

DEPARTMENT OF PARKS.

REPORT FOR THE YEAR ENDING DECEMBER 31, 1900.

DEPARTMENT OF PARKS—CITY OF NEW YORK, }
THE ARSENAL, CENTRAL PARK, }
November 2, 1901.

Hon. ROBERT A. VAN WYCK, Mayor :

SIR—I have the honor to send herewith the annual report of the Commissioners of Parks of the operations of the Department in the borough divisions over which they have administrative jurisdiction, for the year 1900.

Very respectfully yours,

WILLIS HOLLY, Secretary, Park Board.

SCHEDULE.

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|----------------------------|-------------------------|
| 1. Manhattan and Richmond. | 3. Brooklyn and Queens. |
| 2. The Bronx. | 4. Statistics. |

DEPARTMENT OF PARKS—CITY OF NEW YORK. }
THE ARSENAL, CENTRAL PARK, }
January 2, 1901.

Hon. ROBERT A. VAN WYCK, Mayor :

SIR—I have the honor to transmit herewith my report of the operations of the Department of Parks, boroughs of Manhattan and Richmond, for the year 1900.

Respectfully,

GEORGE C. CLAUSEN, Commissioner of Parks,
Boroughs of Manhattan and Richmond.

MANHATTAN AND RICHMOND.

In addition to the regular maintenance work, such as cleaning the walks and drives, pruning the trees, cutting and fertilizing the various lawns, etc., touched upon in the several quarterly

reports, the forces of the Department were engaged during the year in many important works of construction and improvement.

The planting of Riverside Park north of Ninety-sixth street was completed as far as One Hundred and Eighth street and considerable progress made in the new plantations south of Ninety-sixth street. The planting of this large tract in the short period available has required the best attention and workmanship on the part of the employees, but the result has been satisfactory. The loss of newly planted trees and shrubs caused by transplanting has been small, but a great deal of damage has been done by wanton destruction on the part of lawless persons. In connection with this work quantities of noxious weeds were removed and the lawns reseeded or sodded. The lawns from Eighty-first to Ninety-sixth street were also made over and put in a satisfactory condition.

Of the old woodland in Riverside Park there remained in certain sections only dead or dying trees, or those so full of dead wood as to be dangerous to the public. The dangerous trees were removed or properly trimmed and the young trees pruned and cared for, so that a leafy and healthy condition is now apparent, a great contrast to the place before this work was accomplished. Hardy species of woodland trees and shrubs were used in the plantations, including the Japanese Ginko, which has been found to be able to stand the considerable changes of temperature that occur along the water-front during the year. In the development of Riverside Park it has been kept in mind that the time is not far distant when all the older trees will die and the shelter and shade in the park will have to be provided by the trees now being set out. The problem of preserving the beautiful river vistas without exposing the park too greatly to the winds has also been considered in the planting, and it is believed that the future will show that the plans were well conceived and executed.

Ninety-sixth Street, Riverside Drive, Viaduct.

The necessity for a viaduct to carry Riverside drive over West Ninety-sixth street has been apparent for many years, the laws of 1894 authorizing the City to raise funds for the purpose. Ninety-sixth street is the thoroughfare used for carting to and from the extensive docks at the foot of West Ninety-seventh street used for unloading heavy building materials, coal, etc. This heavy traffic crossing the pleasure traffic of Riverside drive at the foot of a down grade has always been a source of danger and annoyance to the public. Early in the summer of 1900 funds were made available for this work and it was begun during August, the contract price being approximately \$200,000. The viaduct will be completed during 1901 and the unfinished park areas between Ninety-fifth and Ninety-seventh streets will be improved and a tool-house, lavatory and entrances to the park constructed. The work accomplished during 1900 is:

DIVISION A.

- 2,552 cubic yards of excavation for foundations and wall footings.
- 709 cubic yards of concrete in foundation.
- 211 cubic yards of first-class rubble retaining-wall.
- 112 cubic feet of pedestal pier caps.
- 207 linear feet of 12-inch pipe laid.

DIVISION D.

1,295 cubic yards of excavation for foundation and wall.

475 cubic yards of concrete in foundation.

350 cubic yards of masonry in Ninety-sixth street wall.

