.

4th. Approving specifications and form of contract for dredging at Piers, new 44 and 45, North river.

5th. Respecting the suit of George Ballard for reinstatement.

From the Fire Department—Requesting a list of dock property from which they may select a site for their permanent use, as provided by chapter 46 of the Laws of 1891. The Engineer-in-Chief directed to examine and report.

From the Finance Department—In relation to furnishing detailed statements of moneys. The Secretary directed to acknowledge receipt.

From C. T. Van Santvoord, lessee—Requesting permission to repair the end of Pier foot of Twenty-second street, North river. Permit granted.

From B. T. Babbitt—Requesting permission to run a six-inch iron pipe from the building at No. 49 West street, under Pier 6, North river. Permit granted, the same to be and remain only during the pleasure of the Board, provided the consent of the owners of said pier is filed in this Department.

From the American Transit Company—Requesting a renewal of their permit for derrick and tally-house on the south end, west side of Pier, old 6, foot of Coenties slip, East river. Permit granted.

From Charles Steel, attorney for the New York, Lake Erie & Western Railroad Company—Inclosing letter from John King, president, requesting a renewal of lease of Pier, new 21, North river, foot of Chambers street. Advise that said lease is being prepared.

From John McDermott—Requesting the privilege of locating a bath at the foot of Stanton street, East river. Whereupon the following resolution was adopted:

Resolved, That permission be and hereby is granted to John McDermott to locate and maintain a bath house at the north side of Pier foot of Stanton street, East river, the rate of compensation to be paid therefor at the rate of two dollars per day, Sundays included, payable at the end of each week to the Dock Master of the District; the same to be and remain only during the pleasure of the Board; this permit is granted on the condition that the said John McDermott files in this office, within ten days after receipt hereof, an agreement to repair, and keep in repair, the said pier in order to put and keep the same in safe condition.

From Stephen H. Mills & Co.—Requesting a lease of Pier, old 32, foot of James slip, East river.

From Joseph Cornell—Complaining that barges and other boats landing at the end of Pier, old 34, North river, interfere with the use of the south half of said pier. The Dock Master directed not to allow vessels to land thereat.

From the Metropolitan Steamship Company—Requesting permission to repair the inner end of Pier 10, North river, and bulkhead thereat. Permit granted.

From Brown & Fleming—Requesting permission to dredge under the dumping board foot of Canal street, North river. Permit granted.

From the North River Steamboat Company—Requesting permission to cut a gangway in the south side of Pier, old 34, foot of Harrison street, North river. Permit granted, the work to be done under the direction and supervision of the Engineer-in-Chief of this Department and the same to be and remain only during the pleasure of the Board.

From the Consolidated Gas Company—Requesting permission to raise the bulkhead between Seventeenth and Eighteenth streets, North river. Permit granted.

From the New York Central and Hudson River Railroad Company—Requesting permission to repair and renew wharf property at Port Morris, Long Island Sound. Referred to the Engineer-in-Chief to examine and report.

From W. A. Winne, with consent of the Brooklyn and New York Ferry Company—Requesting permission to place an ice bridge, scales and weigh office on the bulkhead between Piers 57 and 58, East river. Permit granted.

From Walter B. O'Brien and others—Requesting additional space for float at the south half of One Hundredth street, East river. Application denied.

From M. Peterson and others and B. Johansen and others—Notice of lien for one hundred and fifty-three dollars and forty-five cents (\$153.45) against Wm. W. Hegeman, contractor for building a pier and dumping-board foot of One Hundred and Tenth street, Harlem river, under Contract No. 339. The Secretary directed to file the same with the contract.

From Dock Master Parks: 1st. Reporting several fender-piles loose on Pier, new 57, near the foot of west Twenty-seventh street. Notify lessee to repair.

2d. Reporting that Pier, new 64, foot of Thirty-fourth street, North river, requires both cleaning and repairing. Request the Department of Street Cleaning to clean, and the Engineer-in-Chief directed to repair.

From Dock Master Meehan—Reporting that canal boat No. "17," loaded with coal, sank at the foot of Sixty-first street, East river. Notify the Philadelphia and Reading Coal Company to remove.

From Dock Master Brady—Reporting several dangerous holes in the approach to Pier, old 42, near the foot of Canal street, North river. Referred to the Engineer-in-Chief to examine and report.

From Dock Master Carson—Reporting that Henry Hart has fenced off the east side of Lexington avenue, north of One Hundred and Thirty-first street, Harlem river, and is filling in thereat. Direct Mr. Hart to cease said work of filling until he obtains a permit from the Department.

From Dock Master Kenney—Recommending that the bulkheads, from Seventy-sixth to Eightieth streets, North river, be paved.

The following report for the week ending April 15, 1891, amounting to \$21,855.13 was received from the Treasurer and ordered to be spread in full on the minutes, as follows:

DATE.	FROM WHOM.	FOR WHAT.	AMOUNT.	TOTAL.	DATE DEPOSITED.
1891.					1891.
Apr. 14	Patrick J. Brady.....	Wharfage, District No. 2, N. R.....	\$62 79		
" 14	Edward Abeel.....	" 4, "	99 00		
" 14	William T. Coggeshall.....	" 6, "	62 44		
" 14	Charles Parks.....	" 8, "	85 78		
" 14	George A. Woods.....	" 10, "	183 65		
" 14	B. F. Kenney.....	" 12, "	76 60		
" 14	Henry A. Palmstine.....	" 1, E. R.....	237 65		
" 14	Charles S. Coye.....	" 3, "	867 55		
" 14	John J. Ryan.....	" 5, "	132 84		
" 14	Joseph B. Erwin.....	" 7, "	64 35		
" 14	Joseph F. Meehan.....	" 9, "	89 38		
" 14	James W. Carson.....	" 11, "	14 50		
" 14	John J. Martin.....	" 13, "	36 70		
" 14	J. A. Bostwick.....	1 qrs. rent, Pier, new 36, E. R.....	3,750 00		
" 14	Owens & Co.....	25% sale bkd. foot 47th st., E. R.....	137 50		
" 14	Sheridan & Byrne.....	" Pier foot 5th st., E. R.....	925 00		
" 14	Joseph Cornell.....	" " Jane st., N. R.....	375 00		
" 14	C. T. Van Santvoord.....	" " W. 22d st., N. R.....	2,875 00		
" 14	Knickerbocker Ice Co.....	" bkd. foot Bank st.....	212 50		
" 14	"	" " 93d st., E. R.....	330 00		
" 14	New Haven Steamboat Co....	" Pier 25, E. R., 1/2 bkd., etc....	2,250 00		
" 14	"	" W. 1/2 Pier 26, E. R., & 1/2 bkd., etc.....	750 00		
" 14	Baltimore & Ohio Railroad Co	" Pier foot W. 17th st., N. R ...	1,125 00		
" 14	Baltimore & Ohio Railroad Co	" " 37th st., E. R.....	250 00		
" 14	Hartford & New York Transportation Co.....	" E. 1/2 Pier 24, E. R., & 1/2 bkd.....	1,625 00		
" 14	Consumers' Ice Co.....	" Pier foot Horatio st., N. R....	375 00		
" 14	Union Stock Yard & Market Co	" " W. 58th st., N. R....	750 00		
" 14	J. M. Rogers	" " W. 138th st., N. R....	37 50		
" 14	New York & Texas S. S. Co....	" E. 1/2 Pier 20, E. R.....	1,925 00		

DATE.	FROM WHOM.	FOR WHAT.	AMOUNT.	TOTAL.	DATE DEPOSITED.
1891.					1891.
Apr. 14	New York & Texas S. S. Co....	25% sale W. 1/2 Pier 21, E. R.....	\$1,650 00		
" 14	Carl Smith.....	1 qrs. rent Pier 58 & bkd. bet. Piers 58 & 59, E. R.....	500 00		
				\$21,855 13	Apr. 13.
				\$21,855 13	

Respectfully submitted,

JAMES MATTHEWS, Treasurer.

From the Engineer-in-Chief:

1st. Report for the week ending April 11, 1891.

2d. Reporting that the work of building a new pier foot of One Hundred and Tenth street, Harlem river, under Contract No. 339, has been practically abandoned by the contractor, and recommending that the work be ordered done by the force of the Department, and the cost thereby incurred deducted from the final estimate on said contract. Recommendation adopted.

3d. Reporting repairs required to Pier, old 42, near the foot of Canal street, North river. The Engineer-in-Chief directed to repair.

4th. Recommending that repairs be made to the boat landing at Pier "A," North river. Recommendation adopted.

5th. Respecting the assessment levied on property on the Harlem river, between One Hundred and Thirty-eighth and One Hundred and Forty-first streets, whereupon the following resolutions were adopted:

Resolved, That the attention of the Comptroller be and hereby is called to the fact that on the Tax Map Books filed in the office of the Commissioners of Taxes and Assessments, the blocks from One Hundred and Thirty-eighth street to the centre line of bulkhead between One Hundred and Fortieth and One Hundred and Forty-first streets, east of Fifth avenue, marked and assessed as private property, is the property of the City of New York.

Resolved, That the Comptroller be requested to inform the Department of Taxes and Assessments of the above fact, and ask said Department to make the necessary corrections, and also cause to appear on the Tax Map the new bulkhead recently built thereat by this Department.

6th. Reporting repairs required to the Piers foot of Third and Fifth streets, East river. Notify the lessees that if the repairs are not made immediately in accordance with the order of the Board, dated February 26, 1891, the work will be done by the Department at their cost and expense.

7th. Reporting repairs and cleaning required to the bulkhead foot of Bank street; also to Piers foot of Jane, Horatio, West Fifteenth, West Seventeenth, West Twenty-second and West Fifty-eighth streets, North river. Notify the lessees that if the repairs are not made immediately as provided by the terms and conditions of their lease, the work will be done by this Department at their cost and expense.

8th. Report on Secretary's Order No. 10834, submitting in duplicate plans for change of lines of Pier, new 15, North river, whereupon the following resolutions were adopted:

Resolved, That this Board deems it advisable to change the lines and location of Pier, new 15, near the foot of Vesey street, North river, from the lines and location thereof as laid down on the plans determined by this Board April 13, 1871, and adopted and certified by the Commissioners of the Sinking Fund April 27, 1871, as follows:

The southerly line of Pier, new 15, to be parallel to and distant 175 feet northerly from the northerly line of Pier, new 14, as laid out on the plan determined by the Board of Docks, August 7, 1890, and approved by the Commissioners of the Sinking Fund, November 18, 1890, and the side lines of said Pier, new 15, to form an angle of 90 degrees with the established bulkhead line. The width of Pier, new 15, to be 60 feet instead of 40 feet as on aforesaid plan of 1871. The length of Pier, new 15, to be 715.17 feet on the southerly side and 714.04 feet on the northerly side thereof, extending to the pier-head line determined by the Board of Docks, July 3, 1890, and approved by the Commissioners of the Sinking Fund, July 24, 1890, under chapter 452 of the Laws of 1890, all of which is shown on plan submitted in duplicate herewith by the Engineer-in-Chief.

Resolved, That the Commissioners of the Sinking Fund be and hereby are requested to consent to and approve the change in length, width and location of the new pier near the foot of Vesey street, North river, to be known as Pier, new 15, as above set forth.

9th. Report on Secretary's Order No. 10721 respecting the communication from Sanderson & Son requesting repairs to the roof of shed on the Pier, new 54, North river. The Engineer-in-Chief directed to repair in accordance with his recommendation.

10th. Report on Secretary's Order No. 10800 in reference to the application of Hiram Macdonald for permit to locate boat float between One Hundred and Seventh and One Hundred and Tenth streets, Harlem river, whereupon the following resolution was adopted:

Resolved, That permission be and hereby is granted to Hiram Macdonald to place and maintain a float for the keeping of small boats outside the wall immediately north of East One Hundred and Seventh street, Harlem river; the rate of compensation to be paid therefor at the rate of fifty (50) cents per day, Sundays included, payable at the end of each week to the Dock Master of the District, to commence from the time said float is placed thereat, and to continue only during the pleasure of the Board.

