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DEPARTMENT OF WATER SUPPLY.

Report for the Quarter ending March 31, 1898.

DEPARTMENT OF WATER SUPPLY—COMMISSIONER'S OFFICE,
NO. 150 NASSAU STREET,
NEW YORK, July 18, 1898.

Hon. ROBERT A. VAN WYCK, Mayor.

DEAR SIR.—In compliance with section 1544 of the Greater New York Charter, I have the honor to present the following report of the operations of the Department of Water Supply for the three months ended March 31, 1898.

BOROUGH OF MANHATTAN AND THE BRONX.

The entire water supply for the Borough of Manhattan comes from the Croton Watershed. In the Borough of The Bronx the territory west of the Bronx river is supplied from the Bronx and Byram River Watersheds; the territory east of the Bronx river is supplied by the New York and Westchester Water Company.

The average daily supply from the Croton Watershed for the three months was 220,500,000 gallons, all passing through the New Aqueduct. Except for the supply of water to the contractors engaged in building the Cornell Dam and Reservoir, and for the State Prison at Sing Sing, the Old Aqueduct still remains closed in consequence of alterations to connect it with the new reservoir which the Aqueduct Commissioners are building at Jerome Park.

From the Bronx and Byram Watersheds an average daily supply of 17,000,000 gallons has been received.

No draughts have been made on storage reservoirs, the natural flow of the Croton river being sufficient throughout the quarter, at the end of which all the reservoirs were filled to high-water mark.

The rainfall for the three months at the several stations where rain gauges are kept by the Department in the Croton and Bronx river system was as follows:

At Hoyts Corners Reservoir.....	14.01 inches.
At Middle Branch Reservoir.....	11.51 "
At Croton Dam.....	11.04 "
At Kensico Reservoir, Bronx river.....	11.88 "
At Central Park Reservoirs.....	10.37 "

Surveys are in progress for a new storage reservoir on the Cross river, a branch or tributary of the Croton.

The work under the contract for the reservoir and appurtenances at Byram Pond has remained suspended on account of unsuitable weather.

Engineering parties have continued the surveys and preparation of maps requested by the Corporation Counsel for current proceedings for the acquisition of lands and appraisement of damages, and for the further sanitary protection of the water supply from the Croton, Bronx and Byram rivers.

The operation of the electrozone plant for disinfecting the sewage at the Village of Brewsters, and the dry pan process for treating the sewage at the Village of Mount Kisco, have been continued. Five gangs of laborers have been engaged in clearing lands acquired by the City on the borders of streams, ponds and reservoirs. In conjunction with the force employed by the Aqueduct Commissioners, the watersheds are constantly patrolled to detect and prevent nuisances which tend to the pollution of the water.

Eight gangs or companies of workmen have constantly patrolled the aqueducts and the distributing reservoirs, and have made all necessary repairs to these structures and their appurtenances.

During the quarter contracts for laying water-mains to extend the water service were completed in forty-seven different streets, under the annual appropriation for "Laying Croton Pipes." Under the several contracts there were laid 1,434 lineal feet of 36-inch mains; 62 lineal feet of 20-inch mains; 3,451 lineal feet of 12-inch mains, and 8,502 lineal feet of 6-inch mains, making a total of 13,449 lineal feet, or 2.54 miles of new mains. In connection therewith, 37 new stop-cocks and 45 new fire-hydrants were placed.

The work under the contracts for laying large water-mains, payable from the "Water Main Fund," to increase the supply and pressure of water in the lower and central sections of the Borough of Manhattan, was suspended for the greater part of the quarter in consequence of stormy weather. Since January 1, 1898, vouchers and certificates for payments have been forwarded to the Comptroller for furnishing and laying 11,625 lineal feet of 36-inch mains; 1,400 lineal feet of 20-inch mains; 4,100 lineal feet of 12-inch mains; 150 lineal feet of 6-inch mains, and for furnishing and placing 26 stop-cocks and 9 fire-hydrants.

One company of mechanics and laborers has been engaged in placing 19 new fire-hydrants and their connections with water-mains, in response to requests from the Fire Department.

For the maintenance and repairs of the water-mains, stop-cocks and hydrants, the distributing system is divided into six districts—four in the Borough of Manhattan and two in the Borough of The Bronx. Each district is in charge of a foreman and company of mechanics and laborers, with a central repair shop or station, connected by telephone with the Central Office of the Department and the offices and stations of the Police Department and Fire Department and the general telephone systems. Men are kept on duty at these repair stations at all hours of the day and night, to receive and respond to messages of accidents and calls for repairs. The following are the principal items of work done by this force during the quarter:

- 168 old fire hydrants replaced by new ones.
- 1,409 fire hydrants repaired.
- 4 new stop-cocks placed.
- 475 stop-cocks repaired.
- 410 leaks in water-mains repaired.
- 325 leaking-taps in water-mains shut off.

An additional repair company has been engaged in relaying water-mains and resetting to the proper grades the stop-cocks on First, Second, Third, Fifth, Eighth, Ninth and Tenth avenues and on Forty-second street.

During the quarter 705 taps for new house connections with water-mains were placed.

BOROUGH OF BROOKLYN.

The Brooklyn water system differs radically from the Croton and Bronx river systems, in that the entire Brooklyn supply has to be pumped from wells, shallow streams and ponds, distributed over the westerly part of Long Island, to the necessary elevation, to deliver it through conduits to receiving reservoirs within the city limits and then has to be raised again by pumping for delivery through the distributing mains, whereas all the water from the Croton and Bronx systems is delivered in the receiving reservoirs by gravity.

The Brooklyn system now includes 22 miles of brick conduits from Massapequa Pond to the Ridgewood Engine-house; 23 miles of 48-inch and 36-inch cast-iron conduits from the Milburn

Pumping Station to the Ridgewood Reservoir; 22 pumping stations between Gravesend and Massapequa Pond, and 578 miles of distributing mains, with 4,570 stop-cocks and 6,138 fire hydrants.

The brick conduit and the 48-inch cast-iron conduit from the Milburn Pumping Station to the Ridgewood Reservoir are overtaxed, and another conduit is immediately necessary to insure the safety and continuity of the present supply in the event of an accident to either of the present conduits.

The average daily supply received and distributed in the Borough of Brooklyn during the three months is 92,256,432 gallons, of which 89,682,273 gallons were distributed from the Ridgewood Pumping Station, 4,527,689 gallons from the Mount Prospect Station for ordinary service, 2,308,728 gallons from the Mount Prospect Station for high service, 1,598,002 gallons from the Gravesend Pumping Station, and 976,157 gallons from the New Utrecht Pumping Station.

The average rainfall for the quarter in the territory embraced in the Brooklyn water system was 11.20 inches.

The Department has received no complaints of inadequate supply and pressure from the water-mains in the Borough of Brooklyn, but has received a number of applications for laying distributing mains to extend the service into new streets and districts. Several of these applications were for extending the public water service into the Thirty-second Ward of the borough, the former Town of Flatbush, which is supplied by the Long Island Water Supply Company, under a contract with the late town authorities.

There are two obstacles to the extension of the water service with which this Department has to contend, viz.: The privileges and rights of private water companies under contract with former town and village authorities, and the limitation of bond issues for the laying of additional water-mains at the City's expense.

The erection of the last three new pumping-engines at the Ridgewood Pumping Station has been delayed in consequence of the necessity of operating one of the old engines. The two other new engines have been in successful operation. Many improvements have been made in the steam-fitting and other details of this pumping station.

The other pumping engine, of three million gallons capacity per day, at the Mount Prospect Station, has been completed, and by test has shown a capacity in excess of the contract requirements, for which the contract provides a premium.

The laying of the line of 60-inch steel pipe as a by-pass at the Ridgewood Reservoir has been completed, and the pipes satisfactorily tested. Two additional water-meters have been placed on the 36-inch force mains. Connections have been made between all of the force mains and the by-pass and from the by-pass to the stand-pipe. All the work under the contract for this improvement has been completed except some filling.

Under the contract for the pipe line it is desired to divert polluted water from the Hempstead stream and which includes the laying of 14,400 feet of 36-inch cast-iron pipe, good progress has been made and about 7,400 lineal feet of pipe been laid.

At the New Utrecht Pumping Station nine new wells have been completed and four more wells are to be driven. The increase of population in the section which is supplied with water from this station will make it necessary to drive additional wells and increase the pumping capacity.

At the Springfield Pumping Station six additional 8-inch wells have been driven, averaging from 156 to 165 feet in depth. Four additional wells are to be driven to complete this station. The average daily supply received so far is 2,500,000 gallons per day.

BOROUGH OF QUEENS.