In connection with the viaduct it was found necessary to construct a new sewer to take the place of existing one, owing to its being located directly under the main retaining-wall. This work should be completed early in 1901. The following was accomplished in 1900 :

1,200 cubic yards of excavation of all kinds.

500 linear feet of sewer with manholes, etc.

Central Park.

In the Central Park the renovation of old shrubberies was carried on extensively, especially in the Ramble. Hardy wild and exotic plants were introduced in large numbers. The wild flora in the woods at the upper end of the park was protected and encouraged to grow and large numbers of the wild flowers were transplanted to bare ground with good results. Wild asters and golden rod, seeded one or two years ago, spread over large tracts of bare ground and flowered beautifully in the early fall. Seeds of wild plants were collected in the woods in the suburbs of the city in 1898 and planted in Central Park, with very gratifying results. Many heretofore unsightly spots in the park have been brightened with wild and cultivated flowers and it is believed that the masses of color along the drives and in wood and copse, especially in the spring, is unsurpassed by similar displays in any park in the world.

Sewer.

The sewer from the Swedish School-house, Central Park, was completed during the year. Through the remodeling of this building and the construction of this sewer, nearly 1,500 feet long, a shelter and comfort station has been afforded to the public on the west side of the park where one is urgently needed. The structure, always an ornamental and interesting one, is now in first-class condition and is visited by many people. The improvements cost approximately \$10,000. The laying of the sewer involved :

1,452 linear feet of 10-inch pipe sewer laid.

142 cubic yards of concrete cradle.

7 manholes built.

821 cubic yards of rock excavation.

4,203 feet B. M., of timber in construction.

4,476 square feet of sod laid.

Fifth Avenue and Fifty-ninth Street Entrance.

The appearance of the principal entrance to the Central Park at Fifth avenue, Fifty-eighth and Fifty-ninth streets has been greatly improved. New lawns were laid out, a new walk system inaugurated and a system of unique electric lights installed. The work, costing approx-

imately \$9,500, greatly enhanced the beauty of this entrance and effected much needed repair and embellishment. In detail it was as follows :

- 270 cubic yards of excavation of all kinds.
- 379 cubic yards of mould in place.
- 23 cubic yards of rubble-stone masonry built.
- 135 linear feet of bluestone coping set.
- 73 linear feet of 8-inch curb, straight, set.
- 373 linear feet of 8-inch curb, curved, set.
- 870 linear feet of 2½-inch edging, straight and curved, set.
- 339 linear feet of old curb redressed and reset.
- 60 linear feet of sills furnished and set.
- 16 base blocks for electric-light poles furnished and set.
- 1 walk basin built.
- 57 linear feet of vitrified pipe laid.
- 11,684 square feet of asphalt walk pavement laid.
- 772 square feet of rock asphalt gutters laid.
- 12,138 square feet of sod laid.
- 16 electric lamp-posts furnished and erected.

Water Supply.

For many years it has been impossible to obtain a sufficient supply of water on the west side of Central Park or to properly sprinkle the lawns during the hot summer weather. The existing water-pipes were of an antiquated cement type, and owing to many leaks which could not be traced, the pressure was altogether inadequate and much water was wasted. A contract was let for a new system on the west side, at a cost of about \$21,000, and the work completed during the year. It is deemed necessary to continue this work until the entire park shall be provided with an up-to-date irrigation system. The work completed in 1900 was :

- 6,304 cubic yards of earth excavation.
- 478 cubic yards of rock excavation.
- 6,692 cubic yards of filling in place.
- 260 tons of cast-iron pipe, straight, 4-inch, 6-inch, 8-inch and 10-inch, furnished.
- 19 tons of cast-iron pipe, special, 4-inch, 6-inch, 8-inch and 10-inch, furnished.
- 3,161 linear feet of cast-iron pipe, 4-inch, straight and special, laid.
- 3,857 linear feet of cast-iron pipe, 6-inch, straight and special, laid.
- 1,754 linear feet of cast-iron pipe, 8-inch, straight and special, laid.
- 2,769 linear feet of cast-iron pipe, 10-inch, straight and special, laid.
- 3,007 linear feet of wrought-iron pipe, 2½-inch, furnished and laid.
- 5 10-inch stop-cocks and brick basins complete.
- 4 8-inch stop-cocks and brick basins complete.
- 9 6-inch stop-cocks and brick basins complete.
- 13 4-inch stop-cocks and brick basins complete.
- 62 2½-inch stop-cocks and boxes.