11th. Report on Secretary's Orders Nos. 9022, 9076, 9840, 10309, 10371, 10631, 10653, 10689, 10729, 10732, 10736, 10756, 10757, 10804, 10811, 10818 and 10820; that he had superintended the re-erecting and restoring grain elevator on bulkhead between Sixtieth and Sixty-second streets, North river; superintended repairing Pier, new 1, North river, and the bulkhead north of Pier 54, East river; superintended repairing Freight Piers E. F. & G., North river, respecting the repairs ordered to the outer end of Pier, new 42, North river; superintended locating derrick on Pier, new 29, North river; repairing bulkhead between Ninety-third and Ninety-fourth streets, East river; placing temporary boat-davits on Pier, foot of Fiftieth street, North river, and the erection of an ice platform on the westerly side of Pier 53, East river; removed earth from bulkhead between Piers, new 24 and 25, North river; superintended the removal of boat-house from One Hundred and Thirty-second street, North river; removed old timber, etc., south of Thirty-fourth street and Twelfth avenue, North river; repaired fender-piles southwest corner of Pier foot of Forty-ninth street, North river; superintended driving piles and repairing side-caps near the outer end of Pier 8, North river; that he had transmitted to the Counsel to the Corporation map and data of premises between Fifty-fourth and Fifty-fifth streets, North river; that the lessees of Pier foot of Thirty-seventh street, North river, had repaired the south side of said pier, and that he had removed shed on Pier old 34, North river.

The Secretary reported that the pay-rolls of the General Repairs and Construction force for the week ending April 10, 1891, amounting to \$8,510.41, had been approved and audited and transmitted to the Finance Department for payment.

On motion of Commissioner Cram, the Secretary was directed to notify the Dock Master to prevent any one except the Department of Street Cleaning from using the dump on the Pier foot of Nineteenth street, North river, for the reception of cellar dirt, etc., and the permit issued to Brown & Fleming, May 20, 1890, revoked.

On motion of Commissioner Cram, the Engineer-in-Chief was directed to examine and report where pavement can be laid on the new made land along the water-front.

In the Matter

of

The application of John Gilles for an extension of time under Contract No. 317 for building Pier, new 29, North river.

The President, to whom the above matter was referred, submitted the following report:

That the time for finishing the Pier under Contract No. 317, be extended to the 4th of April, 1891, and that the expenses incurred by the Department in finishing the work amounting to \$144.91, be deducted from the final estimate.

On motion, report received and recommendation adopted.

The Secretary reported that the right to collect and retain all wharfage accruing at the following named piers and bulkheads on the North, East and Harlem rivers, had been sold to the highest bidders therefor as named below, at the public sale held Tuesday, April 14, 1891, at 12 o'clock noon, at Pier "A," North river, by Van Tassell & Kearney, auctioneers, for the terms and at the prices stated opposite each lot respectively, to wit:

On the North River.

For the term of five years from May 1, 1891.

Lot 1. Bulkhead between Pier, new 1, and Pier, old 1—To Cavanagh & Collins for \$1,000 per annum.

Lot 2. Southerly half of Pier, old 18, and twenty-three feet of bulkhead southerly. This pier and bulkhead have sheds upon them—Withdrawn.

Lot 3. Pier, old 54. The Department has set aside this pier, during its pleasure, for the use of the oyster business, pursuant to chapter 521 of the Laws of 1889—Withdrawn.

Lot 4. Bulkhead foot of Bank street—To Knickerbocker Ice Co., for \$850 per annum.

Lot 5. Pier at foot of Jane street—To Joseph Cornell, for \$1,500 per annum.

Lot 6. Pier at foot of Horatio street, except reservation for berth for public bath during summer season—To Consumers' Ice Co., for \$1,500 per annum.
 Lot 7. Pier at foot of West Fifteenth street—No bid.
 Lot 8. Pier at foot of West Seventeenth street—To Baltimore and Ohio Railroad Company, for \$4,500 per annum.
 Lot 9. Pier at foot of West Twentieth street—Withdrawn.
 Lot 10. Pier at foot of West Twenty-first street—Withdrawn.
 Lot 11. Pier at foot of West Twenty-second street. This pier has a shed upon it—To C. T. Van Santvoord, for \$11,500 per annum.
 Lot 12. Pier at foot of West Fifty-eighth street, northerly side and end and surface. South-erly side reserved for Department of Docks—To Union Stock Yard and Market Company, for \$3,000 per annum.
 Lot 13. Pier at foot of West One Hundred and Twenty-ninth street, except the dump of Depart-ment of Street Cleaning, on southerly side—No bid.
 Lot 14. Bulkhead at foot of West One Hundred and Thirtieth street and fifty feet northerly, and platform in front of same. A portion of this platform has a ferry-house upon it—To Riverside and Fort Lee Ferry Co., for \$400 per annum.
 Lot 15. 145 feet of bulkhead southerly of West One Hundred and Thirty-first street, and pier at foot of West One Hundred and Thirty-first street, southerly side—To Riverside and Fort Lee Ferry Company, for \$500 per annum.

On the North River.

For the term of three years from May 1, 1891.

Lot 16. Pier at foot of West One Hundred and Thirty-second street—No bid.
 Lot 17. Pier at foot of West One Hundred and Thirty-eighth street—To J. M. Rogers, for \$150 per annum.
 Lot 18. Pier at foot of West One Hundred and Fifty-second street—No bid.

On the East River.

For the term of five years from May 1, 1891.

Lot 19. Easterly half of Pier 4—To New York Central and Hudson River Railroad Co., for \$4,400 per annum.
 Lot 20. Bulkhead-platform between Pier 4 and Pier 5. This platform has a shed upon it—To New York Central and Hudson River Railroad Co., for \$1,100 per annum.
 Lot 21. Pier 5. This pier has a shed upon it—To New York Central and Hudson River Railroad Company, for \$16,500 per annum.
 Lot 22. Bulkhead between Pier, old 5, and Pier, old 6—To New York Central and Hudson River Railroad Company, for \$1,100 per annum.
 Lot 23. Pier, old No. 6—To New York Central and Hudson River Railroad Company, for \$8,800 per annum.
 Lot 24. Easterly half of Pier 20. This pier has a shed upon it—To New York and Texas Steamship Company, for \$7,700 per annum.
 Lot 25. Westerly half of Pier 21, with whole of surface. This pier has a shed upon it—To New York and Texas Steamship Company, \$6,600 per annum.
 Lot 26. Easterly half Pier 24 and half of the bulkhead adjoining easterly. This pier and bulkhead have sheds upon them—To Hartford and New York Transportation Company, for \$6,500 per annum.
 Lot 27. Pier 25 and half bulkhead adjoining westerly, half bulkhead adjoining easterly, probably included as part of pier—This pier and bulkhead have sheds upon them. To New Haven Steamboat Company, for \$9,000 per annum.
 Lot 28. Westerly half of Pier 26 and half bulkhead adjoining westerly. This pier and bulk-head have sheds upon them—To New Haven Steamboat Company, for \$3,000 per annum.
 Lot 29. Pier at foot of East Third street—Peter Prial, for \$3,000 per annum.
 Lot 30. Pier at the foot of East Fifth street, except reservation for berth for public bath during summer season—To Sheridan & Byrne, for \$3,700 per annum.
 Lot 31. Pier at foot of East Thirty-third street—No bid.
 Lot 32. Pier at foot of East Thirty-seventh street, except reservation for berth for public bath during summer season—To Baltimore & Ohio Railroad Company, for \$1,000 per annum.
 Lot 33. Bulkhead-platform southerly of East Thirty-ninth street about 99 feet—No bid.
 Lot 34. Bulkhead and dump at foot of East Thirty-ninth street—Withdrawn.
 Lot 35. Bulkhead-platform at foot of East Forty-seventh street—To Owens & Company, for \$550 per annum.
 Lot 36. Bulkhead-platform at foot of East Forty-ninth street—No bid.
 Lot 37. Bulkhead at foot of East Fifty-sixth street—No bid.

On the East River.

For the term of three years from May 1, 1891.

Lot 38. Bulkhead at foot of East Fourth street and return along northerly side of East Fourth street—To John Rheinfrank & Co. for \$1,500 per annum.
 Lot 39. Bulkhead at foot of East Fifteenth street—To Consolidated Gas Company, for \$275 per annum.
 Lot 40. Bulkhead-platform at foot of East Seventy-fifth street—No bid.
 Lot 41. Bulkhead at foot of East Seventy-sixth street—Withdrawn.
 Lot 42. Pier at southerly side of East Eighty-sixth street, pier at northerly side of East Eighty-sixth street and bulkhead northerly of same—No bid.

On the Harlem River.

For the term of five years from May 1, 1891.

Lot 43. Bulkhead at foot of East Ninety-third street—To Knickerbocker Ice Company, for \$1,320 per annum.
 Lot 44. Bulkhead at foot of East One Hundred and Thirty-eighth street—Withdrawn.
 Lot 45. Crib-bulkhead at foot of One Hundred and Fifty-fifth street, Harlem river—With-drawn.
 Lot 46. Crib-bulkhead at foot of One Hundred and Fifty-sixth street, Harlem river—With-drawn.
 Lot 47. Crib-bulkhead at foot of One Hundred and Fifty-seventh street, Harlem river—Withdrawn.
 Lot 29. Pier at the foot of Third street was sold for \$3,000. The name of the purchaser was given as Peter Prial. He was requested to pay the customary fee. Mr. Prial informed the Secretary that he was without money. At the conclusion of the sale, Mr. Prial failing to appear, his bid was declared forfeited.

Whereupon the following resolution was adopted:

Resolved, That the right to collect and retain all wharfage which may accrue for the use and occupation by vessels of more than five tons burden at the several lots of wharf property sold as afore-said excepting Lot No. 29, upon the terms reported by the Secretary be and hereby is approved and confirmed, and the officers of this Board be and they hereby are authorized and empowered to execute the necessary leases therefor, as prepared, and in the form approved by the Counsel to the Corporation.

The Board then proceeded to open the estimates for dredging at Piers, new 44 and 45, on the North river, advertised to be opened this day at 12 o'clock M., a representative of the Comptroller being present.

One estimate was received as follows:

From the Atlantic Dredging Company with security deposit \$35, twenty cents per cubic yard.

On motion, the Secretary was directed to transmit to the Comptroller the security deposit made by said bidder, and accompanying its estimate, whereupon the following resolution was adopted:

Resolved, That the contract opened this day for dredging at Piers, new 44 and 45, on the North river, be and hereby is awarded to the Atlantic Dredging Company, it being the only bidder, upon the approval of the sureties by the Comptroller.

The Board then convened in executive session.

The following communications were received, and,

On motion, ordered to be placed on file, viz.:

From the Engineer-in-Chief:

1st. Reporting the suspension of Stone-cutters John J. Grant and James McNamee, for a period of ten days, and recommending that his action be approved. Action approved.

2d. Reporting that he had directed that Laborers, Acting Watchmen, Jackson Vermilyea and William F. Martin, be not again assigned to duty as Acting Watchmen, and recommending that his action be approved. The Engineer-in-Chief directed not to assign said persons to duty as Acting Watchmen for a period of thirty days.

3d. Reporting that he had directed that Laborer Acting Watchman John English be not again assigned to duty as Acting Watchman and recommending that his action be approved. Action approved.

4th. Reporting that he had suspended Laborers, Acting Watchmen, Mortimore W. Hale and William Teal, also William Owens, Stone-cutter, and recommending that they be discharged. Recommendation adopted.

5th. Reporting the death of Laborer Thomas Dugan. The Secretary directed to cause his name to be dropped from the list of employees.

John Whearty and C. M. Brown, Laborers, were discharged, and Patrick O'Rourke was appointed as Laborer.

On motion, the Board adjourned.

AUGUSTUS T. DOCHARTY, Secretary.

POLICE DEPARTMENT.

POLICE DEPARTMENT OF THE CITY OF NEW YORK,
 No. 300 MULBERRY STREET,
 NEW YORK, May 1, 1891.