In this borough there are six water plants owned by the City, viz.: three in Long Island City, one in Flushing, one in College Point and one in Woodside. The total pumping capacity of these plants is 10,000,000 gallons per day, and the capacity of the wells from which the water is drawn is 5,000,000 gallons per day. The public water system includes 84 miles of water-mains, 760 fire-hydrants, 454 stop-cocks, and 1,600 houses are supplied from this system. A considerable part of the borough, however, is supplied with water by private water companies, and the City is charged with the expense of maintaining fire-hydrants by these companies, as follows:

The Queens County Water Company.....	267 hydrants.
The Woodhaven Water Company.....	307 "
The Citizens' Water Supply Company.....	295 "
The Jamaica Water Supply Company.....	305 "

—the price for each hydrant being \$30 to \$25 per annum.

To furnish an adequate supply of water to the population in this borough, it is necessary to expend at least \$100,000 to put the pumping stations in thoroughly effective condition, and \$150,000 to drive additional wells and lay additional water-mains.

BOROUGH OF RICHMOND.

With the exception of a small pumping station at Totenville, which was completed in December last, the entire territory of this borough is supplied with water by private water companies. There are in the borough 128 miles of water-mains, with 900 fire hydrants. Under the existing contracts made by former town and village authorities, the City is to pay \$30 per annum each for 404 hydrants, and \$25 per annum each for 556 hydrants.

Until the consolidation of the Greater City of New York, the questions which present themselves as to the advantages of having public water supply furnished by the municipality direct, or through private companies, had not presented itself, because all the territory of the former City of New York had always been supplied with water directly by the City.

I believe it to be good policy on the part of the City government to acquire or extinguish the rights of private water companies within its territory as soon as possible. The investments of the old City of New York, as well as that of the City of Brooklyn, in their water-works, have proven satisfactory, both in the sense of general public benefit and comfort and as a financial investment. The revenue derived from the public water supply in the Boroughs of Manhattan, The Bronx and Brooklyn is sufficient to pay for the maintenance of the system and to leave a surplus for a sinking fund sufficient to extinguish the bond issues incurred, in a short time.

REVENUE FROM THE WATER SUPPLY.

The following revenue from the water service has been collected and paid into the City Treasury by the Department:

Borough of Manhattan and The Bronx.	
Regular water rents.....	\$36,015 34
Penalties on water rents.....	1,743 00
Charges for water supplied through meter.....	517,848 05
Water supplied to shipping.....	30,965 10
Water for building purposes.....	9,111 80
Water for miscellaneous purposes.....	1,068 80
Permits to tap water mains.....	2,917 00
	<hr/>
	\$599,669 69
Borough of Brooklyn.	
Regular and extra water rents.....	\$92,799 13
Arrears of water rents.....	34,957 60
Penalties on water rents.....	3,008 72
Permits to supply water.....	1,702 25
Water for building purposes.....	2,216 85
	<hr/>
	\$134,684 55
Borough of Queens.	
Receipts for water rents.....	\$4,483 20
Receipts for permits to tap water mains.....	54 00
	<hr/>
	\$4,537 20
Borough of Richmond.	
Receipts for water rents.....	\$22 00
Receipts for permits to tap water mains.....	4 00
	<hr/>
	\$26 00

SUMMARY OF EXPENDITURES

Table with 2 columns: Description of expenditure and Amount. Includes items like 'On account of annual appropriation, raised by taxation for the year 1898' and 'For liabilities incurred in preceding years'.

DOCUMENT "A"

Showing Title of Appropriation; Appropriations for 1898; Requisitions, First Quarter, 1898; Balance of Appropriations on April 1, 1898; Title of Trusts and Special Accounts, and Requisitions, First Quarter, 1898.

Main summary table with 5 columns: Title of Appropriation, Borough, Amount for 1898, Requisitions for First Quarter 1898, and Balance on April 1, 1898. Lists various categories like 'Aqueduct Repairs and Maintenance' and 'Salaries'.

Table with 3 columns: Title of Trusts and Special Accounts, Borough, and Requisitions for First Quarter 1898. Lists items like 'Additional Water Fund' and 'Riverdale Avenue Archway'.

NOTE.—Requisitions were drawn during the quarter on liabilities of 1897, amounting to \$45,099.47; on liabilities of 1896, amounting to \$4,064.70; and on liabilities of 1895, amounting to \$3,474.15.

Very respectfully, WM. DALTON, Commissioner of Water Supply.

DEPARTMENT OF WATER SUPPLY—BUREAU OF WATER REGISTER, No. 125 NASSAU STREET, NEW YORK, March 31, 1898.

WILLIAM DALTON, Esq., Commissioner of Water Supply.

SIR.—I herewith transmit statement of moneys received for water-rents, penalties, taps, etc., for the quarter ending March 31, 1898.

Table with 4 columns: Month, Regular Rates, Penalties, and Total. Shows monthly breakdown of revenue for January, February, and March.

Large table with 4 columns: Month, Regular Rates, Penalties, and Total. Contains sub-sections for 'Meter Measurements', 'Building Purposes', and 'Meters Issued'.

The above report is herewith submitted. Very respectfully, WM. G. BYRNE, Water Register.

DEPARTMENT OF WATER SUPPLY—OFFICE OF CHIEF ENGINEER, ROOM 1715, No. 150 NASSAU STREET, NEW YORK, April 6, 1898.

Hon. WILLIAM DALTON, Commissioner of Water Supply. DEAR SIR—Under section 1544 of the Charter, herewith please find statement of the operation of this Bureau for the quarter ending March 31, 1898.

SUMMARY OF EXPENDITURES

Table with 2 columns: Description of expenditure and Amount. Lists items like 'Additional Water Fund', 'Aqueduct—Repairs, Maintenance and Supplies', and 'Salaries'.

STORAGE RESERVOIRS

The Croton river has furnished a full supply to the aqueducts during the quarter. All of the storage reservoirs are full. Work on the improvement of White Pond and channelway has commenced.

RAINFALL

Table with 5 columns: Location, January, February, March, and Total Quarter. Shows rainfall data for various reservoirs like 'Boyd's Corner Reservoir' and 'Middle Branch Reservoir'.

Surveys are being made for a storage reservoir on the Cross River Branch of the Croton river.

BRONX AND HYRAM RIVERS—SUPPLY.

The regular force have been employed in cleaning up along conduit, roads, reservoirs and streams, etc. An average daily supply of 17,000,000 gallons has been uninterruptedly furnished during the quarter. The contract for building reservoir, etc., at Hiram Pond has been suspended on account of the weather. The engineering party has been completing maps of lands necessary for sanitary protection of the Bronx, Hiram and Waquoit rivers, as called for by the Corporation Counsel, and in making plans for further improvements necessary to complete and increase this supply and in protecting same from pollution.

SANITARY PROTECTION OF THE CROTON WATERSHED.

The necessary surveys, maps, etc., are being made at the request of the Corporation Counsel, for further information required, as the proceedings are carried on by Commissioners appointed to appraise the values of lands taken; also surveys and maps along the several tributaries of the Croton river, of lands necessary to be taken for the further protection of same from contamination. Five gangs of men are clearing up lands taken along East Branch, West Branch, Middle Branch, Tifton Branch of the Croton river, and at Mount Kisco. The electrotype plant for treating the sewage of Brewster and the dry-pan process of treating the sewage of Mount Kisco is still carried on. The several commissions are still taking testimony as to values of lands taken under former proceedings. In connection with the Aqueduct Commission, the whole of the watershed is patrolled by employees under the several engineers.

NEW AQUEDUCT.

All of the water furnished to the City from the Croton River has been carried through this aqueduct. The Old Aqueduct is shut off on account of damages to the same at Jerome Park Reservoir, and is only supplying the contractors at Cornell Dam and Sing Sing Prison.

AQUEDUCT REPAIRS AND MAINTENANCE.

Eight gangs of men have been steadily employed patrolling the aqueducts and reservoirs, keeping in repair the culverts, boxes, gate-lenses, etc., and in pumping the necessary water required on high grounds and handling of coal and ashes from pumping stations. The contractor for facing bank at High Bridge has commenced work.

Statement of work done during the quarter: Aqueduct Repairs, Maintenance and Strengthening.

Table with 12 columns: Division, Stone Quantity, Iron Quantity, Brick Quantity, Cement Quantity, Lime Quantity, Coal Quantity, Fuel Quantity, Masonry Quantity, Lumber Quantity, Pipes Quantity, Fences Quantity, Total Quantity.

Contract for furnishing coal completed.

BURNSIDE AVENUE ARCADES.

This work is completed except the pointing of the masonry and clearing up of the grounds. Work has been suspended but will be completed in May.

LAYING CROTON PIPES.

Contracts for laying water-mains in the following streets and avenues have been completed during the quarter.