- 60 hydrants taken up, repaired and reset.
- 9 blow-offs, with brick basins, cocks, etc., set.
- 6 air cocks furnished and set.
- 240,190 square feet of sod laid.
- 170 linear feet of $\frac{3}{8}$ -inch lead pipe connections.
- 53 linear feet of $1\frac{1}{4}$ -inch lead pipe connections.
- 7 $\frac{3}{8}$ -inch taps, set.
- 3 1-inch taps, set.
- 5 stop-cocks, $\frac{3}{8}$ -inch and $1\frac{1}{4}$ -inch, set.

Drainage.

It was found necessary to reconstruct the entire drainage system of the East drive, Central Park, between Eighty-fifth and Ninety-seventh streets, and the territory adjacent. After heavy rains the bridle road and the drive at the Ninetieth street entrance were submerged because of defective drainage, resulting in muddy drives and soggy lawns. Some of the basins were found to be not connected with the main drains, and the drains were in places choked up and broken. A contract involving about \$8,000 was let for a new system, which has remedied the difficulty. The work done was:

- 715 linear feet of 6-inch vitrified pipe laid.
- 298 linear feet of 8-inch vitrified pipe laid.
- 1,007 linear feet of 10-inch vitrified pipe laid.
- 2,093 linear feet of 12-inch vitrified pipe laid.
- 151 cubic yards of rock excavated.
- 4 road basins built complete.
- 4,188 square feet of sod laid.
- 252 square yards of gutters taken up and relaid.

Repairing Walks.

The walks surrounding the Arsenal Building and adjacent to the Menagerie buildings, Central Park, were found to urgently require repairs, and a new wearing surface of rock asphalt was laid. These repairs, costing some \$2,100, consisted of 16,732 square feet of asphalt surface and 21 cubic yards of Portland cement concrete.

Asphalt Gutters.

A great improvement in the East drive, from the Marble Arch to a point about opposite One Hundred and Sixth street, was completed by the laying of rock asphalt gutters for surface drainage. The old gutters, consisting of rubble and cobble stones, were unsightly and offered an uneven surface for the flow of water. The improvement added to the width of the roadway and bettered the appearance of the park to a great degree. It is believed that the extension of these asphalt gutters throughout the park will be an advisable move, as their cost compares favorably with the cost of stone gutters when the repair of the latter is taken into consideration. New crosswalks were laid and the walks adjacent to the work repaved where necessary to meet the proper grade of the gutters. This work comprised:

In Gutters.

28,087 square feet of asphalt wearing surface laid.
344 cubic yards of Portland cement concrete laid.

In Crosswalks.

304 square yards of asphalt wearing surface laid.
13 cubic yards of binder laid.

In Walks.

2,804 square feet of asphalt wearing surface laid.
26 cubic yards of concrete base laid.
1 walk basin built.
56 linear feet of 6-inch vitrified pipe laid.

Conservatory.

The number of visitors to the Conservatory, Central Park, exceeded 600,000 during the year. The exhibits there are very popular and in addition a very large number of plants used in the parks throughout the City are propagated there at comparatively small cost. During the year 1900 145,000 tender plants, valued at \$16,000, were raised and in the Conservatory and the Sixty-sixth street nursery 70,000 plants for spring display, valued at \$3,000. The total value of all plants raised is estimated at \$27,000. Taking the cost of maintenance and the value of the plants raised annually into consideration, it is believed that the Conservatory furnished entertainment to the people at as small an expense as any institution in the country.

Hamilton Fish Park.

The improvement of Hamilton Fish Park, begun in 1899, was completed in 1900. This park, located in one of the most thickly populated districts of the city, affords a breathing space for thousands of people. The cost of improving this park was about \$164,000 and the portion of the work done in 1900 was :

2 exedras completed.
4 electric-light towers erected.
21,410 square feet of asphalt walk pavement (2-inch) laid.
5,250 square feet of asphalt walk pavement (1-inch) laid.
1,220 linear feet of bluestone edging furnished and laid.
4 drinking-fountains complete.
1,400 square feet of sod furnished and laid.
½ acre of ground seeded.