To the Supervisor of the City Record:

SIR—Pursuant to chapter 226, Laws of 1889, I herewith transmit the following list of appoint-ments and applicants for appointment in the Police Department of the City of New York for the week ending May 1, 1891:

Applicants for Appointment.

NAME.	RESIDENCE.	OCCUPATION.	
Charles W. Ahearn.....	7 Monroe street.....	Printer.....	Rejected.
Michael J. Conroy.....	367 First avenue.....	Truck-driver.....	Passed.
Frank Eberty.....	42 Avenue D.....	Trimmer.....	Rejected..
Thomas F. Gilligan.....	528 West Forty-sixth street.....	Clerk.....	"
George Germann.....	410 East Eighty-third street.....	Cook.....	"
Louis Hechler.....	149 East Fourth avenue.....	Butcher.....	Passed.
Frank Lindner.....	253 Second street.....	Machinist.....	"
James E. McCormack.....	302 East Thirty-fourth street.....	Driver.....	"
Charles Scott.....	2311 Second avenue.....	Expressman.....	"
John B. Sunders.....	641 East Eleventh street.....	Brass-finisher.....	Rejected.
Henry Mitchell.....	West Farms, N. Y.....	Spinner.....	Passed.
John Murphy.....	109 West Fifty-third street.....	Driver.....	"
Andrew Campbell.....	132 East One Hundred and Twenty-third street.....	Produce-dealer.....	Rejected.
Eugene Hermance.....	558 West Twenty-fourth street.....	Plumber.....	"
Alexander McCaughery.....	111 East One Hundred and Twenty-sixth street.....	Printer.....	"
Dennis F. Sullivan.....	1627 East End avenue.....	Waiter.....	"
Edward T. Walsh.....	199 West Houston street.....	Cartman.....	Passed.
William A. Douglass.....	200 East One Hundred and Seventeenth street..	Driver.....	Rejected.
Maurice Fitzgerald.....	101 West Ninety-eighth street.....	".....	Passed.
John J. Fehr.....	241 Broome street.....	Frame-maker.....	Rejected.
George Lahm.....	311 East One Hundred and First street.....	Carriage-trimmer....	"
Harry D. Adriance.....	340 West Twelfth street.....	Clerk.....	Passed.
John J. O'Brien.....	139 West Ninety-fourth street.....	Stage-driver.....	"
Richard C. Slavin.....	110 Bedford street.....	Plumber.....	"
Louis Young.....	10 Eldridge street.....	Railroad fireman....	"
Louis V. Wyart.....	209 East Forty-fourth street.....	Glass polisher.....	"
William J. Clancey.....	1015 Sixth avenue.....	Milkman.....	"
John Heid.....	550½ West Fifty-fifth street.....	Silk weaver.....	Rejected.

Appointed on Probation.

NAME.	RESIDENCE.	OCCUPATION.
Thomas Anderson.....	342 Morris avenue.....	Porter.
Joseph F. Bush.....	536 East Fourteenth street.....	Housesmith.
Franklin Cornell.....	51 Leroy street.....	Farmer.
William Drennan.....	312 Henry street.....	Varnisher.
Daniel McCaffrey.....	One Hundred and Seventy-ninth street and Bathgate avenue.	Driver.
Michael Regan.....	42 Beach street.....	Porter.
Louis Schindler.....	172 Suffolk street.....	Driver.
Matthew Slattery.....	343 East One Hundred and Twelfth street.....	Fireman.

Respectfully,

WM. H. KIPP, Chief Clerk.

EXECUTIVE DEPARTMENT.

MAYOR'S OFFICE,
 NEW YORK, March 4, 1890.

Pursuant to section 1, subdivision 3 of chapter 10, Laws of 1888, I hereby designate the "New Yorker Zeitung" and "New York Daily News," of the daily papers printed in the City of New York as the newspapers in which the advertise-ments of the public notice of the time and place of auction sales in the City of New York shall be published.

HUGH J. GRANT, Mayor.

MAYOR'S OFFICE,
 NEW YORK, February 1, 1889.

Pursuant to section 9 of chapter 339, Laws of 1883, I hereby designate the "Daily News" and the "New York Morning Journal," two of the daily papers printed in the City of New York, in which notice of each sale of unredeemed pawns or pledges by public auction in said city, by pawnbrokers, shall be published for at least six days previous thereto, until otherwise ordered.

HUGH J. GRANT, Mayor.

OFFICIAL DIRECTORY.

STATEMENT OF THE HOURS DURING which the Public Offices in the City are open for business, and at which the Courts regularly open and adjourn, as well as of the places where such offices are kept and such Courts are held; together with the heads of Departments and Courts:

EXECUTIVE DEPARTMENT.

Mayor's Office.

No. 6 City Hall, 10 A. M. to 4 P. M.; Saturdays, 10 A. M. to 12 M.

HUGH J. GRANT, Mayor. WM. McM. SPEER, Secretary and Chief Clerk.

Mayor's Marshal's Office.

No. 1 City Hall, 9 A. M. to 4 P. M.

DANIEL ENGELHARD, First Marshal.
 FRANK FOX, Second Marshal.

COMMISSIONERS OF ACCOUNTS.

Rooms 114 and 115, Stewart Building, 9 A. M. to 4 P. M.
 MAURICE F. HOLAHAN, EDWARD P. BARKER.

AQUEDUCT COMMISSIONERS.

Room 209, Stewart Building, 5th floor, 9 A. M. to 5 P. M.
 JAMES C. DUANE, President; JOHN C. SHEEHAN, Secretary; A. FTELEY, Chief Engineer; J. C. LULLEY, Auditor

BOARD OF ARMOY COMMISSIONERS.

THE MAYOR, Chairman; PRESIDENT OF DEPARTMENT OF TAXES AND ASSESSMENTS, Secretary.
 Address M. COLEMAN, Staats Zeitung Building, Tryon Row. Office hours, 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.

COMMON COUNCIL.

Office of Clerk of Common Council.

No. 8 City Hall, 9 A. M. to 4 P. M.
 JOHN H. V. ARNOLD, President Board of Aldermen.
 FRANCIS J. TWOMEY, Clerk Common Council.

City Library.

No. 12 City Hall, 10 A. M. to 4 P. M.

MICHAEL C. PADDEN, City Librarian.

DEPARTMENT OF PUBLIC WORKS

Commissioner's Office.

No. 31 Chambers street, 9 A. M. to 4 P. M.
 THOMAS F. GILROY, Commissioner; BERNARD F. MARTIN, Deputy Commissioner.

Bureau of Chief Engineer.

No. 31 Chambers street, 9 A. M. to 4 P. M.
 GEORGE W. BIRDSALL, Chief Engineer.

Bureau of Water Register.

No. 31 Chambers street, 9 A. M. to 4 P. M.

JOSEPH RILEY, Register.

Bureau of Street Improvements.

No. 31 Chambers street, 9 A. M. to 4 P. M.
 WM. M. DEAN, Superintendent.

Office of Engineer in Charge of Sewers.

No. 31 Chambers street, 9 A. M. to 4 P. M.
 HORACE LOOMIS, Engineer-in-Charge.

Bureau of Repairs and Supplies.

No. 31 Chambers street, 9 A. M. to 4 P. M.
 WILLIAM G. BERGEN, Superintendent.

Bureau of Water Purveyor.

No. 31 Chambers street, 9 A. M. to 4 P. M.
WM. H. BURKE, Water Purveyor.

Bureau of Lamps and Gas.

No. 31 Chambers street, 9 A. M. to 4 P. M.
STEPHEN MCCORMICK, Superintendent.

Bureau of Streets and Roads.

No. 31 Chambers street, 9 A. M. to 4 P. M.
JOHN B. SHEA, Superintendent.

Bureau of Incumbrances.

No. 31 Chambers street, 9 A. M. to 4 P. M.
MICHAEL T. CUMMINGS, Superintendent.

Keeper of City Hall

MARTIN J. KEENE, City Hall.

DEPARTMENT OF STREET IMPROVEMENTS

TWENTY-THIRD AND TWENTY-FOURTH WARDS.

No. 2656 Third avenue.

LOUIS J. HEINTZ, Commissioner; JOHN H. J. RONNER, Deputy Commissioner; WM. H. TEN EVCK, Secretary.

FINANCE DEPARTMENT**Comptroller's Office.**

No. 15 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.

THEODORE W. MYERS, Comptroller; RICHARD A. STORRS, Deputy Comptroller; D. LOWBER SMITH, Assistant Deputy Comptroller.

Auditing Bureau.

Nos. 19, 21, 23 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.

WILLIAM J. LYON, First Auditor.
DAVID E. AUSTEN, Second Auditor.

Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents.

Nos. 31, 33, 35, 37, 39 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.

OSBORNE MACDANIEL, Collector of Assessments and Clerk of Arrears.

No money received after 2 P. M.

Bureau for the Collection of City Revenue and of Markets.

Nos. 1 and 3 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.

JAMES DALY, Collector of the City Revenue and Superintendent of Markets.

No money received after 2 P. M.

Bureau for the Collection of Taxes.

No. 57 Chambers street and No. 35 Reade street Stewart Building, 9 A. M. to 4 P. M.

GEORGE W. MCLAN, Receiver of Taxes; ALFRED VREDENBURGH, Deputy Receiver of Taxes.

No money received after 2 P. M.

Bureau of the City Chamberlain.

Nos. 25, 27 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.

THOMAS C. T. CRAIN, City Chamberlain.

Office of the City Paymaster.

No. 33 Reade street, Stewart Building, 9 A. M. to 4 P. M.

JOHN H. TIMMERMAN, City Paymaster

LAW DEPARTMENT.**Office of the Counsel to the Corporation**

Staats Zeitung Building, third and fourth floors, 9 A. M. to 5 P. M. Saturdays, 9 A. M. to 12 M.

WILLIAM H. CLARK, Counsel to the Corporation.
ANDREW T. CAMPBELL, Chief Clerk.

Office of the Public Administrator.

No. 49 Beekman street, 9 A. M. to 4 P. M.

CHARLES E. LYDECKER, Public Administrator.

Office of Attorney for Collection of Arrears of Personal Taxes.

Stewart Building, Broadway and Chambers street, 9 A. M. to 4 P. M.

JOHN G. H. MEYERS, Attorney.
SAMUEL BARRY, Clerk.

Office of the Corporation Attorney.

No. 49 Beekman street, 9 A. M. to 4 P. M.

LOUIS HANNEMAN, Corporation Attorney.

POLICE DEPARTMENT.**Central Office.**

No. 300 Mulberry street, 9 A. M. to 4 P. M.

CHARLES F. MACLEAN, President; WILLIAM H. KIPP, Chief Clerk; T. F. RODENBOUGH, Chief of Bureau of Elections.

DEPARTMENT OF CHARITIES AND CORRECTION.**Central Office.**

No. 66 Third avenue, corner Eleventh street, 9 A. M. to 4 P. M.

HENRY H. PORTER, President; GEORGE F. BRITTON, Secretary.

Purchasing Agent, FREDERICK A. CUSHMAN. Office hours, 9 A. M. to 4 P. M. Saturdays, 12 M.

Contracts, Proposals and Estimates for Work and Materials for Building, Repairs and Supplies, Bills and Accounts, 9 A. M. to 4 P. M. Saturdays, 12 M. CHARLES BENN, General Bookkeeper.

Out-Door Poor Department. Office hours, 8.30 A. M. to 4.30 P. M. WILLIAM BLAKE, Superintendent. Entrance on Eleventh street.

HEALTH DEPARTMENT.

No. 301 Mott street, 9 A. M. to 4 P. M.

CHARLES G. WILSON, President; EMMONS CLARK, Secretary.

DEPARTMENT OF PUBLIC PARKS.

Emigrant Industrial Savings Bank Building, Nos. 49 and 51 Chambers street, 9 A. M. to 4 P. M. Saturdays, 12 M.

ALBERT GALLUP, President; CHARLES DE F. BURNS, Secretary.

Office of Topographical Engineer.

Arsenal, Sixty-fourth street and Fifth avenue, 9 A. M. to 5 P. M.

FIRE DEPARTMENT.