- List of streets and avenues where water-main contracts were completed, including Amsterdam Avenue, St. Nicholas Avenue, Gerard Avenue, Third Avenue, Park Avenue, Bremer Avenue, Seventh Avenue, Independence Avenue, Intervale Avenue, One Hundred and Seventy-ninth Street, One Hundred and Thirty-ninth Street, Ninety-second Street, Union Street, One Hundred and Sixth Street, One Hundred and Eighth Street, One Hundred and Ninth Street, One Hundred and Eleventh Street, One Hundred and Fourteenth Street, One Hundred and Sixty-seventh Street, Hylan Street, Langfellow Street, Boulevard, Hall Place, Union Avenue, Jansen Avenue, Wicker Place, Webster Avenue, Simpson Street, Travers Street, One Hundred and Forty-first Street, Tremont Street, Southern Boulevard, One Hundred and Sixty-third Street, Dawson Street, One Hundred and Seventieth Street, One Hundred and Forty-second Street, One Hundred and Eightieth Street, Hylan Street, Stubbins Avenue, and Shaft No. 25.

Lineal Feet of Pipe Laid.

Table with 2 columns: Pipe Size (36-inch, 30-inch, 24-inch, 18-inch, 12-inch, 6-inch) and Lineal Feet.

Supplies and

Table with 2 columns: Item (36-inch, 30-inch, 24-inch, 18-inch, 12-inch, 6-inch) and Quantity.

Hydrants Placed

Table with 2 columns: Item (No. A, No. B) and Quantity.

NEW FIRE HYDRANTS.

A gang of men has been employed in setting fire hydrants. New York hydrants placed.

REPAIRING AND RENOVATION OF PIPES, APPURTEANCES, ETC.

A gang of men has been employed relaying mains, re-setting stop-cocks, etc., on large mains, in the following localities:

- List of streets: First Avenue, Second Avenue, Third Avenue, Fifth Avenue, Eighth Avenue, Ninth Avenue, Tenth Avenue, Forty-second Street.

Six gangs of men have been employed making the necessary repairs to mains, hydrants, stop-cocks, etc., on small mains. 168 new hydrants set, 1,409 old hydrants repaired, 4 new stop-cocks set, 475 old stop-cocks repaired, 416 leaks in mains repaired, 325 leaking taps shut off, 215 hydrants found improperly closed, 705 taps placed during quarter.

Laying Large Mains.

Owing to the weather this work has been shut down during the winter, except on rock. The contractors are again at work. Contract for laying mains on Fifth Avenue, between Fourth and Fifty-fifth streets completed.

Lineal Feet of Pipe Laid.

Table with 2 columns: Pipe Size (36-inch, 30-inch, 24-inch, 18-inch, 12-inch, 6-inch) and Lineal Feet.

Stop-cocks Set

Table with 2 columns: Item (12-inch, 6-inch) and Quantity.

Hydrants Placed

Table with 2 columns: Item (New York Hydrants) and Quantity.

Waste and Use of Water.

The weather during the winter having been comparatively warm, the amount of waste has been only normal. The new mains on Fifth Avenue have been brought into use and the pressure below Thirty-eighth Street increased from 5 to 20 pounds. As soon as the weather is settled, will further increase the pressure, by fully opening these mains and distributing same.

Table with 2 columns: Month (January) and Quantity (Gallons) for Croton and Bronx Watersheds.

Table with 2 columns: Month (February) and Quantity (Gallons) for Croton and Bronx Watersheds.

Table with 2 columns: Month (March) and Quantity (Gallons) for Croton and Bronx Watersheds.

In the Twenty-fourth Ward, Borough of The Bronx, east of Bronx river, there are 465 hydrants supplied with water by the New York and Westchester Water Company, at \$40 per annum each.

BOROUGH OF BROOKLYN.

EXPENDITURES FOR QUARTER.

Table with 2 columns: Item (Water Supply, Salaries, Contingencies, etc.) and Amount (\$).

On March 31, 1898, there were 22 miles of brick conduits extending from Ridgewood Engine House to Massapequa Pond; 23 miles 38-inch and 36-inch cast-iron conduits from Ridgewood Reservoir to Milburn Pumping Station; 22 pumping stations from Coney Island to Massapequa; 578 miles water-mains; 4,570 stop-cocks; 6,158 fire hydrants.

The old brick conduit and the 48-inch cast-iron conduit between Milburn and Ridgewood are now overtaxed in their capacity, and if either should give out, the borough would be very short of water. There is immediate necessity, in order to insure the present supply, that another conduit should be built between Ridgewood and Milburn.

CONSUMPTION.

Table with 4 columns: Supply (Ridgewood, Greenud, New Utrecht) and Consumption (January, February, March, Three Months) in U.S. Gallons.

RAINFALL.

The rainfall, as observed in this office in the Municipal Building and at our Storage Reservoir at Hempstead during the quarter, was as follows:

Table with columns: Location, January, February, March, Total. Rows: Municipal Building, Hempstead Reservoir.

ANALYSES.

The work done at our Mount Prospect Laboratory during the quarter was as follows:

Water Samples.

100 samples received; 405 physical examinations; 271 chemical analyses; 108 partial chemical analyses; 405 microscopic examinations; 223 bacterial examinations; 104 special bacterial examinations; 12 periodical bacterial analyses; 146 chlorine determinations at driven-well stations.

Miscellaneous.

Two analyses of sediment from shallow wells at Jamaica; 5 experiments on solution for hydraulic lift; 30 experiments on the action of water on the asphalt; 6 analyses of boiler scale; investigation of analyses for lubricating oils; close inspection of all sources of supply and storage reservoirs; one special inspection of tubular iron conduits.

DISTRIBUTION SYSTEM.

During the quarter 7,047 lineal feet of 8-inch pipe were laid, and 23 hydrants and 20 eight-inch water gates were set.

Mount Prospect Engine.

Work on the new 2,000-gallon pumping engine for the Mount Prospect high service, which was begun on November 1, 1897, was completed early this year, and was tested for five days beginning on February 14. The duty stipulated in the contract for this engine was 700,000 feet pounds per million U. S. D. The duty shown on trial was 775,818 feet pounds. Under the terms of the contract it was stipulated that a bonus should be paid to the contractor of \$250 for each million feet pounds over and above the stipulated duty up to 1,000,000 feet pounds. The contract price was \$9,700, making the amount due the contractor on a final estimate, including deductions for alterations in the work and the provision also for excess of duty, \$10,450. The final estimate was made for the amount of the certificate, leaving a balance due the contractor, Mr. M. T. Davidson, of \$1,750. The engine is of the triple-expansion, horizontal direct-acting type, with steam cylinders of 31 1/2 inches, 20 inches and 24 inches diameter, respectively, and water cylinders of 21 inches, all having a 24-inch stroke. The engine is operating very satisfactorily.

Water Pressure Meters.

One of the three 2-inch Venturi meters purchased last year has been set up on the 20-inch high service main leading from the standpipe. It was intended to use this meter in connection with the engine test, but it was thrown out of adjustment early in the test by a break in the pipe main, and was not replaced in time to be of service in this connection. It has since been repaired, and a test will be made at the earliest opportunity.

Highway System Stations.

Owing to the necessity of operating old engine No. 2 at this station, it was not possible until very recently to permit the work of erection of the last of the three new engines to be begun. Arrangements are being made for dismantling the old engine after which the erection will be commenced. Considerable work has been done on the two engines previously erected to insure their continuous operation, the work consisting mainly of making joints, respraying valves, and changing location of lubricators. One of the engines has been covered with Kennedy's masonry and iron work, which work has been completed, as has also the lagging of one of the engines, while similar work on the second engine is nearly completed. Several of the steam pipes have been repaired, the lines straightened, a number of joints put in and the purifier put in use. All of the piping in the pump room has been covered and the damper regulators adjusted. The main battery of boilers has been repaired, the electric lighting installed, and fresh air in boiler covered with Kennedy's masonry. Many improvements have been made in the steam-piping and others are still in progress, the work being done by the contractor without interruption of the service.

Cooney Engine.

Under the terms of the agreement entered into last year with Mr. M. T. Davidson, the engines at this station and Shepler's, were to be returned to the City for \$20 per day each, and the rental payments were to apply as part of the purchase price. On March 11 the Cooney engine, under these conditions, became our property, and on May 4 the one at Shepler's will likewise belong to the City.

Redwood Engine.

The laying of the concrete lined pipe has been completed and the line satisfactorily tested to 50 pounds per square inch. Two more meters were placed on the 36-inch force mains, making four meters altogether at this point. They have not yet been connected to the registering apparatus, nor has the preparation for the installation of the same been erected. Connections have been made between all force mains and the by-pass, and also upon the by-pass to the stand-pipe. The stand-pipe has been tested and the manholes completed. The hand-pump for operating the large 24-inch gate by hydraulic pressure has been set up and satisfactorily operated. All the work under the contract has been completed, except some filling between the side of the pipe line and the foot of the reservoir and embankment.