Work on building to the amount of \$6,000.

Harlem River Driveway.

The Harlem River Driveway, popularly known as the "Speedway," has proved the success predicted for it by its projectors. Its beneficial effect upon the industry of breeding and selling speeding and road horses, and upon the manufacture and sale of wagons and harness incidental

thereto, is incalculable. It is doubtful if at any other place in the world a spectacle equal to that frequently seen at the Speedway can be witnessed. It is a common occurrence in the fall and spring months for thousands of people to congregate there, where the owners of fast horses from all over the country gather and test their qualities. The spectator is not only entertained with exhibitions of speed between the very best horses, but the number of contests is practically unlimited. The building of the Speedway has not only stimulated the horse and carriage industry in this city, but throughout the country, and in many other cities similar roadways are being constructed. The rules adopted by the Department to govern the uses of the roadway, and which have given general satisfaction, are as follows :

1. The use of the Speedway is restricted to light vehicles of the classes known as buggies, runabouts, surreys and other like vehicles adapted to the speeding of light harness horses, seating not more than four persons and drawn by one or two horses, except that exercising carts may be used until 2.30 P. M.
2. Speeding on Sundays and holidays, and after 3 o'clock P. M. on other days, will be permitted in one direction, from north to south only. Turning is forbidden, except at the ends of the driveway and at the bridges.
3. When not speeding, drivers must keep closely to the right-hand side of the road and keep moving.
4. Pedestrians must not cross on the roadway ; subways are provided for that purpose.
5. Loud shouting, to make horses break or to urge them on, is strictly forbidden.

Violations of these rules are punishable by a fine not to exceed \$10.

A brief description of the Harlem River Driveway and its construction, for which the Department has received many requests, is as follows :

The Harlem River Driveway extends from One Hundred and Fifty-fifth street and St. Nicholas place to the easterly extremity of Dyckman street, Borough of Manhattan, The City of New York, a distance of about two and one-fifth miles. It was constructed as a roadway especially fitted for driving purposes, with a sidewalk on each side throughout its entire length. It is intended to be a resort of those drivers who desire a specially prepared roadway surface for the best class of driving with light vehicles. Although the grade from One Hundred and Fifty-fifth street to the shore of the Harlem river has necessarily been constructed with a macadam surface on a telford foundation, to avoid destructive washing by storms, the entire remaining portion of the roadway surface is selected sandy loam, giving practically a racetrack on which the fastest driving can be done. These general purposes have controlled the plans and construction.

The original act of the Legislature contemplated but one sidewalk, on the westerly side of the driveway. The original act was amended, however, and a sidewalk on the easterly side constructed. It then became necessary, to afford passage from one walk to the other, to construct three subways. These are sub-surfaced arched passageways from one side to the other.

The magnitude of the entire work can be realized from the following statement, which includes only a few of the chief items :

Excavation, cubic yards.....	463,000
Filling, cubic yards.....	781,000

Dredging, cubic yards.....	\$734,000
Crib-bulkhead, cubic feet.....	6,350,000
Masonry, cubic yards.....	70,000
Piling, linear feet.....	370,000
Garden mould, cubic yards.....	56,000

The total width of the driveway varies from 100 to 150 feet, while the width of the roadway proper varies from 52 to 95 feet. The difference between the widths of the roadway proper and of the entire driveway is made up of the planting trenches and the sidewalks, together with certain other strips of mould over which grass was intended to be grown at points where the local conditions make such features advisable. The varying widths of the entire driveway are adjusted to meet the topographical features of the adjoining bluffs, as well as the presence of High Bridge and Washington Bridge.

The sidewalks vary in width from ten to twenty feet, the narrow portions being at points where it was found to be impossible to maintain the full width. The walks are of asphalt, excepting short stretches where settlement is likely to occur, where gravel is used to avoid cracking. The route of the Speedway, along the bank of the Harlem river, affords all the attractions of a river front, on the one hand, and a beautifully wooded bluff, capable of most artistic treatment, on the other.

The entire roadway surface of the Harlem River Driveway, which had become uneven and worn, was top-dressed, harrowed and rolled during the year 1900, and the adjacent slopes graded and sodded. About 14,000 cubic yards of mould were used upon the roadway, costing approximately \$11,800.