Office hours for all, except where otherwise noted from 9 A. M. to 4 P. M. Saturdays, to 12 M.

Headquarters.

Nos. 157 and 159 East Sixty-seventh street.

HENRY D. PURROY, President; CARL JUSSEN, Secretary.

Bureau of Chief of Department.

HUGH BONNER, Chief of Department.

Bureau of Inspector of Combustibles.

PETER SEERY, Inspector of Combustibles.

Bureau of Fire Marshal.

JAMES MITCHELL, Fire Marshal.

Bureau of Inspection of Buildings.

THOMAS J. BRADY, Superintendent of Buildings.

Attorney to Department.

WM. L. FINDLEY.

Fire Alarm Telegraph.

J. ELLIOT SMITH, Superintendent.
Central Office open at all hours.

Repair Shops.

Nos. 128 and 130 West Third street.

JOHN CASTLES, Foreman-in-Charge, 8 A. M. to 5 P. M.

Hospital Stables.

Ninety-ninth street, between Ninth and Tenth avenues.

JOSEPH SHEA, Foreman-in-Charge.
Open at all hours.

DEPARTMENT OF DOCKS

Battery, Pier A, North river.

EDWIN A. POST, President; AUGUSTUS T. DOCHARTY, Secretary.

Office hours, from 9 A. M. to 4 P. M.

DEPARTMENT OF TAXES AND ASSESSMENTS.

Staats Zeitung Building, Tryon Row, 9 A. M. to 4 P. M. Saturdays, 12 M.

MICHAEL COLEMAN, President; FLOYD T. SMITH, Secretary.

DEPARTMENT OF STREET CLEANING.

Stewart Building. Office hours, 9 A. M. to 4 P. M.

HANS S. BEATTIE, Commissioner; WILLIAM DALTON, Deputy Commissioner; GILBERT O. F. NICOLL, Chief Clerk.

CIVIL SERVICE SUPERVISORY AND EXAMINING BOARDS.

Cooper Union, 9 A. M. to 4 P. M.

JAMES THOMSON, Chairman of the Supervisory Board
LEE PHILLIPS, Secretary and Executive Officer.

BOARD OF ESTIMATE AND APPORTIONMENT

Office of Clerk, Staats Zeitung Building, Room 5.

The Mayor, Chairman; CHARLES V. ADEE, Clerk.

BOARD OF ASSESSORS.

Office, 27 Chambers street, 9 A. M. to 4 P. M.

EDWARD GILON, Chairman; WM. H. JASPER, Secretary

BOARD OF EXCISE.

No. 54 Bond street, 9 A. M. to 4 P. M.

ALEXANDER MEAKIN, President; JAMES F. BISHOP, Secretary and Chief Clerk.

SHERIFF'S OFFICE.

Nos. 6 and 7 New County Court-house, 9 A. M. to 4 P. M.

JOHN J. GORMAN, Sheriff; JOHN B. SEXTON, Under Sheriff.

DEPARTMENT OF PUBLIC WORKS**DEPARTMENT OF PUBLIC WORKS,****BUREAU OF WATER REGISTER,**

No. 31 CHAMBERS STREET, ROOM 2,

NEW YORK, May 1, 1891.

CROTON WATER RATES.

NOTICE IS HEREBY GIVEN THAT THE annual Water Rates for 1891 are now due and payable at this office.

THOMAS F. GILROY,

Commissioner of Public Works.

DEPARTMENT OF PUBLIC WORKS,**COMMISSIONER'S OFFICE,**

ROOM 6, NO. 31 CHAMBERS STREET,

NEW YORK, April 27, 1891.

TO CONTRACTORS.

BIDS OR ESTIMATES, INCLOSED IN A sealed envelope, with the title of the work and the name of the bidder indorsed thereon, also the number of the work as in the advertisement, will be received at this office until 12 o'clock M. on Monday, May 11, 1891, at which place and hour they will be publicly opened by the head of the Department.

No. 1. FOR SEWER IN SEVENTY-FIRST STREET, between Boulevard (Sherman Square) and Summit west.

No. 2. FOR ALTERATION AND IMPROVEMENT TO SEWER IN ESSEX STREET, between Delancey and Broome streets.

No. 3. FOR SEWERS IN SOUTH STREET, between Market Slip and Montgomery street, connecting with outlet built by Department of Docks through Pier, new 30, East river, WITH CURVE IN CLINTON STREET, AND ALTERATION AND IMPROVEMENT TO EXISTING SEWERS IN PIKE SLIP AND RUTGERS SLIP.

No. 4. FOR SEWER IN FIRST AVENUE, between Ninetieth and Ninety-first streets.

No. 5. FOR FURNISHING AND DELIVERING TO THE DEPARTMENT OF PUBLIC WORKS ABOUT TWENTY-FIVE HUNDRED (2,500) CUBIC YARDS OF BROKEN STONE OF TRAP-ROCK; ALSO, ABOUT TWELVE HUNDRED (1,200) CUBIC YARDS OF SCREENINGS OF TRAP-ROCK.

Each estimate must contain the name and place of residence of the person making the same, the names of all persons interested with him therein, and if no other person be so interested, it shall distinctly state that fact. That it is made without any connection with any other person making an estimate for the same work, and is in all respects fair and without collusion or fraud. That no member of the Common Council, head of a department, chief of a bureau, deputy thereof, or clerk therein, or other officer of the Corporation is directly or indirectly interested in the estimate, or in the work to which it relates or in the profits thereof.

Each estimate must be verified by the oath, in writing, of the party making the same, and must be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, to the effect that if the contract is awarded to the person making the estimate, they will, upon its being so awarded, become bound as his sureties for its faithful performance; and that if he shall refuse or neglect to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled upon its completion and that which the Corporation may be obliged to pay to the person to whom the contract shall be awarded at any subsequent letting; the amount to be calculated upon the estimated amount of the work by which the bids are tested.

The consent last above mentioned must be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of the contract, over and above his liabilities as bail, surety, or otherwise, and that he has offered himself as surety in good faith, with the intention to execute the bond required by law.

No estimate will be considered unless accompanied by either a certified check upon one of the State or National banks of the City of New York, drawn to the order of the Comptroller, or money, to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or

money must not be inclosed in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of the deposit will be returned to him.

THE COMMISSIONER OF PUBLIC WORKS RESERVES THE RIGHT TO REJECT ALL BIDS RECEIVED FOR ANY PARTICULAR WORK IF HE DEEMS IT FOR THE BEST INTERESTS OF THE CITY.

Blank forms of bid or estimate, the proper envelopes in which to inclose the same, the specifications and agreements, and any further information desired, can be obtained at Rooms 9 and 12, No. 31 Chambers street.

THOS. F. GILROY,
Commissioner of Public Works.

DEPARTMENT OF PUBLIC WORKS,
COMMISSIONER'S OFFICE, NO. 31 CHAMBERS STREET,
NEW YORK, April 21, 1891.

NOTICE OF SALE AT PUBLIC AUCTION.

ON MONDAY, MAY 4, 1891, at 11.30 A. M., the Department of Public Works will sell at public auction, on the premises, by Messrs. Van Tassall & Kearney, auctioneers, as follows, viz.:

At the Corporation Yards, One Hundred and Nineteenth street and St. Nicholas avenue, foot of East Sixteenth street, foot of Rivington street, East river, and foot of East Forty-first street, the following—sale to commence at the One Hundred and Nineteenth street Yard:

Wagons, trucks, carts, stands, booths, boot-black stands, quantity of old lumber, telegraph poles, wire, quantity of old scrap-iron, etc.

At the west-side of Harlem river, between One Hundred and Thirty-eighth and One Hundred and Thirty-ninth streets:

About 200,000 old Belgian paving blocks.

TERMS OF SALE.

Cash payments in bankable funds at the time and place of sale, and the removal within ten days by the purchaser of the articles, etc., purchased, otherwise purchaser will forfeit the same, together with all moneys paid therefor.

THOS. F. GILROY,

Commissioner of Public Works.

POLICE DEPARTMENT.**PROPERTY CLERK'S OFFICE,**

POLICE DEPARTMENT OF THE CITY OF NEW YORK,
ROOM 9, NO. 300 MULBERRY STREET,

NEW YORK, April 10, 1891.

EIGHTEENTH AUCTION SALE, ON THURSDAY, MAY 7, 1891, at Police Headquarters, at 11 A. M., by Van Tassall & Kearney, Auctioneers, of Police, Cartage and Unclaimed Property, consisting of Watches, Jewelry and Silverware, Male and Female Clothing, Shoes, etc., Revolvers, Pistols, Guns, Knives, Pocket-books, Umbrellas, Cans, Canned Goods, Iron, Lead, Brass, Copper, Glass, Wardrobes, Bedsteads, Carpet, Furniture, Harness, Chairs, and a lot of miscellaneous articles.

For particulars see catalogues on day of sale.

JOHN F. HARRIOT,

Property Clerk.

POLICE DEPARTMENT—CITY OF NEW YORK,
OFFICE OF THE PROPERTY CLERK (Room No. 9),
NO. 300 MULBERRY STREET,
NEW YORK, April 10, 1891.

OWNERS WANTED BY THE PROPERTY Clerk of the Police Department of the City of New York, No. 300 Mulberry street, Room No. 9, for the following property, now in his custody, without claimants: Boats, rope, iron, lead, male and female clothing, boots, shoes, wine, blankets, diamonds, canned goods, liquors, etc., also small amount money taken from prisoners and found by patrolmen of this Department.

JOHN F. HARRIOT,

Property Clerk.

BOARD OF EDUCATION.

Sealed proposals will be received by the Board of School Trustees for the Nineteenth Ward, at the Hall of the Board of Education, No. 146 Grand street, until 4 o'clock P. M. on Tuesday, May 12, 1891, for New Wings and Alterations to Grammar School Building No. 18.

RICHARD KELLY, Chairman,

LOUIS M. HORNTHAL, Secretary.

Board of School Trustees, Nineteenth Ward.
NEW YORK, April 29, 1891.

Plans and specifications may be seen, and blank proposals obtained, at the office of the Superintendent of School Buildings, No. 146 Grand street, third floor.

The Trustees reserve the right to reject any or all of the proposals submitted.

The party submitting a proposal, and the parties proposing to become sureties, must each write his name and place of residence on said proposal.

Two responsible and approved sureties, residents of this city, are required in all cases.

No proposal will be considered from persons whose character and antecedent dealings with the Board of Education render their responsibility doubtful.

Dated NEW YORK, April 14, 1891.

COMMISSIONER OF STREET IMPROVEMENTS OF THE TWENTY-THIRD AND TWENTY-FOURTH WARDS.**OFFICE OF**

COMMISSIONER OF STREET IMPROVEMENTS
OF THE TWENTY-THIRD AND TWENTY-FOURTH WARDS,
NEW YORK, April 27, 1891.

TO CONTRACTORS.

SEALED BIDS OR ESTIMATES FOR EACH OF the following mentioned works, with the title of the work and the name of the bidder indorsed thereon, also the number of the work as in the advertisement, will be received by the Commissioner of Street Improvements of the Twenty-third and Twenty-fourth Wards, at his office, No. 262 Third avenue, corner of One Hundred and Forty-first street, until 3 o'clock P. M., on Tuesday, May 12, 1891.

No. 1. FOR REGULATING AND PAVING WITH TRAP-BLOCK PAVEMENT THE ROADWAY OF ONE HUNDRED AND FORTY-NINTH STREET, between Third avenue and Morris avenue, and for REAJUSTING THE CURB-STONES, SIDEWALKS AND CROSSLAWS.

No. 2. FOR REGULATING AND PAVING WITH TRAP-BLOCK PAVEMENT ONE HUNDRED AND FIFTY-THIRD STREET, between Third and Courtland avenues, and for REAJUSTING CURB-STONES AND CROSSLAWS, ETC., AND LAYING CROSSLAWS, WALKS, AND NOT ALREADY LAID.

No. 3. FOR REGULATING AND PAVING WITH GRANITE-BLOCK PAVEMENT THE ROADWAY OF ONE HUNDRED AND FORTY-NINTH STREET, from the westerly crosswalk of Robbins avenue to the westerly crosswalk of the Southern Boulevard, AND LAYING CROSSLAWS WHERE NOT ALREADY LAID.