Hempstead Engine.

The work to be done at this point is for the diversion of the polluted portion of the Hempstead stream, and consists principally in laying about 14,400 feet of 36-inch cast iron pipe from the head of the Hempstead Storage Reservoir to the lower end of Smith's Pond. The trench was partially opened last year, and during the past three months the pipe has been delivered and about 7,400 lineal feet laid. Under the terms of this contract it was agreed that three and one-half months after the date of written notice to the contractor to begin work, the water in the Hempstead Reservoir should be held at an elevation of not more than 17.5 feet above water supply datum. The failure to provide the increased supply heretofore frequently recommended by this Department made it impracticable to lower the storage reservoir to the stipulated height, as it would equal two serious losses in our storage; on March 5, the contractor was, therefore, given written notice to stop laying pipe at such points where the increased depth of water would interfere with this work. He was, however, permitted to continue the work at the upper end of the reservoir. The concrete foundation at the intake has been made and a portion of the brick walls for the same built; the ditch at the intake is practically finished and a portion of the filling made.

New Utrecht Driven Wells.

The work of substituting deeper wells for the old wells at the New Utrecht Pumping Station, which was begun last fall, has been continued. At the present time nine wells, with a 6-inch outer casing and 4-inch section, have been completed, of which seven are connected and are in service; there yet remain four more wells to be driven. It is more than likely that the increased demand of the section which this plant supplies will require further extension of the driven wells at this station.

Jamaica Driven Wells.

The shallow 2-inch driven wells at this station have all been taken up, cleaned and redriven, thereby increasing the supply.

Springfield Driven Wells.

Six more 8-inch wells with 5 1/4-inch section have been driven at this station during the past three months; these wells average from 150 to 160 feet in depth. There yet remain four more wells to be driven before the station is completed. This station was first put in service in December of last year, and the yield during the last three months has averaged about 2,500,000 United States gallons.

Forest Park Reservoir.

Additional cross sections required at this point, in order to make up detailed plans, have been made and mapped and the profiles partially completed. The area covered by the cross sections amounts to nearly 70 acres.

A portion of the Borough of Brooklyn is supplied by private water companies, the City paying for the use of the hydrants on same. 100 miles of mains laid. 1,216 hydrants on same. At the price for use of same is very large, \$35 to \$100 per hydrant per annum, the City should take the necessary means to purchase these plants.

Borough of Queens.

EXPENDITURES FOR QUARTER.

Table with columns: Item, Amount. Rows: Salaries—Office of Deputy Commissioner, Salaries etc., Pumping Stations, Maintenance and Repairs—Water Pipes, Fund for Street Pipe, Fund for Steam Pump, Total.

This borough is partially supplied with water by private water companies, who have the following hydrants on their mains, under contracts to be paid at a rate per year as follows:

Table with columns: Name of Company, No. of Hydrants, Rate Per Annum. Rows: Queens County Water Company, Woodhams Water Company, Citizens' Water Supply Company, Jamaica Water Supply Company.

The City owns 6 water plants: 3 in Long Island City, 1 in Flushing, 1 in College Point and 1 in Woodside.

Total pumping capacity, 16,000,000 gallons per day. Total well, etc., capacity 5,000,000 gallons per day. 5 1/2 miles of mains laid, 606 fire hydrants, 454 stop-cocks, 1,600 houses on line of mains. It is required to place these plants in proper working order and to distribute the water from same, the expenditure of \$100,000, to lay larger and new water-mains, and \$125,000 to drive new wells, furnish new machinery, build coal-houses and repair and reset present machinery.

Borough of Richmond.

EXPENDITURES DURING QUARTER.

Table with columns: Item, Amount. Rows: Salaries—Office of Deputy Commissioner, Pumping Stations, Total.

This borough is generally supplied with water by private water companies. 120 miles of mains. 404 hydrants, at \$50 per annum, and 556, at \$25 per annum.

This City owns one small plant at Tottenville that was completed in December, 1897, and, to the best of my knowledge, paid for. On account of the weather only 10 taps have been placed on the mains. The pumping plant has a capacity of 500,000 gallons per day; wells, only 150,000 gallons per day.

57,476 lineal feet of mains laid; 60 fire hydrants; 51 stop-cocks; 150 houses on line of mains. There should be during the year two more 10-inch wells and one 12-inch well driven, and the lands belonging to the City cleaned up and fenced, at an expense of \$7,000.

As far as practicable the houses will be measured and placed on maps and books, so that the charges for frontage rate (that is fire protection) will accrue against same.

Respectfully,

G. W. BIRDWELL, Chief Engineer.

DEPARTMENT OF WATER SUPPLY, BOROUGH OF BROOKLYN, April 15, 1898.

Hon. WILLIAM DALLON, Commissioner of Water Supply, City of New York.

Sir:—Statement of transactions of the Department of Water Supply, Borough of Brooklyn for the quarter ending March 31, 1898.

RECEIPTS.

Moneys Collected for Water Rents and other Sources.

Large table with columns: Date, Regular, Extra, Deposits, Receipts, Payments, All-accounts, Arrears, Total. Rows: Jan, Feb, Mar, Total.

EXPENDITURES.

Salaries—Office of Deputy Commissioner.

CR.

Appropriation, 1898 \$19,592 00

DR.

Table with columns: Item, Amount. Rows: Pay-roll, January, February, March, Total, Balance April 1, 1898.

Salaries—Office of Water Registrar.

Table with columns for Cr., De., and various months (January, February, March) showing salary amounts for the Office of Water Registrar.

Contingents—Office of Deputy Commissioner.

Table with columns for Cr., De., and various months (March 28, 1898) showing contingent amounts for the Office of Deputy Commissioner.

Table with columns: ACCOUNT, JANUARY, FEBRUARY, MARCH, TOTAL. Lists various water supply accounts and their monthly and total expenditures.

Water Construction.

Table with columns: ACCOUNT, JANUARY, FEBRUARY, MARCH, TOTAL. Lists various water construction projects and their monthly and total expenditures.

JAMES MOFFETT, Deputy Commissioner of Water Supply.

DEPARTMENT OF WATER SUPPLY—DEPUTY COMMISSIONER'S OFFICE, BOROUGH OF QUEENS, April 9, 1898.

Hon. WILLIAM DALTON, Commissioner of Water Supply, New York City.

DEAR SIR:—In accordance with section 1544 of the Greater New York Charter, I transmit herewith the following report and quarterly statement of the condition of the water supply in the Borough of Queens for the quarter ending April 1, 1898.

Annexed hereto, and forming portion of this report, is a tabulated statement showing the collections, miles of mains, fire hydrants, taps, meters, etc., in the five wards of this borough.

The First and Third Wards of the Borough of Queens have water systems belonging to the City. The First Ward has three pumping stations, supplying to it at the present time about 2,500,000 gallons of water per day.

The Third Ward has three pumping stations and supplying to it about 1,500,000 gallons per day.

There are no reservoirs or stand-pipes in the First Ward.

In the Third Ward there are three stand-pipes, one erected in 1892, the other two erected last year, now in use but not completed.

There has been no material change in the condition of the borough reported to you in my letter of January 10.

No additional mains have been laid or wells driven, or any other steps taken looking into the increase of the water supply in the First Ward, as therein recommended.

I have endeavored, by promptly remedying all reported cases of wastage, to maintain as full a supply as possible, but am still in receipt of numerous complaints.

I have not yet commenced the collection of the regular water rates in the First Ward. This should be done at once, if it is to be done. I am awaiting the determination of the Corporation Counsel on this point.

I have heretofore transmitted the contracts for hydrant service by private companies in the Second, Fourth and Fifth Wards.

If the contracts are sustained, and these hydrants placed under my jurisdiction, I should need three hydrant inspectors, in addition to my present force.

I also deem it necessary, in case we are to collect the Long Island City water rates, to have an additional Clerk here.

Yours truly, JOS. FITCH, Deputy Commissioner.

Table with columns: BOROUGH OF QUEENS, COLLECTIONS, MILES OF MAINS, FIRE HYDRANTS, TAPS, METERS, CAPACITY (GALLONS), STAND PIPES. Provides detailed statistics for each ward.

Disbursed on Account of Appropriations.

Table with columns for Office salaries, Pumping stations, Fuel, etc., Maintenance, and Total, showing disbursement amounts.

*Much salaries unpaid. APRIL 9, 1898. JOSEPH FITCH, Deputy Commissioner Water Supply, Borough of Queens.