No. 4. FOR CONSTRUCTING SEWER AND APPURTENANCES IN ONE HUNDRED AND FORTY-FIFTH STREET AND THIRD AVENUE, between existing sewers in One Hundred and Forty-seventh street and One Hundred and Forty-sixth street.

No. 5. FOR SETTING CURB-STONES, FLAGGING THE SIDEWALKS AND LAYING CROSSLAWS ON WESTCHESTER AVENUE, from Prospect avenue to the Southern Boulevard.

Special notice is given that the works must be bid for separately; that is, more than one work must not be included in the same estimate or envelope.

NUMBER 1, ABOVE-MENTIONED.

4,575 square yards of new trap-block pavement.
The time allowed for the completion of the work will be NINETY CONSECUTIVE WORKING DAYS.

NUMBER 2, ABOVE-MENTIONED.

2,760 square yards of new trap-block pavement.
The time allowed for the completion of the whole work will be FORTY CONSECUTIVE WORKING DAYS.

NUMBER 3, ABOVE-MENTIONED.

6,100 square yards of new granite-block pavement.
The time allowed for the completion of the whole work will be SEVENTY-FIVE CONSECUTIVE WORKING DAYS.

NUMBER 4, ABOVE-MENTIONED.

75 linear feet of fifteen-inch pipe sewer, including concrete foundation and cradle, and exclusive of spurs for house connections.

400 linear feet of twelve-inch pipe sewer, including concrete foundation and cradle, and exclusive of spurs for house connections.

45 spurs for house connections, over and above the cost per foot of sewer.

7 manholes complete.

25 receiving-basins complete.

25 cubic yards of rock to be excavated and removed.

5 cubic yards of concrete in place, exclusive of concrete cradle for pipe sewer.

1,000 feet B. M. of lumber furnished and laid.
The time allowed for the completion of the whole work will be FIFTY CONSECUTIVE WORKING DAYS.

NO. 5 ABOVE-MENTIONED.

wise; and that he has offered himself as surety in good faith and with the intention to execute the bond required by law. The adequacy and sufficiency of the security offered will be subject to approval by the Comptroller of the City of New York, after the award is made and prior to the signing of the contract.

No estimate will be received or considered unless accompanied by either a certified check upon one of the State or National banks of the City of New York, drawn to the order of the Comptroller, or money, to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be inclosed in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same, within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Bidders are informed that no deviation from the specifications will be allowed, unless under the written instructions of the Engineer-in-Chief.

No estimate will be accepted from or contract awarded to, any person who is in arrears to the Corporation, upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

THE RIGHT TO DECLINE ALL THE ESTIMATES IS RESERVED IF DEEMED FOR THE INTEREST OF THE CORPORATION OF THE CITY OF NEW YORK.

Bidders are requested, in making their bids or estimates, to use the blank prepared for that purpose by the Department, a copy of which, together with the form of agreement, including specifications, and showing the manner of payment for the work, can be obtained upon application therefor at the office of the Department.

EDWIN A. POST,
JAMES MATTHEWS,
J. SERGEANT CRAM,
Commissioners of the Department of Docks.
Dated NEW YORK, May 22, 1891.

FINANCE DEPARTMENT.

CITY OF NEW YORK,
FINANCE DEPARTMENT,
COMPTROLLER'S OFFICE,
May 1, 1891.

NOTICE TO PROPERTY-OWNERS.

IN PURSUANCE OF SECTION 997 OF THE "New York City Consolidation Act of 1882," the Comptroller of the City of New York hereby gives public notice to all persons, owners of property, affected by the assessment list in the matter of acquiring title to Dyckman street, between Kingsbridge road and Exterior street, Harlem river, which was confirmed by the Supreme Court April 22, 1891, and entered on the 30th day of April, 1891, in the Record of Titles of Assessments, kept in the "Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents," that unless the amount assessed for benefit on any person or property shall be paid within sixty days after the date of said entry of the assessment, interest will be collected thereon, as provided in section 998 of "New York City Consolidation Act of 1882."

Section 998 of the said act provides that, "If any such assessment shall remain unpaid for the period of sixty days after the date of entry thereof in the said Record of Titles of Assessments, it shall be the duty of the officer authorized to collect and receive the amount of such assessment, to charge, collect and receive interest thereon at the rate of seven per centum per annum, to be calculated from the date of such entry to the date of payment."

The above assessment is payable to the Collector of Assessments and Clerk of Arrears, at the "Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents," Room 31, Stewart Building, between the hours of 9 A. M. and 2 P. M., and all payments made thereon on or before June 29, 1891, will be exempt from interest as above provided, and after that date will be subject to a charge of interest at the rate of seven per cent. per annum from the date of entry in the Record of Titles of Assessments in said Bureau to the date of payment.

THEO. W. MYERS,
Comptroller.

CITY OF NEW YORK,
FINANCE DEPARTMENT,
COMPTROLLER'S OFFICE,
April 28, 1891.

NOTICE TO PROPERTY-OWNERS.

IN PURSUANCE OF SECTION 997 OF THE "New York City Consolidation Act of 1882," the Comptroller of the City of New York hereby gives public notice to all persons, owners of property, affected by the assessment list in the matter of acquiring title to Kelly street, from Westchester avenue to Wales avenue, which was confirmed by the Supreme Court April 22, 1891, and entered on the 25th day of April, 1891, in the Record of Titles of Assessments kept in the "Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents," that unless the amount assessed for benefit on any person or property shall be paid within sixty days after the date of said entry of the assessment, interest will be collected thereon, as provided in section 998 of said "New York City Consolidation Act of 1882."

Section 998 of the said act provides that, "If any such assessment shall remain unpaid for the period of sixty days after the date of entry thereof in the said Record of Titles of Assessments, it shall be the duty of the officer authorized to collect and receive the amount of such assessment, to charge, collect and receive interest thereon at the rate of seven per centum per annum, to be calculated from the date of such entry to the date of payment."

The above assessment is payable to the Collector of Assessments and Clerk of Arrears at the "Bureau for the Collection of Assessments and Arrears of Taxes and Assessments and of Water Rents," Room 31, Stewart Building, between the hours of 9 A. M. and 2 P. M., and all payments made thereon on or before June 24, 1891, will be exempt from interest as above provided, and after that date will be subject to a charge of interest at the rate of seven per cent. per annum from the date of entry in the Record of Titles of Assessments in said Bureau to the date of payment.

THEO. W. MYERS,
Comptroller.

CORPORATION SALE OF REAL ESTATE.

PUBLIC NOTICE IS HEREBY GIVEN THAT the Commissioners of the Sinking Fund of the City of New York, by virtue of the powers vested in them by law, will offer for sale at public auction, on Monday, the first day of June, 1891, at noon, at the Comptroller's office, Room 14, Stewart Building, No. 280 Broadway, a certain unimproved lot of land belonging to the Corporation of the City of New York, to wit:

CITY OF YONKERS, WESTCHESTER COUNTY, NEW YORK.

(On the line of the New Croton Aqueduct.)

All that certain piece or parcel of land, situate, lying and being in the City of Yonkers, Westchester County,

N. Y., and designated by a certain map and known as Parcel No. 258, adopted by the Aqueduct Commissioners on August 27, 1884, pursuant to section No. 4 of chapter 490 of the Laws of 1883, which map was filed in the office of the Register of the County of Westchester, State of New York, at the Village of White Plains, on August 28, 1884, pursuant to section No. 5 of said act. Said parcel being described as follows:

Beginning at a point in the northerly boundary of Parcel No. 314, as shown on said filed map, which point is the most easterly corner of a parcel of land which is reserved for the maintenance of Shaft 17 and is distant 100 feet southeasterly from the centre line of the New Croton Aqueduct; thence north 35° 30' west and crossing said centre line 211 feet; thence northeasterly 162 feet along the southeasterly side of Parcel No. 313, as shown on said filed map, the lands formerly of Sarah C. Baxter; thence northwesterly 108 feet along the easterly side of said Parcel 313; thence southwesterly 212 feet along the northwesterly side of said Parcel 313 to the easterly right-of-way line of the New York City and Northern Railroad; thence north 10° 52' west along said easterly right-of-way line 660 feet; thence south 70° 30' east at right angles to said centre line and crossing the same at Station 154, a distance of 533 feet to a point which is distant 33 feet southeasterly at right angles from said centre line; thence south 19° 30' west parallel to said centre line and distant 33 feet southeasterly at right angles therefrom 250 feet; thence south 70° 30' east at right angles to said centre line 67 feet; thence south 19° 30' west parallel to said centre line and distant 100 feet southeasterly at right angles therefrom 497 feet to the point or place of beginning, containing five acres and $\frac{3}{1000}$ of an acre; excepting, however, therefrom, a permanent easement for the maintenance of an aqueduct underneath the surface, a strip of land 66 feet in width—33 feet on either side of the aforesaid centre line—as shown on said filed map.

TERMS OF SALE.

The auctioneer's fees and ten per cent. of the purchase money to be paid at the time and place of sale, and the balance in cash on delivery of a warrant deed of the property, within thirty days thereafter, from the Mayor, Aldermen and Commonalty of the City of New York.

The right to reject any bid is reserved.

By order of the Commissioners of the Sinking Fund, under a resolution adopted April 14, 1891.

THEO. W. MYERS,
Comptroller.

CITY OF NEW YORK—FINANCE DEPARTMENT,
COMPTROLLER'S OFFICE,
April 27, 1891.

SALE AT PUBLIC AUCTION OF THE RIGHT, TITLE AND INTEREST OF THE CITY OF NEW YORK IN AND TO CERTAIN LAND IN THE TWELFTH WARD.

ALL THE RIGHT, TITLE AND INTEREST of the Corporation of the City of New York in and to a certain parcel of land in the Twelfth Ward, in said city, will be sold at public auction to the highest bidder, at the office of the Comptroller, Room No. 14, Stewart Building, No. 280 Broadway, at noon, on Thursday, the twenty-eighth day of May, 1891, under a resolution of the Commissioners of the Sinking Fund, adopted April 14, 1891, as follows, to wit:

Resolved, That the Comptroller be and he is hereby authorized and directed to sell for cash at public auction to the highest bidder, all the right, title, and interest, of the Corporation of the City of New York, in and to a certain tract or parcel of land in the City and County of New York, bounded and described as follows: All that certain plot, piece, or parcel of land situate, lying, and being in the City, County and State of New York, bounded and described as follows, to wit: Beginning at a point in the northerly line of Ninety-fourth street, distant two hundred and eighty-five feet and six inches westerly from the corner formed by the intersection of the northerly line of Ninety-fourth street with the westerly line of Second avenue; running thence northerly, parallel with Second avenue, one hundred feet eight and one-half inches; thence westerly, parallel with Ninety-fourth street, thirty-nine feet and six inches; thence southerly, and again parallel with Second avenue, one hundred feet eight and one-half inches, to the northerly line of Ninety-fourth street; and thence easterly, along the northerly line of Ninety-fourth street, thirty-nine feet and six inches, to the point or place of beginning, as shown upon a diagram of said parcel of land; and the value of the City's interest is hereby appraised at two hundred and fifty dollars (\$250), and the upset price fixed at that sum, the condition of the sale being that the purchaser shall pay the auctioneer's fee, and if the said Sarah B. Brainerd shall become the purchaser, she shall also pay the sum of one hundred dollars (\$100) to cover all the expenses of said sale; provided that nothing in the sale and conveyance of said premises shall be taken or construed as in any way releasing or affecting any claim or right of the Mayor, Aldermen and Commonalty of the City of New York, to collect and recover any and all taxes, assessments and water-rents, heretofore levied, imposed or assessed, upon said premises and now remaining unpaid, or any part thereof, as fully in all respects as if the said sale and conveyance had never been made; nor shall said sale and conveyance be taken, or construed, to be a release of any right, title, interest or lien in or upon the said premises existing in favor of the said Mayor, etc., by reason of any sale for the non-payment of taxes, assessments or Croton-water rents, at any time heretofore had or made.