OFFICE OF THE DEPUTY COMMISSIONER OF WATER SUPPLY OF THE CITY OF NEW YORK FOR THE BOROUGH OF RICHMOND, NEW BRIGHTON, N. Y., March 31, 1898.

REPORT OF THE TRANSACTIONS OF THE DEPARTMENT OF WATER SUPPLY, BOROUGH OF RICHMOND, FOR THE QUARTER ENDING MARCH 31, 1898.

Hon. WILLIAM DALTON, Commissioner of Water Supply, No. 150 Nassau Street, New York City.

DEAR SIR:—I herewith respectfully submit, as required by section 1544, chapter 378 of the Laws of 1897, a report of the operations of the branch of your Department located in the Borough of Richmond for the quarter ending March 31, 1898, simply prefacing the more detailed report with such general information concerning the work as I deem worthy of your consideration.

The piped water-supply of the island is, without exceptions, furnished by the artesian well system, there being three private companies operating plants, and one pumping-station with wells owned by The City of New York. The character of the water delivered is good, but regulations concerning the pollution of the water-sheds might, with profit, be authorized and enforced, as the underground source of the supply is no guarantee that surface contaminations have been entirely eliminated by the process of filtration.

Two of the private companies above mentioned have contracts for supplying fire-hydrants, draft-hydrants and sewer-flash tanks with water.

As to the quantity of water which can be secured from the island's sources, it would seem to be nearly inexhaustible, and it would further seem that a municipal ownership of the private plants would result in (assuming, of course, that the price paid represented true value) a substantial annual profit to the City and at the same time a material saving to the residents of this borough, who are supplied by the private companies. This for the following reasons:

First—One of the companies mentioned has wells on low ground near the Kill Van Kull and is obliged to supply the higher levels in the district covered by its franchise as well as the lower ones. This company, however, does not own some of the water-bearing land at greater altitudes which it has only lately developed and that to a very small extent.

Another company supplies both high and low levels from water-bearing land at high altitude. These two companies, if amalgamated or if owned by the City, could so arrange their plants as to give much better service at a much smaller cost. In some of the higher districts near St. George it is impossible now to get any water above the first floor.

Second—The people are burdened with exorbitant water rates made necessary to return profit on the invested capital, and also the wasted energy as noted above in the advantageous use of water-bearing land.

This could certainly be abated by the municipal ownership.

Third—The wording of the contracts between the City and the companies cause continual conflict between the authorities and the companies, to the detriment of the public service, which must continue for nearly five years under existing contracts.

Fourth—No appropriation has been made for repairing and renewing draw hydrants, which are a great benefit to the poor, and there are several now out of use by this season.

A reduction of water rates would stimulate the use of water throughout houses where one fixture is now in use, and thereby facilitate the flushing of sewers.

Others who are not now connected with sewers, because of the expense of a water service, would be induced to put in at least one faucet, and the increased amount of water thus passing through the sewers would render their frequent flushing by the City of less necessity than now.

During the quarter the Department in the borough has been engaged in organizing and in collecting data necessary for the conduct of its affairs.

A Cashier and two Inspectors have been appointed and the services of the Engine-men at the Tottenville plant retained. An official Tapper has been designated, and the collection of water-rates for the ensuing year are now in progress.

The transactions of the Department in detail will be found in the following pages:

Employes of the Department of Water Supply, Borough of Richmond.

Table with columns: NAME, RESIDENCE, POSITION, DATE OF APPOINTMENT, REMOVAL OR RESIGNATION, SALARY. Lists employees and their details.

STATEMENT.

Table with columns for Permits for tapping water-mains, Moneys received—Annual rates, Maintenance and operation of Tottenville Plant—Wages of Pumping Engineer, Salaries (Deputy Commissioner, Inspectors, Cashier), and Total.

TRIAL BALANCE AND STATEMENT AS PER LEDGER—DEPARTMENT OF WATER SUPPLY—BOROUGH OF RICHMOND—FOR THE QUARTER ENDING MARCH 31, 1898.

Table with columns: TITLE OF APPROPRIATION, SALARIES, INCLUDING ONE-THIRD SALARY OF DEPUTY COMMISSIONER AT \$3,000, PUMPING STATIONS AT TOTTENVILLE, SALARIES AND SUPPLIES, CONTINGENTS. Shows financial statement for the quarter.

All of which is respectfully submitted, HENRY P. MORRISON, Deputy Commissioner.

DEPARTMENT OF FINANCE.

Abstract of transactions of the Finance Department for the week ending May 28, 1898.

Table with columns: Description, Amount. Includes 'Deposited in the City Treasury', 'Bonds Sold', and 'Warrants Registered for Payment'.

With, Other of Cash, Payments, etc.

Main table with columns: County, Name of Plaintiff, Amount, Name of Defendant, Attorney. Lists various legal cases and their details.

Table with columns: Date, Name of Claimant, Amount, Name of Claim, Attorney. Lists claims filed and their corresponding attorneys.

CONTRACTS EXECUTED UP TO JANUARY 1, 1898, AND REGISTERED DURING THE WEEK ENDING MAY 14, 1898.

Table with 7 columns: No., Date of Contract, Department, Name of Contractor, Name of Sureties, Amount in Bonds, Description of Work, Cost. Row 1: Public Parks, Bar Dues, \$75,000.00, Modification of Contract No. 1897...

CONTRACTS EXECUTED SINCE JANUARY 1, 1898, AND REGISTERED DURING THE WEEK ENDING MAY 26, 1898.

Main table with 7 columns: No., Date of Contract, Department, Name of Contractor, Name of Sureties, Amount in Bonds, Description of Work, Cost. Rows include various departments like Public Buildings, Parks, and Charities with detailed contractor and surety information.

Opening of Proposals.

The Comptroller, by representative, attended the opening of bids at the following Departments: 1898. May 23. Furnishing hospital supplies and repairs, Department of Charities. May 25. Furnishing drygoods, Department of Charities. May 24. Alterations, repairs, etc., to Public Schools Nos. 17, 19, 20, etc. May 27. Dredging in North river, north of Thirty-fourth street. May 27. Furnishing shields to Police Department.

Approval of Sureties.

The Comptroller approved of the adequacy and sufficiency of the sureties on the following proposals, namely: 1898. May 25. Dredging for Department of Docks and Ferries. Marris & Cumings Dredging Company, No. 22 State street, Principal. James D. Leary, No. 43 East Twenty-fifth street, Sureties. Daniel J. Leary, No. 109 East Twenty-fifth street, Sureties. May 25. Repairing baths, etc., for Department of Public Buildings, Lighting and Supplies. Thomas Williams, No. 105 Hoyt street, Brooklyn, Principal. Fidelity and Deposit Company of Maryland, No. 35 Wall street, Sureties. United States Fidelity and Guaranty Company, No. 140 Broadway, Sureties.

1898.

May 25. Limestone screenings for Department of Parks. Calvin Tomkins, No. 329 West Eighty-seventh street, Principal. Nicholas Ryan, No. 275 Carroll street, Brooklyn, Sureties. Richard Fitzpatrick, No. 324 West Twentieth street, Sureties. May 25. Coal for Department of Water Supply. Thomas F. Tone, Twelfth avenue and One Hundred and Thirty-third street, Principal. John J. Hopper, No. 215 West One Hundred and Twenty-fifth street, Sureties. James Rogers, foot West One Hundred and Thirty-second street, Sureties. May 27. Meats for Department of Correction. Armour & Co., Principal. May 26. Gravel for Department of Parks. Harris & Maguire, No. 125 St. Mark's avenue, Brooklyn, Principal. The Fidelity and Deposit Company, No. 35 Wall street, Sureties. United States Fidelity and Guaranty Company, No. 140 Broadway, Sureties.

Official Designation.

May 25. Michael T. Daly, Deputy Comptroller, to act as Comptroller from Wednesday, May 25, to Wednesday, June 8, 1898, both days inclusive. M. T. DALY, Deputy Comptroller.

DEPARTMENT OF SEWERS.

DEPARTMENT OF SEWERS—COMMISSIONER'S OFFICE, CITY OF NEW YORK, October 12, 1898.

Supervisor of the City Record:

DEAR SIR—In accordance with section 1546, chapter 378, Laws of 1897, I herewith transmit, for publication in the CITY RECORD, a statement of the transactions of the Department of Sewers for the week ending October 8, 1898.

JAS. KANE, Commissioner of Sewers.

Table with columns: Money Received, Number of, Amount, Appropriation, Funds. Rows include sewer permits, connections, repairs, and various construction items like basins, culverts, and pipe drains.

Laboring Force Employed during the Week.

Table showing laboring force by category: Plumbers, Carpenters, Bricklayers, etc., with counts for each.

APPOINTMENTS.