Terms—Cash at time of sale.

THEO. W. MYERS,
Comptroller.

CITY OF NEW YORK—FINANCE DEPARTMENT,
COMPTROLLER'S OFFICE, April 23, 1891.

SALE OF FERRY LEASE.

THE LEASE OF THE FRANCHISE OF THE FERRY from Twenty-third street, East river, to Greenpoint, Long Island, will be sold by the Comptroller, by order of the Commissioners of the Sinking Fund, under a resolution adopted April 14, 1891, along with the wharf property belonging to the Corporation of the City of New York, used for ferry purposes, at public auction to the highest bidder, at the Comptroller's office, Room 14, Stewart Building, No. 280 Broadway, at 12 o'clock noon, on Wednesday, the sixth day of May, 1891, under a lease for a term of five years, commencing May 1, 1891.

The resolution of the Commissioners of the Sinking Fund, authorizing the sale of the ferry, is as follows: Resolved, That the Comptroller be and hereby is authorized to take measures to advertise and sell at public auction, to the highest bidder, as provided by law, the lease of the franchise of the ferry from Twenty-third street, East river, to Greenpoint, City of Brooklyn, the term of which will expire on June 1, 1891, for a new term of five years from that date, together with the wharf property belonging to the Corporation of the City of New York which is used and required for ferry purposes. The minimum yearly rental or upset price of the franchise is appraised and fixed at five per centum of the gross receipts of the ferry, which shall not be less than \$10,000 per annum, and also \$10,000 per annum for the said wharf property, payable quarterly and for a term of five years from June 1, 1891.

TERMS AND CONDITIONS OF SALE.

The highest bidder for the ferry will be required to pay the auctioneer's fee and to deposit with the Comptroller, at the time of sale, a sum equal to twenty-five per cent. of the amount of the yearly rental bid, which shall be credited on the rent of the first quarter, or be forfeited to the City if the lease shall not be executed by the purchaser when notified and required by the Comptroller, and he shall execute an obligation to that effect at the time of sale.

The lessee of the ferry will be required to give a bond in double the amount of the yearly rental, with two sufficient sureties, approved by the Comptroller, and conditioned for the faithful performance of the terms and conditions of the lease, which will be such as are required by law and the ordinances of the Common Council relating to ferries, and are usually contained in ferry leases, which shall be approved by the Counsel to the Corporation.

The lease shall contain a covenant providing for the purchase, at a fair appraised valuation, of the boats, buildings and other property belonging to the lessees, used in and actually necessary for the operation of the ferry upon the termination of the lease and the surrender and yielding up of the premises by the lessee, if the lessee shall not become the purchaser of the franchise for another term, which appraisal shall be made in the usual way before advertising a lease for a new term of the franchise, at least four months prior to the termination of the lease.

The rates for ferrage shall not exceed those heretofore charged at the ferry.

The form of lease which the purchaser will be required to execute can be seen at the office of the Comptroller.

The right to reject any bid is reserved, if deemed by the Comptroller to be for the interest of the City.

THEO. W. MYERS,
Comptroller.

CITY OF NEW YORK—FINANCE DEPARTMENT,
COMPTROLLER'S OFFICE, April 23, 1891.

CORPORATION SALE OF PUBLIC SCHOOL PROPERTY.

ELEVENTH WARD.

THE COMMISSIONERS OF THE SINKING Fund of the City of New York will offer for sale at public auction on Wednesday, the twenty-seventh day of May, 1891, at noon, at the Real Estate Exchange and Auction Rooms (Limited), Nos. 59 to 65 Liberty street, the lot, piece, or parcel of ground situated on the easterly side of Cannon street, 50 feet south of Stanton street, 25 feet front and rear by 100 feet deep, known as Ward No. 684, in the Eleventh Ward of the City of New York, with the building thereon known as Primary School No. 3; the said premises being sold pursuant to the provisions of chapter 89 of the Laws of 1881, which provide for the sale of any land or lands and the buildings thereon owned by the Mayor, Aldermen and Commonalty of said city, occupied or reserved for school purposes, and no longer required therefor, the money received in payment to be appropriated to the Board of Education for the purpose of purchasing other property, or erecting school buildings for new schools, and as provided by section 186 of the New York City Consolidation Act of 1882.

TERMS OF SALE.

The auctioneer's fees and ten per cent. of the purchase money to be paid at the time and place of sale, and the balance in cash on delivery of a warrant deed of the property, within thirty days thereafter, from the Mayor, Aldermen and Commonalty of the City of New York.

The right to reject any bid is reserved.

By order of the Commissioners of the Sinking Fund under a resolution adopted April 9, 1891.

THEO. W. MYERS,
Comptroller.

CITY OF NEW YORK, FINANCE DEPARTMENT,
COMPTROLLER'S OFFICE, April 22, 1891.

CORPORATION SALE OF REAL ESTATE.

PUBLIC NOTICE IS HEREBY GIVEN THAT the Commissioners of the Sinking Fund of the City of New York, by virtue of the powers vested in them by law, will offer for sale at public auction, on Wednesday, the 27th day of May, 1891, at noon, at the Real Estate Exchange and Auction Rooms (Limited), Nos. 59 to 65 Liberty street, certain unimproved lots of land belonging to the Corporation of the City of New York, to wit:

TWELFTH WARD.

(On the line of the Old Croton Water Aqueduct.)
Two lots, south side One Hundred and First street; Block No. 1027; Ward Nos. 37, 35; each 25 feet front and 100 feet 11 inches deep.

Two lots, north side One Hundred and First street; Block No. 1028; Ward Nos. 27, 28; each 25 feet front and 100 feet 11 inches deep.

Two lots, north side One Hundred and Second street; Block No. 1029; Ward Nos. 27, 28; each 25 feet front and 100 feet 11 inches deep.

NINETEENTH WARD.

Four lots, northwest corner Eighty-first street and Park avenue; Block No. 466; 100 feet by 104 feet 4 inches.

TWENTY-FOURTH WARD.

One vacant lot on the west side of Third avenue (formerly Fordham avenue), 187.38 feet south of One Hundred and Seventy-sixth street, 27 by 103.5 feet; Ward No. 45, on Block 1150.

TERMS AND CONDITIONS OF SALE.

The highest bidders will be required to pay ten (10) per cent. of the purchase money and the auctioneer's fee on each lot immediately after the sale; thirty (30) per cent. upon the delivery of the deed, within thirty days from the date of the sale; and the balance, sixty (60) per cent. of the purchase money, or any portion thereof, may remain at the option of the purchaser on bond and mortgage for five years, with interest at the rate of six per centum per annum, payable semi-annually, the mortgages to contain the customary thirty days' interest and ninety days' tax clauses.

The bond and mortgage may be paid off at any time within the term thereof on giving thirty days' notice to the Comptroller, or it may be paid by installments of not less than five hundred dollars on any day when the interest is due, or on thirty days' notice. The bonds and mortgages will be prepared by the Counsel to the Corporation, and the sum of twelve dollars and fifty cents will be charged for drawing, acknowledging and recording each separate mortgage. If more than one lot of land is included in any mortgage, the whole mortgage must be paid off before any release can be given by the Corporation, as a release of any part of the premises included in a mortgage to the Corporation is forbidden by law.

The Comptroller may, at his option, resell any lot which may be struck off to the highest bidder who may fail to comply with the terms of sale, and the party who may fail to comply therewith will be held liable for any deficiency that may result from any such resale.

The right to reject any bid is reserved.

Lithographic maps of said real estate may be had at the Comptroller's office, Stewart Building, No. 280 Broadway, after May 1, 1891.

By order of the Commissioners of the Sinking Fund, under a resolution adopted at a meeting of the Board held March 31, 1891.

THEO. W. MYERS,
Comptroller.

CITY OF NEW YORK—FINANCE DEPARTMENT,
COMPTROLLER'S OFFICE, April 22, 1891.

NOTICE OF POSTPONEMENT OF SALE FOR UNPAID ASSESSMENTS.

WHEREAS, SECTION 928 OF THE NEW York City Consolidation Act of 1882 authorizes the Comptroller, in his discretion, to postpone any sale for unpaid taxes or assessments; and

Whereas, Many persons desire, and have applied for, a postponement of the sale for unpaid assessments advertised to be held on Monday, March 2, 1891; now, therefore, in order to afford all such persons the opportunity to pay the assessments on their property so advertised to be sold and thereby avoid the additional expense of redemption of the property, it is sold, the said

sale is hereby ordered to be postponed until Monday, the first day of June, 1891, to be held at the same time and place, to wit: at the Court-house, City Hall Park, at 12 o'clock noon.

THEO. W. MYERS,
Comptroller.

CITY OF NEW YORK—FINANCE DEPARTMENT,
COMPTROLLER'S OFFICE, March 2, 1891.

REAL ESTATE RECORDS.

THE ATTENTION OF LAWYERS, REAL Estate Owners, Monetary Institutions engaged in making loans upon real estate, and all who are interested in providing themselves with facilities for reducing the cost of examinations and searches, is invited to these Official Indices of Records, containing all recorded transfers of real estate in the City of New York from 1853 to 1887, prepared under the direction of the Commissioners of Records.

Grantors, grantees, suits in equity, insolvents' and Sheriff's sales in 61 volumes, full bound, price \$100 00
The same in 25 volumes, half bound 50 00
Complete sets, folded, ready for binding 15 00
Records of Judgments, 25 volumes, bound 10 00
Orders should be addressed to "Mr. Stephen Angell Room 23, Stewart Building."

THEODORE W. MYERS,
Comptroller.

NEW AQUEDUCT.

NEW YORK SECTION.

NOTICE OF APPLICATION FOR THE CONFIRMATION of the report of the Commissioners of Appraisal, New York Section, dated November 28, 1890, as to Parcels A, B, C, D and E, on a certain map entitled "Map No. 1, Department of Public Works, property map for the construction of a blow-off at Shaft number twenty-four on Section 'A' of the New Croton Aqueduct in the Twenty-fourth Ward of the City of New York. Note.—Parcels A, B, C, D and E (colored pink) are to be taken in fee. On Parcels C and D said fee is taken subject to a perpetual right of way for railroad purposes; scale, 50 feet equal to one inch. February, 1889," which map was duly filed in the office of the Register of the City and County of New York on the 22d day of October, 1889, and real estate contiguous thereto.

Public notice is hereby given that it is my intention to make application to the Supreme Court of the State of New York, at a Special Term of said Court, to be held in the Second Judicial District, at the Court-house in White Plains, on Saturday, the 23d day of May, 1891, at half past ten o'clock, forenoon, or as soon thereafter as counsel can be heard, to confirm as to said Parcels A, B, C, D and E, and real estate contiguous thereto, the report of the Commissioners of Appraisal, appointed in the above matter, pursuant to the provisions of chapter 490 of the Laws of 1883, and of chapter 126 of the Laws of 1887, by an order bearing date the 4th day of January, 1890, which report was duly filed in the office of the Clerk of the County of Westchester, on the 2d day of December, 1890, and a copy of which was duly filed in the office of the Clerk of the City and County of New York, on said 2d day of December, 1890.

Dated NEW YORK, April 24, 1891.
WILLIAM H. CLARK,
Counsel to the Corporation,
No. 2 Tryon Row, New York City.

WESTCHESTER COUNTY SECTION.

ADDITIONAL LANDS, SHAFTS 8 AND 15½.

SUPREME COURT, SECOND JUDICIAL DISTRICT.

In the matter of the petition of John Newton, Commissioner of Public Works of the City of New York, under and in pursuance of chapter 490 of the Laws of 1883, and on behalf of the Mayor, Aldermen and Commonalty of the City of New York, for the appointment of Commissioners of Appraisal under chapter 490 of the Laws of 1883.

TO ALL PERSONS INTERESTED IN THIS proceeding, notice is hereby given that the fourth separate report of the Commissioners of Appraisal appointed herein on February 26, 1887, which report was filed on March 25, 1891, in the office of the Clerk of Westchester County, at the Court-house in the Village of White Plains, in said county, will be presented for confirmation to the Supreme Court, at a Special Term thereof, to be held in the Second Judicial District, at the Court-house, in the City of Poughkeepsie, Dutchess County, on May 9, 1891, at 11 o'clock in the forenoon.

Dated NEW YORK, April 9, 1891.
WILLIAM H. CLARK,
Counsel to the Corporation,
No. 2 Tryon Row, New York City.

WESTCHESTER COUNTY SECTION.

SUPREME COURT, SECOND JUDICIAL DISTRICT.

In the matter of the petition of Hubert O. Thompson, Commissioner of Public Works of the City of New York, under and in pursuance of chapter 490 of the Laws of 1883, and on behalf of the Mayor, Aldermen and Commonalty of the City of New York, for the appointment of Commissioners of Appraisal, under chapter 490 of the Laws of 1883.

TO ALL PERSONS INTERESTED IN THIS proceeding, notice is hereby given that the fifth separate report of the above-mentioned Commissioners of Appraisal appointed herein, on October 11, 1884, which report was filed on March 28, 1891, in the office of the Clerk of Westchester County, at the Court-house, in the Village of White Plains, in said county, will be presented for confirmation to the Supreme Court, at a Special Term thereof to be held in the Second Judicial District at the Court-house in Poughkeepsie, Dutchess County, on May 9, 1891, at 11 o'clock in the forenoon.

Dated NEW YORK, April 9, 1891.
WILLIAM H. CLARK,
Counsel to the Corporation,
No. 2 Tryon Row, New York City.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,
No. 66 THIRD AVENUE.

TO CONTRACTORS.

PROPOSALS FOR DRY GOODS.

SEALED BIDS OR ESTIMATES FOR FURNISHING

DRY GOODS.

17,000 yards Satinet, "Springbrook."
21,000 yards Cassimere, "Berkeley."
16,000 yards Cottonade.
—will be received at the office of the Department of Public Charities and Correction, in the City of New York, until 10 o'clock A. M. of Monday, May 4, 1891. The person or persons making any bid or estimate shall furnish the same in a sealed envelope, indorsed "Bid or Estimate for Dry Goods," with his or their name or names, and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the bids or estimates received will be publicly opened by the President of said Department and read.

THE BOARD OF PUBLIC CHARITIES AND CORRECTION RESERVES THE RIGHT TO REJECT ALL BIDS OR ESTIMATES IF DEEMED TO BE FOR THE PUBLIC INTEREST, AS PROVIDED IN SECTION 64, CHAPTER 410, LAWS OF 1882.

No bid or estimate will be accepted from, or contract awarded to, any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Delivery will be required to be made from time to time, and in such quantities as may be directed by the said Commissioners.

Any bidder for this contract must be known to be engaged in and well prepared for the business, and must have satisfactory testimonials to that effect; and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract by his or their bond, with two sufficient sureties, in the penal amount of fifty (50) per cent of the ESTIMATED amount of the contract.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same; the names of all persons interested with him or them therein; and if no other person be so interested, it shall distinctly state that fact; also that it is made without any connection with any other person making an estimate for the same purpose, and is in all respects fair and without collusion or fraud; and that no member of the Common Council, head of a department, chief of a bureau, deputy thereof, or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein or in the supplies or work to which it relates, or in any portion of the profits thereof. The bid or estimate must be verified by the oath, in writing, of the party or parties making the estimate, that the several matters stated therein are in all respects true. Where more than one person is interested, it is requisite that the VERIFICATION be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled on its completion and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting; the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract, over and above all his debts of every nature, and over and above his liabilities as bail, surety or otherwise; and that he has offered himself as a surety in good faith and with the intention to execute the bond required by section 12 of chapter 7 of the Revised Ordinances of the City of New York, if the contract shall be awarded to the person or persons for whom he consents to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either a certified check upon one of the State or National banks of the City of New York, drawn to the order of the Comptroller, or money to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be inclosed in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York, as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to his or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security he or they shall be considered as having abandoned it, and as in default to the Corporation, and the contract will be readvertised and relet, as provided by law.

The quality of the articles, supplies, goods, wares and merchandise must conform in every respect to the samples of the same on exhibition at the office of the said Department. Bidders are cautioned to examine the specifications for particulars of the articles, etc., required, before making their estimate.

Bidders will state the price for each article, by which the bids will be tested.

Bidders will write out the amount of their estimate in addition to inserting the same in figures.

Payment will be made by a requisition on the Comptroller, in accordance with the terms of the contract, or from time to time, as the Commissioners may determine.

The form of the contract, including specifications, and showing the manner of payment, will be furnished at the office of the Department, and bidders are cautioned to examine each and all of its provisions carefully, as the Board of Public Charities and Correction will insist upon its absolute enforcement in every particular.

Dated NEW YORK, April 22, 1891.
HENRY H. PORTER, President,
CHARLES E. SIMMONS, M. D.,
EDWARD C. SHEEHY,
Commissioners of Public Charities and Correction.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,
No. 66 THIRD AVENUE,
NEW YORK, April 30, 1891.

IN ACCORDANCE WITH AN ORDINANCE OF the Common Council, "In relation to the burial of strangers or unknown persons who may die in any of the public institutions of the City of New York," the Commissioners of Public Charities and Correction report as follows:

At Morgue, Bellevue Hospital, from foot of Eleventh street, East river—Unknown man, aged about 55 years; 5 feet 3 inches high; brown hair, small side whiskers. Had on brown cardigan jacket, black vest and pants, white shirt, white cotton undershirt, gray woolen drawers, white socks.

Unknown man, from One Hundred and Fifty-fifth street and Harlem river, aged about 40 years; 5 feet 8 inches high; sandy hair and moustache. Had on black overcoat, black sack coat, black vest, dark gray mixed pants, red and white striped shirt, gray cotton drawers, gaiters, white socks.

By order,
G. F. BRITTON, Secretary.

DEPARTMENT OF STREET CLEANING.

NOTICE.

PERSONS HAVING BULKHEADS TO FILL, IN the vicinity of New York Bay, can procure material for that purpose—ashes, street sweepings, etc., such as is collected by the Department of Street Cleaning—free of charge, by applying to the Commissioner of Street Cleaning, in the Stewart Building.

HANS S. BEATTIE,
Commissioner of Street Cleaning

SUPREME COURT.

In the matter of the application of the Board of Street Opening and Improvement of the City of New York, for and on behalf of the Mayor, Aldermen and Commonality of the City of New York, relative to acquiring title, wherever the same has not been heretofore acquired, to WELCH STREET (although not yet named by proper authority), extending from the New York and Harlem Railroad to Webster avenue, in the Twenty-fourth Ward of the City of New York, as the same has been heretofore laid out and designated as a first-class street or road by the Department of Public Parks.

PURSUANT TO THE STATUTES IN SUCH cases made and provided, notice is hereby given that an application will be made to the Supreme Court of the State of New York, at a Special Term of said Court, to be held at Chambers thereof, in the County Court-house, in the City of New York, on Thursday, the 28th day of May, 1891, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title, in the name and on behalf of the Mayor, Aldermen and Commonality of the City of New York, for the use of the public, to all the lands and premises, with the buildings thereon and the appurtenances thereto belonging, required for the opening of a certain street or avenue known as Welch street, extending from the New York and Harlem Railroad to Webster avenue, in the Twenty-fourth Ward of the City of New York, as the same has been heretofore laid out and designated as a first-class street or road by the Department of Public Parks, being the following described lots, pieces or parcels of land, viz:

Beginning at a point in the eastern line of Webster avenue, distant 1,497 1/2 feet northerly of the northern line of East One Hundred and Eighty-fourth street.

1st. Thence northeasterly along the eastern line of Webster avenue, for 8 1/2 feet.

2d. Thence southeasterly, deflecting 81° 25' 4" to the right, for 236 1/2 feet to the western line of the N. Y. & H. R. R.

3d. Thence southwesterly, deflecting 80° 57' 15" to the right, along the western line of N. Y. & H. R. R., for 80 feet.

4th. Thence northwesterly for 248 3/8 feet to the point of beginning.

Welch street, from the N. Y. & H. R. R. to Webster avenue, is a street of the first-class, and is 80 feet wide.

And as shown on certain maps filed by the Commissioners of the Department of Public Parks in the office of the Register of the City and County of New York, in the office of the Secretary of State of the State of New York, and in the Department of Public Parks.

Dated NEW YORK, April 30, 1891.
WILLIAM H. CLARK,
Counsel to the Corporation,
No. 2 Tryon Row, New York City.

In the matter of the application of the Board of Street Opening and Improvement of the City of New York, for and on behalf of the Mayor, Aldermen and Commonality of the City of New York, relative to acquiring title, wherever the same has not been heretofore acquired, to ONE HUNDRED AND EIGHTY-SEVENTH STREET (although not yet named by proper authority), between Amsterdam avenue (Tenth avenue) and Kingsbridge road, in the Twelfth Ward of the City of New York.

PURSUANT TO THE STATUTES IN SUCH cases made and provided, notice is hereby given that an application will be made to the Supreme Court of the State of New York, at a Special Term of said Court, to be held at Chambers thereof, in the County Court-house, in the City of New York, on Thursday, the 28th day of May, 1891, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title, in the name and on behalf of the Mayor, Aldermen and Commonality of the City of New York, for the use of the public, to all the lands and premises, with the buildings thereon and the appurtenances thereto belonging, required for the opening of a certain street or avenue known as One Hundred and Eighty-seventh street, between Amsterdam avenue (Tenth avenue) and Kingsbridge road, in the Twelfth Ward of the City of New York.

Beginning at a point in the westerly line of Amsterdam (Tenth) avenue, said point being distant 8,464 1/2 feet northerly from the southerly line of One Hundred and Fifty-fifth street; thence westerly and parallel with said street, distance 800 feet, to the easterly line of Eleventh avenue; thence northerly along said line, distance 80 feet; thence easterly, distance 200 feet, to the westerly line of Amsterdam avenue; thence southerly along said line, distance 80 feet, to the point or place of beginning.

Also, beginning at a point in the westerly line of Eleventh avenue, said point being distant 8,464 1/2 feet northerly from the southerly line of One Hundred and Fifty-fifth street; thence westerly and parallel with said street, distance 744 1/2 feet, to the easterly line of Kingsbridge road; thence northerly along said line, distance 40 1/2 feet; thence still northerly along said line of Kingsbridge road, distance 41 1/2 feet; thence easterly, distance 760 1/2 feet to the westerly line of Eleventh avenue; thence southerly along said line, distance 80 feet to the point or place of beginning.

Said street to be 80 feet wide between the lines of Amsterdam avenue and the Kingsbridge road.

And as shown on certain maps filed by the Commissioners of the Department of Public Parks in the office of the Register of the City and County of New York, in the office of the Secretary of State of the State of New York, and in the Department of Public Parks.

Dated NEW YORK, April 29, 1891.
WM. H. CLARK,
Counsel to the Corporation,
No. 2 Tryon Row, New York City.

In the matter of the application of the Board of Street Opening and Improvement of the City of New York, for and on behalf of the Mayor, Aldermen and Commonality of the City of New York, relative to acquiring title, wherever the same has not been heretofore acquired, to the opening and extension of PELHAM AVENUE (although not yet named by proper authority), westwardly to Webster avenue, in the Twenty-fourth Ward of the City of New York, as the same has been heretofore laid out and designated as a first-class street or road by the Department of Public Parks.

PURSUANT TO THE STATUTES IN SUCH cases made and provided, notice is hereby given that an application will be made to the Supreme Court of the State of New York, at a Special Term of said Court, to be held at Chambers thereof, in the County Court-house, in the City of New York, on Thursday, the 28th day of May, 1891, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title, in the name and on behalf of the Mayor, Aldermen and Commonality of the City of New York, for the use of the public, to all the lands and premises, with the buildings thereon and the appurtenances thereto belonging, required for the opening and extension of a certain street or avenue known as Pelham avenue, westwardly to Webster avenue, in the

Twenty-fourth Ward of the City of New York, as the same has been heretofore laid out and designated as a first-class street or road by the Department of Public Parks, being the following-described lots, pieces or parcels of land, viz:

Beginning at a point in the eastern line of Webster avenue, distant 2,008.02 feet northerly of the intersection of the northern line of East One Hundred and Eighty-fourth street with the eastern line of Webster avenue.