- List of appointments and removals for the Borough of The Bronx, Borough of Brooklyn, and Borough of Manhattan.

APPROVED PAPERS.

Approved Papers for the Week ending October 15, 1898.

No. 461.

Resolved, That permission be and the same is hereby given to J. W. Foote to place and keep storm-doors in front of his premises on the southwest corner of Myrtle avenue and Adams street, Borough of Brooklyn, provided said storm-doors shall not exceed the dimensions prescribed by law, the work to be done at his own expense, under the direction of the Commissioner of Highways; such permission to continue only during the pleasure of the Municipal Assembly.

No. 462.

Resolved, That the following-named persons be and they hereby are appointed Commissioners of Deeds in and for The City of New York: David Joyce, No. 100 Broadway, Manhattan; Louis I. B. Barenkopf, No. 145 Norfolk street, Manhattan; John P. Besinger, No. 24 East One Hundred and Third street, Manhattan; William J. Carroll, No. 533 East Fifty-first street, Manhattan; George Hahn, No. 160 East Ninety-fifth street, Manhattan; Francis Murtagh, No. 64 Middleton street, Brooklyn; Edward Greenthal, No. 49 Chambers street, Manhattan; William Grosser, 100 East Fifty-seventh street, Manhattan; Edward Grossman, No. 442 East Eighty-sixth street, Manhattan.

List of names for the Board of Deeds, including Reginald Solney Durran, Frederick M. Livingston, Siegmund Rothschild, Fred. Samuels, Max Hollander, Harro Schacht, Albert C. Lorey, Louis I. B. Barenkopf, Henry A. Raymond, John J. McCanna, A. Doecks, William E. McPadden, William A. Bergamini, Edgar J. Kohler, George H. Young, William Philipp.

No. 463.

Resolved, That the names of the following persons, recently appointed Commissioners of Deeds, be corrected so as to read as follows: Leon Malbraison to read Leon Malraison; J. K. Trenchard to read T. K. Trenchard. Adopted by the Board of Aldermen, October 11, 1898.

No. 464.

Resolved, That the ordinance relating to the discharge of fireworks in The City of New York be and the same is hereby suspended so far as to permit displays of fireworks by the Wyandott Club in the Twenty-fourth Assembly District, Manhattan, from the date of the approval of that resolution by his Honor the Mayor, until November 10, 1898. Adopted by the Council, October 11, 1898. Adopted by the Board of Aldermen October 11, 1898. Approved by the Mayor, October 13, 1898.

P. J. SCULLY, City Clerk.

BOARDS OF LOCAL IMPROVEMENTS.

NINETEENTH DISTRICT, BOROUGH OF MANHATTAN.

Meeting Held in the Borough Office, City Hall, on September 15, 1898, at 12 M.

The roll was called and the following members answered in their names: Augustus W. Peters (President) in the chair, Councilman Wise and Aldermen Woodward. The minutes of the previous meeting were read and approved. The President submitted a communication from Mr. H. T. Andrews, asking for the closing of the corners at One Hundred and Twentieth street and Fifth avenue.

Alderman Woodward offered the following resolution: Resolved, That the Board of Local Improvements of the Nineteenth District of the Borough of Manhattan recommend to the Board of Public Improvements that the curb and sidewalk at the southeast and southwest corners of One Hundred and Twentieth street and Fifth avenue be rounded. Adopted. On motion, the meeting adjourned.

I. E. RIDER, Secretary.

DEPARTMENT OF PARKS.

DEPARTMENT OF PARKS, CITY OF NEW YORK, THE ARSENAL, CENTRAL PARK, October 14, 1898.

Supervisor of the City Record:

SIR—The Park Commissioner for the Borough of Manhattan and Richmond has taken the following action in connection with employees of the Department:

OCTOBER 13.

Resignation Accepted.

Wm. J. Cotter, Laborer.

OCTOBER 14.

Appointed.

Wm. J. Bell, No. 400 East One Hundred and Twenty-fifth street, Souder.

Richard McInerney, No. 2412 First avenue, Laborer.

Thomas Kelly, No. 345 East One Hundred Twenty-first street, Souder.

Patrick Shanahan, No. 301 East One Hundred and Twentieth street, Souder.

Jacob Eschwegg, No. 2239 Third avenue, Souder.

Chas. M. Daniel, No. 406 East One Hundred and Twenty-second street, Souder.

E. P. Broman, No. 117 East One Hundred and Twenty-sixth street, Souder.

Owen Smith, No. 243 Madison street, Cement Worker.

Ferdinando Oliviere, No. 423 East One Hundred and Fourteenth street, with team.

Restored to Duty.

George Brickner, Fireman, No. 67 Columbus avenue, absent since August last on account of sickness.

Pay Fixed.

John F. Minz, Laborer, at \$2 per day.

TO TAKE EFFECT OCTOBER 15.

Discharged.

John Monahan, with team.

Henry Wingrove, Inspector.

Respectfully,

WILLIS HOLLY,

Secretary, Park Board.

THE CITY OF NEW YORK, DEPARTMENT OF PARKS, OFFICE OF COMMISSIONER FOR THE BOROUGH OF THE BRONX, ZBROWSKI MANSION, CLAREMONT PARK, October 14, 1898.

Supervisor of the City Record:

DEAR SIR—Pursuant to section 1546, chapter 378, Laws of 1897, I hereby notify you, for publication in the CITY RECORD, that, by order of the Commissioner for the Borough of The Bronx, the resignation of Hugh P. O'Rourke, Carpenter, has this day been accepted.

Respectfully yours,

MAX K. KAHN,

Private Secretary.

MUNICIPAL ASSEMBLY.

OFFICE OF THE BOARD OF ALDERMEN,

NEW YORK, October 15, 1898.

The Committee on Railroads of the Board of Aldermen will hold public hearings at the City Hall as follows:

On "An ordinance to promote the safety of pedestrians, by compelling the equipment of street surface railroad cars with automatic ladders," Friday, October 21, 1898, at 1.30 P. M.

On a resolution permitting the Atlantic Terra Cotta Company to lay a switch or spur across Broadway, between Fisher avenue and Church street, Tottenville, Borough of Richmond, Friday, October 21, 1898, at 1 P. M.

The Joint Committee of Railroads and Streets and Highways of the Board of Aldermen will hold a public hearing at the City Hall on the petition of property-owners and residents of DeKalb avenue, Borough of Brooklyn, calling attention to the condition of the trolley system of said avenue, particularly between Cumberland and Raymond streets, Friday, October 21, 1898, at 2.30 P. M.

OFFICE OF THE BOARD OF ALDERMEN,

NO. 8 CITY HALL,

NEW YORK, October 10, 1898.

Public hearing will be held in the Aldermanic Chamber, City Hall, before the Committee on Parks, Wednesday, October 19, 1898, at 2 P. M. to consider the advisability of establishing a park at Houston, Elizabeth, Prince and Mott streets.

M. F. BLAKE,

Clerk.

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, 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.

ROBERT A. VAN WYCK, Mayor. ALFRED M. DOWNS, Private Secretary.

Bureau of Licenses.

No. 1 City Hall, 9 A. M. to 4 P. M. DAVID J. ROOPE, Chief. GEORGE W. BROWN, Jr., Deputy.

COMMISSIONERS OF ACCOUNTS.

Rooms 124 and 125 Stewart Building, 9 A. M. to 4 P. M. JOHN C. HERTLE and EDWARD OWEN.

BOARD OF ARMORY COMMISSIONERS.

THE MAYOR, Chairman; PRESIDENT OF DEPARTMENT OF TAXES AND ASSESSMENTS, Secretary; Address THOMAS L. FRYER, Stewart Building. Office hours, 9 A. M. to 4 P. M.; Saturdays, 9 A. M. to 12 M.

AQUEDUCT COMMISSIONERS.

Room 209 Stewart Building, 9th floor, 9 A. M. to 4 P. M. JOHN J. RYAN, MAURICE J. BOWEN, WILLIAM H. TEN DYCK, JOHN P. WINDOLEN and THE MAYOR, and COMPTROLLER, Commissioners; HARRY W. WALKER, Secretary; A. FRELEY, Chief Engineer.

The contract will be re-estimated and rates as provided by law.

JOHN W. KELLER, President. ADOLPH SIMIS, Jr., Commissioner. JAMES FEENEY, Commissioner. Department of Public Charities.

BOARD OF ESTIMATE AND APPORTIONMENT.

BOARD OF ESTIMATE AND APPORTIONMENT, New York, September 24, 1898.

NOTICE TO TAXPAYERS.

AT A MEETING OF THE BOARD OF ESTIMATE AND APPORTIONMENT, held this day, the following resolution was adopted:

Resolved, That this Board does hereby designate Tuesday, the 17th day of October, 1898, at eleven o'clock in the forenoon, at the office of the Mayor, as the time and place for the commencement of the consideration of the Budget for 1899...

CHAS. V. ADEE, Clerk.

DEPARTMENT OF STREET CLEANING.

SALE OF PROPERTY OF THE DEPARTMENT OF STREET CLEANING.

PUBLIC NOTICE.

NOTICE IS HEREBY GIVEN THAT THE following described articles of property of the Department of Street Cleaning will be sold...

TUESDAY, THE 20TH DAY OF OCTOBER, 1898.

- 300 Horses (more or less). 1000 Bales of Hags (more or less). 20000 pounds (more or less) of Old Tm, Malchale, Cast and Scrap Iron.

PERSONS HAVING BULKHEADS TO FILL IN the vicinity of New York Bay, can procure material for the purpose...

MUNICIPAL CIVIL SERVICE COMMISSION.

MUNICIPAL CIVIL SERVICE COMMISSION OF THE CITY OF NEW YORK.

PUBLIC NOTICE IS HEREBY GIVEN THAT open competitive examinations will be held...

- Wednesday, October 20, POLICE DOORMAN. Friday, October 21, SUPERVISING ENGINEER. Monday, October 23, PILE DRIVING ENGINEER.

BOROUGH OF BROOKLYN.

I HAVE RECEIVED THE FOLLOWING petitions, now to file in my office for inspection...

Eldert street, grading lot on the north side of Eldert street, between Hamburg avenue and Knickerbocker avenue...

Groene avenue, flagging sidewalk on the south side of Groene avenue, between St. Nicholas avenue and Wyckoff avenue...

Gates avenue, fencing lot on the south side of Gates avenue, between Knickerbocker avenue and Irving avenue...

Gates avenue, flagging sidewalk on the south side of Gates avenue, near Irving avenue...

Central avenue, grading lots on the west side of Central avenue, between Grover street and Linden street...

Central avenue, flagging sidewalks on the west side of Central avenue, between Grover street and Linden streets...

Miller avenue, flagging sidewalks on the northwest corner of Miller avenue and Fulton street...

Jamaica avenue, flagging sidewalks on the northerly side of Jamaica avenue, between Crescent street and Cypress Hills road...

Irving avenue, fencing vacant lots on the west side of Irving avenue, between Stockholm street and DeKalb avenue...

Knickerbocker avenue, fencing lots on the west side of Knickerbocker avenue, between Gratton street and Harrison place...

Starr street, flagging sidewalk on the south side of Starr street, between Knickerbocker avenue and Hamburg avenue...

Hart street, flagging sidewalk on the south side of Hart street, between Hamburg avenue and Knickerbocker avenue...

Bushwick avenue, flagging sidewalk on the east side of Bushwick avenue, between Aberdeen street and de Sales place...

Bushwick avenue, flagging sidewalk on the west side of Bushwick avenue, between Aberdeen street and de Sales place...

Aberdeen street, flagging sidewalk on the south side of Aberdeen street, between Bushwick avenue and Evergreen cemetery...

Central avenue, fencing vacant lots on the west side of Central avenue, between Grove street and Linden streets...

Knickerbocker avenue, electric light at the corner of Knickerbocker avenue and Gratton street...

Jerman street, complaint about factory situated on Jerman street, between Eastern parkway and Glenmore avenue.

BEHAVIORAL ADVISOR, complaint about barn at the corner of Pennsylvania avenue and Glenmore avenue.

DEPARTMENT OF FINANCE.

NOTICE TO TAXPAYERS. DEPARTMENT OF FINANCE, BUREAU FOR THE COLLECTION OF TAXES.

NOTICE IS HEREBY GIVEN THAT THE Assessment-rolls of Real Estate, Personal Property and Bank Stock...

Each estimate must be verified by the oath in writing, of the person making the same, that the several matters therein stated are true...

DEPARTMENT OF FINANCE—CITY OF NEW YORK, BUREAU FOR THE COLLECTION OF TAXES.

NOTICE OF ASSESSMENTS FOR LOCAL IMPROVEMENTS.

NOTICE IS HEREBY GIVEN THAT THE Assessment Rolls in the following entitled matters have been completed...

- Scott avenue, opening Scott avenue, between Metropolitan and Flushing avenues. Belmont avenue, removal of obstruction at railroad crossing...

Flagging Rochester avenue, east side, between Pacific street and Nassau street.

Flagging Second avenue, east side, between Mason street and McDougall street.

Chapter 133, Laws of 1898, title 1, section 10, and title 19, section 9...

On all cases and on all assessments except assessments for grading and paving, which shall hereafter be paid to the Receiver of Taxes...

BIRD S. COLER, Comptroller. DAVID E. AUSTIN, Receiver of Taxes. JAMES B. BOUCK, Deputy Receiver of Taxes.

INTEREST ON CITY BONDS AND STOCKS.

THE INTEREST DUE NOVEMBER 1, 1898, ON the Registered Bonds and Stocks of The City of New York...

The interest due November 1, 1898, on the Coupon Bonds and Stocks of the former City of New York...

BIRD S. COLER, Comptroller. THE CITY OF NEW YORK—DEPARTMENT OF FINANCE.

DEPARTMENT OF WATER SUPPLY.

DEPARTMENT OF WATER SUPPLY, COMMISSIONER'S OFFICE.

TO CONTRACTORS.

BIDS OR ESTIMATES, ENCLOSED IN A sealed envelope, with the title of the work and the name of the bidder...

THURSDAY, OCTOBER 20, 1898. The bids will be publicly opened by the head of the Department...

FOR FURNISHING THE DEPARTMENT OF WATER SUPPLY WITH AN AERATED WATER SUPPLY...

FOR THE IMPROVEMENT OF PUMPING PLANT, COLLEGE POINT, BOROUGH OF QUEENS.

FOR FURNISHING DELIVERING AND LAYING WATER MAINS IN SOUTHERN BOULEVARD...

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same...

DEPARTMENT OF CORRECTION, BUREAU FOR THE COLLECTION OF TAXES.

SEPALED PROPOSALS WILL BE RECEIVED BY the Committee on Buildings of the Board of Education of The City of New York...

MONDAY, OCTOBER 17, 1898. for supplying New Furniture for Public Schools...

Plans and specifications may be seen and blank proposals obtained at the Annex of the Board of Education...

The attention of bidders is especially called to the time stated in the contract within which the work must be completed...

The party submitting a proposal and the parties proposing to become sureties, must each state his name and place of residence...

It is required, as a condition precedent to the acceptance or consideration of any proposal, that a certified check upon a National Bank...

DEPARTMENT OF CORRECTION, BUREAU FOR THE COLLECTION OF TAXES.

PROPOSALS FOR INSTALLING THREE ELEVATORS ON BLACKWELL'S ISLAND.

SEPALED BIDS OR ESTIMATES FOR INSTALLING three elevators on Blackwell's Island...

Plans and specifications will be received at the office of the Department of Correction...

DEPARTMENT OF CORRECTION, BUREAU FOR THE COLLECTION OF TAXES.

PROPOSALS FOR INSTALLING THREE ELEVATORS ON BLACKWELL'S ISLAND.

SEPALED BIDS OR ESTIMATES FOR INSTALLING three elevators on Blackwell's Island...

Plans and specifications will be received at the office of the Department of Correction...

DEPARTMENT OF EDUCATION.

SEPALED PROPOSALS WILL BE RECEIVED BY the Committee on Buildings of the Board of Education of The City of New York...

MONDAY, OCTOBER 21, 1898. for supplying Furniture for Public Schools...

Plans and specifications may be seen and blank proposals obtained at the Annex of the Board of Education...

The attention of bidders is especially called to the time stated in the contract within which the work must be completed...

The party submitting a proposal and the parties proposing to become sureties, must each state his name and place of residence...

It is required, as a condition precedent to the acceptance or consideration of any proposal, that a certified check upon a National Bank...

DEPARTMENT OF WATER SUPPLY, COMMISSIONER'S OFFICE.

TO CONTRACTORS.

BIDS OR ESTIMATES, ENCLOSED IN A sealed envelope, with the title of the work...

THURSDAY, OCTOBER 20, 1898. The bids will be publicly opened by the head of the Department...

FOR FURNISHING THE DEPARTMENT OF WATER SUPPLY WITH AN AERATED WATER SUPPLY...

FOR THE IMPROVEMENT OF PUMPING PLANT, COLLEGE POINT, BOROUGH OF QUEENS.

FOR FURNISHING DELIVERING AND LAYING WATER MAINS IN SOUTHERN BOULEVARD...

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same...

DEPARTMENT OF CORRECTION, BUREAU FOR THE COLLECTION OF TAXES.