1st. Thence northeasterly along the eastern line of Webster avenue, for 110.82 feet.

2d. Thence southeasterly, deflecting 77° 52' 14" to the right, for 346.15 feet.

3d. Thence westerly, deflecting 165° 21' 3" to the right, along the former Fordham and Pelham avenue, for 224.73 feet.

4th. Thence westerly, deflecting 150° 58' 17" to the right, along the former Fordham and Pelham avenue, for 44.00 feet.

5th. Thence southerly, deflecting 90° to the left, along the former Fordham and Pelham avenue, for 30.0 feet.

6th. Thence southeasterly, deflecting 47° 52' 5" to the left, along the Fordham and Pelham avenue, for 109.46 feet.

7th. Thence southerly, deflecting 41° 57' 27" to the right, for 16.39 feet.

8th. Thence westerly, deflecting 95° 02' 17" to the right, for 50.19 feet.

9th. Thence northerly, deflecting 44° 58' 59" to the right, for 17.62 feet.

10th. Thence westerly for 53.46 feet to the point of beginning.

And as shown on certain maps filed by the Commissioners of the Department of Public Parks in the office of the Register of the City and County of New York, in the office of the Secretary of State of the State of New York and in the Department of Public Parks.

WE, THE UNDERSIGNED COMMISSIONERS of Estimate and Assessment in the above-entitled matter, hereby give notice to all persons interested in this proceeding, and to the owner or owners, occupant or occupants, of all houses and lots and improved or unimproved lands affected thereby and to all others whom it may concern, to wit:

First—That we have completed our estimate and assessment, and that all persons interested in this proceeding, or in any of the lands affected thereby, and having objections thereto, do present their said objections in writing, duly verified, to us at our office, No. 200 Broadway (fifth floor), in the said city, on or before the 1st day of June, 1891, and that we, the said Commissioners, will hear parties so objecting within the ten week days next after the said 1st day of June, 1891, and for that purpose will be in attendance at our said office on each of said ten days at 3 o'clock P. M.

Second—That the abstract of our said estimate and assessment, together with our damage and benefit maps, and also all the affidavits, estimates and other documents used by us in making our report, have been deposited with the Commissioner of Public Works of the City of New York, at his office, No. 31 Chambers street, in the said city, there to remain until the 2d day of June, 1891.

Third—That the limits of our assessment for benefit include all those lots, pieces or parcels of land, situate, lying and being in the City of New York, which, taken together, are bounded and described as follows, viz.: Northerly by a line drawn parallel with and distant 25 feet northerly of the northerly line of East One Hundred and Forty-seventh street, from Third avenue to Willis avenue, and the centre line of the block between Bergen avenue and East One Hundred and Fifty-sixth street and Third avenue; easterly by the westerly line of Brook avenue, the centre line of the blocks between Bergen avenue and Brook avenue, extending from the intersection of the easterly line of Bergen avenue with the westerly line of Brook avenue to East One Hundred and Forty-seventh street, and a line drawn parallel with and distant 100 feet easterly of the easterly line of Willis avenue and extending from East One Hundred and Forty-seventh street to East One Hundred and Forty-sixth street; southerly by the northerly line of East One Hundred and Forty-sixth street and westerly by a line drawn parallel with and distant 100 feet westerly of the westerly line of Willis avenue from East One Hundred and Forty-sixth street to East One Hundred and Forty-seventh street, the easterly line of Third avenue, the easterly line of Willis avenue and the centre line of the blocks between Bergen avenue and Third avenue; excepting from said area all streets, avenues and roads, or portions thereof, heretofore legally opened, and all the unimproved land included within the lines of streets, avenues, roads, public squares and places shown and laid out upon any map or maps filed by the Commissioners of the Department of Public Parks pursuant to the provisions of chapter 604 of the Laws of 1874 and the laws amendatory thereof, or of chapter 410 of the Laws of 1882, as such area is shown upon our benefit map deposited as aforesaid.

Fourth—That our report herein will be presented to the Supreme Court of the State of New York, at a Special Term thereof, to be held at the Chambers thereof, in the County Court-house, in the City of New York, on the 15th day of June, 1891, at the opening of the Court on that day, and that then and there, or as soon thereafter as counsel can be heard thereon, a motion will be made that the said report be confirmed.

Dated NEW YORK, April 20, 1891.
NELSON SMITH, Chairman,
WILLIAM J. LACEY,
CHARLES S. BEARDSLEY,
Commissioners.

CARROLL BERRY, Clerk.

In the matter of the application of the Board of Street Opening and Improvement of the City of New York, for and on behalf of the Mayor, Aldermen and Commonality of the City of New York, relative to acquiring title, wherever the same has not been heretofore acquired, to that part of EAST ONE HUNDRED AND FIFTY-SEVENTH STREET (although not yet named by proper authority), extending from Railroad avenue, East, to Third avenue, in the Twenty-third Ward of the City of New York, as the same has been heretofore laid out and designated as a first-class street or road by the Department of Public Parks.

NOTICE IS HEREBY GIVEN THAT THE BILL of costs, charges and expenses incurred by reason of the proceedings in the above-entitled matter, will be presented for taxation to one of the Justices of the Supreme Court, at the Chambers thereof, in the County Court-house, at the City Hall, in the City of New York, on the 7th day of May, 1891, at 10.30 o'clock in the forenoon of that day, or as soon thereafter as counsel can be heard thereon; and that the said bill of costs, charges and expenses has been deposited in the office of the Department of Public Works, there to remain for and during the space of ten days.

Dated NEW YORK, April 24, 1891.
EDWARD L. PARRIS,
GILBERT M. SPEIR, Jr.,
LAWRENCE WELLS,
Commissioners.

CARROLL BERRY, Clerk.

In the matter of the application of the Board of Street Opening and Improvement of the City of New York, for and on behalf of the Mayor, Aldermen and Commonality of the City of New York, relative to acquiring title wherever the same has not been heretofore acquired to BIRCH STREET (although not yet named by proper authority), extending from Wolf street to Marcher avenue, in the Twenty-third Ward of the City of New York, as the same has been heretofore laid out and designated as a first-class street or road by the Department of Public Parks.

NOTICE IS HEREBY GIVEN THAT THE BILL of costs, charges and expenses incurred by reason of the proceedings in the above entitled matter, will be presented for taxation to one of the Justices of the Supreme Court, at the Chambers thereof in the County Court-house, at the City Hall in the City of New York, on the 2d day of May, 1891, at 10.30 o'clock in the forenoon of that day, or as soon thereafter as counsel can be heard thereon; and that the said bill of costs, charges and expenses has been deposited in the office of the Department of Public Works, there to remain for and during the space of ten days.

Dated NEW YORK, April 27, 1891.
GEORGE P. WEBSTER,
MOSES HERRMAN,
JOHN H. KITCHEN,
Commissioners.

CARROLL BERRY, Clerk.

In the matter of the application of the Board of Street Opening and Improvement of the City of New York, for and on behalf of the Mayor, Aldermen and Commonality of the City of New York, relative to acquiring title, wherever the same has not been heretofore acquired, to JOHN STREET (although not yet named by proper authority), extending from Brook avenue to Eagle avenue, in the Twenty-third Ward of the City of New York, as the same has been heretofore laid out and designated as a first-class street or road by the Department of Public Parks.

WE, THE UNDERSIGNED COMMISSIONERS of Estimate and Assessment in the above-entitled matter, hereby give notice to all persons interested in this proceeding and to the owner or owners, occupant or occupants of all houses and lots and improved or unimproved lands affected thereby, and to all others whom it may concern, to wit:

First—That we have completed our estimate and assessment, and that all persons interested in this proceeding, or in any of the lands affected thereby, and having objections thereto, do present their said objections in writing, duly verified, to us at our office, No. 200 Broadway (fifth floor), in the said city, on or before the 18th day of May, 1891, and that we, the said Commissioners, will hear parties so objecting within the ten week days next after the said 18th day of May, 1891, and for that purpose will be in attendance at our said office on each of said ten days at 3 o'clock P. M.

Second—That the abstract of our said estimate and assessment, together with our damage and benefit maps, and also all the affidavits, estimates and other documents used by us in making our report, have been deposited with the Commissioner of Public Works of the City of New York, at his office, No. 31 Chambers street, in the said city, there to remain until the 19th day of May, 1891.

Third—That the limits of our assessment for benefit include all those lots, pieces or parcels of land, situate, lying and being in the City of New York, which, taken together, are bounded and described as follows, viz.: Northerly by the centre line of the blocks between John street and Third avenue and John street and Clifton street, and the prolongation easterly of the said centre line for a distance of 100 feet easterly of the easterly line of Eagle avenue; easterly by a line drawn parallel with and distant 100 feet easterly of the easterly line of Eagle avenue; southerly by the centre line of the blocks between John street and East One Hundred and Fifty-sixth street and the prolongation easterly of the said centre line for a distance of 100 feet easterly of the easterly line of Eagle avenue, and westerly by the easterly line of German place and Brook avenue; excepting from said area all the streets, avenues and roads, or portions thereof, heretofore legally opened, and all the unimproved land included within the lines of streets, avenues, roads, public squares and places shown and laid out upon any map or maps filed by the Commissioners of the Department of Public Parks, pursuant to the provisions of chapter 604 of the Laws of 1874, and the laws amendatory thereof, or of chapter 410 of the Laws of 1882, as such area is shown upon our benefit map deposited as aforesaid.

Fourth—That our report herein will be presented to the Supreme Court of the State of New York at a Special Term thereof, to be held at the Chambers thereof, in the County Court-house in the City of New York, on the first day of June, 1891, at the opening of the Court on that day, and that then and there, or as soon thereafter as counsel can be heard thereon, a motion will be made that the said report be confirmed.

Dated NEW YORK, April 7, 1891.
DENIS A. SPELLISSY, Chairman,
ROYAL S. CRANE,
NEVIN W. BUTLER,
Commissioners.

CARROLL BERRY, Clerk.

In the matter of the application of the Board of Street Opening and Improvement of the City of New York, for and on behalf of the Mayor, Aldermen and Commonality of the City of New York, relative to acquiring title, wherever the same has not been heretofore acquired, to ONE HUNDRED AND THIRTY-FIRST STREET (although not yet named by proper authority), between Amsterdam and Convent avenues, in the Twelfth Ward of the City of New York.

PURSUANT TO THE STATUTES IN SUCH cases made and provided, notice is hereby given that an application will be made to the Supreme Court of the State of New York, at a Special Term of said Court, to be held at Chambers thereof in the County Court-house, in the City of New York, on Friday, the 8th day of May, 1891, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended is the acquisition of title, in the name and on behalf of the Mayor, Aldermen and Commonality of the City of New York, for the use of the public, to all the lands and premises, with the buildings thereon and the appurtenances thereto belonging, required for the opening of a certain street or avenue known as One Hundred and Thirty-first street, between Amsterdam and Convent avenues, in the Twelfth Ward of the City of New York, being the following-described lots, pieces or parcels of land, viz:

Beginning at a point in the easterly line of Amsterdam avenue, distant 4,976 1/2 feet southerly from the southerly line of One Hundred and Thirty-third street; thence easterly and parallel with said street, distance 284 1/2 feet, to the westerly line of Convent avenue; thence southerly along the westerly line of Convent avenue, distance 651 1/2 feet; thence westerly, distance 309 1/2 feet, to the easterly line of Amsterdam avenue; thence northerly along said line, distance 60 feet, to the point or place of beginning.

Said One Hundred and Thirty-first street to be 60 feet wide between the lines of Amsterdam avenue and Convent avenue.

Dated NEW YORK, April 11, 1891.
WILLIAM H. CLARK,
Counsel to the Corporation,
No. 2 Tryon Row, New York City.

THE CITY RECORD.

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W. J. K. KENNY,
Supervisor