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MONDAY, OCTOBER 17, 1898. for supplying New Furniture for Public Schools...

Plans and specifications may be seen and blank proposals obtained at the Annex of the Board of Education...

The attention of bidders is especially called to the time stated in the contract within which the work must be completed...

The party submitting a proposal and the parties proposing to become sureties, must each state his name and place of residence...

It is required, as a condition precedent to the acceptance or consideration of any proposal, that a certified check upon a National Bank...

DEPARTMENT OF CORRECTION, BUREAU FOR THE COLLECTION OF TAXES.

PROPOSALS FOR INSTALLING THREE ELEVATORS ON BLACKWELL'S ISLAND.

SEPALED BIDS OR ESTIMATES FOR INSTALLING three elevators on Blackwell's Island...

Plans and specifications will be received at the office of the Department of Correction...

DEPARTMENT OF CORRECTION, BUREAU FOR THE COLLECTION OF TAXES.

PROPOSALS FOR INSTALLING THREE ELEVATORS ON BLACKWELL'S ISLAND.

SEPALED BIDS OR ESTIMATES FOR INSTALLING three elevators on Blackwell's Island...

Plans and specifications will be received at the office of the Department of Correction...

Twenty-six acres, in The City of New York, until 20 o'clock, a. m.

MONDAY, OCTOBER 14, 1898.

The person or persons making any bid or estimate shall furnish the same in a sealed envelope...

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same...

Each bid or estimate shall be accompanied by the amount of the security required for the faithful performance of the contract...

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FRANCIS J. LANEY, Commissioner.

BOARD OF PUBLIC IMPROVEMENTS.

BOARD OF PUBLIC IMPROVEMENTS, No. 245 BROADWAY.

NOTICE IS HEREBY GIVEN THAT THE Board of Public Improvements of The City of New York, desiring it for the public interest...

Resolved, That the Board of Public Improvements of The City of New York, in pursuance of the provisions of section 24 of chapter 278, Laws of 1897...

Manhattan, City of New York, more particularly described as follows:

Beginning at a point the intersection of the centre lines of Wicker place and Van Cortlandt place...

Resolved, That this Board consider the proposed change of grade of the above named place...

Resolved, That the Secretary of this Board cause these resolutions, and a notice to all persons affected thereby, to be published in the City Record...

JOHN H. MOONEY, Secretary.

Dated New York, October 12th 1898.

BOARD OF PUBLIC IMPROVEMENTS, No. 245 BROADWAY.

NOTICE IS HEREBY GIVEN THAT THE public hearing in the matter of the proposed widening of Canfield street, between East One Hundred and Fifty-fifth streets...

JOHN H. MOONEY, Secretary.

Dated, New York, October 12, 1898.

DEPARTMENT OF PARKS.

DEPARTMENT OF PARKS, ARSENAL, CENTRAL PARK, BOROUGH OF MANHATTAN, CITY OF NEW YORK, October 15, 1898.

TO CONTRACTORS.

SEALED BIDS OR ESTIMATES, WITH THE title of the work and the name of the bidder or bidders indorsed thereon, will be received by the Park Board...

THURSDAY, OCTOBER 27, 1898.

for the following work in the Borough of Brooklyn: FOR FURNISHING AND DELIVERING LARGE FIELD SPONGE OR SPOUNGERS, AT SUNSET PARK, ON FIFTH AVENUE, BETWEEN FORTY-FIFTH AND FORTY-SEVENTH STREETS...

Each bid or estimate shall be accompanied by the amount of the security required for the faithful performance of the contract...

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Each bid or estimate shall be accompanied by the amount of the security required for the faithful performance of the contract...

Resolved, That the Board of Public Improvements of The City of New York, in pursuance of the provisions of section 24 of chapter 278, Laws of 1897...

provision, accuracy or otherwise, when any objection is made.

The Park Board reserves the right to reject any or all the bids received in response to this advertisement...

Blank forms for proposals, and forms of the several contracts which the successful bidder will be required to execute, can be had...

GEORGE C. CLAUSEN, AUGUST MOEBUS, GEORGE V. BROWER, Commissioners of Parks of The City of New York.

DEPARTMENT OF PARKS, ARSENAL, CENTRAL PARK, BOROUGH OF MANHATTAN, CITY OF NEW YORK, October 4, 1898.

TO CONTRACTORS.

SEALED BIDS OR ESTIMATES, WITH THE title of the work and the name of the bidder or bidders indorsed thereon, will be received by the Park Board...

THURSDAY, OCTOBER 20, 1898.

for the following work in the Borough of Manhattan: FOR THE CONSTRUCTION OF A RANGE OF GREENHOUSES AND APPURTENANCES IN CENTRAL PARK, NEAR FIFTH AVENUE AND ONE HUNDRED AND FIFTH STREET.

The Landscape Gardener's estimate of the work to be done and by which the bids will be made is as follows:

Item 1. Buildings Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14, complete with heating and ventilating apparatus, finished and ready for use.

Item 2. Buildings Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9, complete with their heating and ventilating apparatus, finished and ready for use.

Each bid or estimate shall be accompanied by the amount of the security required for the faithful performance of the contract...

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person 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...

No bid or 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...

No bid or 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...

The Park Board reserves the right to reject any or all the bids received in response to this advertisement...

Blank forms for proposals, and information relative thereto can be had at the office of the Park Board, Arsenal, Central Park...

GEORGE C. CLAUSEN, AUGUST MOEBUS, GEORGE V. BROWER, Commissioners of Parks of The City of New York.

DEPARTMENT OF FIRE.

DEPARTMENT OF FIRE, 100 EAST 57TH STREET, CITY OF NEW YORK, October 15, 1898.

SEALED PROPOSALS FOR FURNISHING.

This Department with the Fire Apparatus below specified will be provided by the Fire Commissioners, at the office of the Fire Department, Nos. 157 and 159 East 57th Street, street, in the Borough of Manhattan, in The City of New York, until 20 o'clock, a. m.

WEDNESDAY, OCTOBER 20, 1898.

SEALED PROPOSALS FOR FURNISHING Fire Tractor, and Fire Escape. The amount of the security required is \$5,000, and the time for delivery sixty days.

Each bid or estimate shall be accompanied by the amount of the security required for the faithful performance of the contract...

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Each bid or estimate shall be accompanied by the amount of the security required for the faithful performance of the contract...

erected thereon or in the supplies or work to which it...

dated October 13, 1898. LOUIS F. HOFFEN, President.

THE UNDERSIGNED COMMISSIONERS of Estimate and Assessment in the above-entitled matter...

JOHN J. SCANNELL, Commissioner.

CORPORATION NOTICE.

PUBLIC NOTICE IS HEREBY GIVEN TO THE owners of various lots, houses and lots, improved...

Boarding in Tenements. No. 1, Baychester, public, cribbing, flagging...

EDWARD MOORE, EDWARD CAHILL, THOMAS A. WILSON, PATRICK M. HAERTY.

BOROUGH OF THE BRONX.

I HEREBY GIVE NOTICE THAT PETITIONS have been prepared to be and are on file in my office...

Viaduct construction by assessment, from the intersection of Franklin and Fulton avenues...

Dated October 13, 1898. LOUIS F. HOFFEN, President.

SUPREME COURT.

FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community of The City of New York...

WE, THE UNDERSIGNED COMMISSIONERS of Estimate and Assessment in the above-entitled matter...

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community of The City of New York...

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

In the matter of the application of the Department of Public Parks...

WE, THE UNDERSIGNED COMMISSIONERS of Estimate and Assessment in the above-entitled matter...

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

offer on the 27th day of October, 1898, at 3 o'clock in the afternoon...

THOMAS P. WICKES, CONRAD HARRIS, PIERRE V. R. HOES, Commissioners.

COAS. H. GOETTL, Clerk.

FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community of The City of New York...

WE, THE UNDERSIGNED COMMISSIONERS of Estimate and Assessment in the above-entitled matter...

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community of The City of New York...

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

between Drake street and Halleck street to the middle line of the block between Spofford avenue and Randall avenue...

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

FIRST DEPARTMENT.

In the matter of the application of The Mayor, Aldermen and Community of The City of New York...

JOHN PAUL BOGOCK, Chairman. WALTER MCBRIDE, EDWARD S. KAUFMAN, Commissioners.

SECOND JUDICIAL DISTRICT.

CARREL LAKE GIBSONA, PUTNAM COUNTY.

In the matter of the application and petition of Michael T. Daly...

JOHN WHALEN, Corporation Counsel. No. 3 Tryon Row, New York City.

THE CITY RECORD.

THE CITY RECORD IS PUBLISHED DAILY. Sundays and legal holidays excepted, at No. 3 City Hall, New York City.