New York Public Library.

The work of removing the Forty-second Street Reservoir and building foundations for the New York Public Library was continued during 1900. An extension of time for the completion of this work until June 1, 1901, was given because of an increase in the quantities. Many difficulties were encountered in making the excavations for the walls and cellars, the depth of the same varying from 15 to 45 feet. The following was accomplished during 1900:

59,000 cubic yards of materials of all kinds taken down and removed (section 2).

47,500 cubic yards of earth excavated for foundations below grade 97.

373 cubic yards of rock excavated.

338 linear feet of test borings made.

82,200 cubic feet of concrete footings laid.

308,660 cubic feet of rubble masonry laid.

1,175 cubic yards of back filling.

Thomas Jefferson Park.

Thomas Jefferson Park, between One Hundred and Eleventh and One Hundred and Fourteenth streets, First avenue and the East river, was acquired under the Laws of 1894 and the buildings standing upon the lands were sold at auction and removed during 1900. A contract for regulating and grading the lands was executed in August. The bricks, masonry and rubbish

are to be removed to a depth of from four to five feet below the curb grades, the entire area refilled with clean earth filling, the existing water supply pipes properly capped, etc. This will obviate the settlement of curbs, walk pavements, etc., when the laying out of the park is undertaken. The work done to December 31 was :

- 18,500 cubic yards of excavation of all kinds.
- 20,000 cubic yards of filling in place.

Entomologist.

The Entomologist and his assistants have waged a very successful war during the year upon the noxious insects in the parks. The trees and shrubberies in the parks in the Borough of Manhattan have been remarkably free from insects and the visitors have been freed from the annoyance of having caterpillars and other insects dropping upon them from the trees. Such a satisfactory condition can only be had through the most skillful management and thorough work on the part of the Entomologist. The New York parks have been remarkably free from the swarms of insects that have at times infested the neighboring country and the foliage has at all times presented a clean and healthy appearance. The Entomologist is in receipt of inquiries from all over the country from the owners of trees as to how to preserve them from destruction from insects or disease.

Games, Picnics, etc.

Skating was enjoyed in the Central Park lakes and ponds during the winter on but six days, the changeable weather making the use of the ice unsafe during the balance of the season. The small ponds known as Conservatory Lake was open to curlers when the ice was in a safe condition.

The concert season was opened at Hamilton Fish Park on June 1. One hundred and seventy concerts were given during the summer, divided among the City Parks, as follows :

Central Park	30	Concerts.
Washington Square Park.....	13	"
Mount Morris Park.....	13	"
Madison Square Park.....	13	"
Battery Park.....	13	"
Corlears Hook Park.....	12	"
Tompkins Square Park.....	12	"
Abingdon Square Park.....	15	"
Mulberry Bend Park.....	12	"
East River Park.....	13	"
Hudson Park.....	12	"
William H. Seward Park.....	12	"

Commencing with the first Saturday of May the lawns were open for children's picnic parties and for playing tennis, croquet, baseball, cricket, football, etc. Permits were issued for children's parties as follows :

Central Park.....	104,099	Attendance.
Mount Morris Park.....	5,134	"
	<u>109,233</u>	<u>Attendance.</u>

Permits were issued for games, as follows :

Tennis	934	Permits.
Croquet	597	"
Cricket	5	"
Football	302	"

No permits are required to play baseball upon the ball ground when the turf is open for the purpose. One hundred and ninety-six tennis courts are maintained in the Central Park for the use of players.

Rubbish, etc.

The rubbish collected in the parks during the year consisted of 4,877 loads. Some 9,362 cubic yards of shale and sandstone screenings were used in repairing the drives.

The Menagerie, Central Park, and the Aquarium, Battery Park, continue to be immensely popular places, both for purposes of recreation and scientific study.

Aquarium.

The attendance at the Aquarium for 1900 was 1,585,584, made up to a considerable degree by classes from schools of the City and the nearby cities and towns. The mortality of this large collection is surprisingly small. There were 2,086 specimens on exhibition at the Aquarium in December, 1900, made up as follows :

FRESH WATER SPECIMENS.

- 955 specimens of fishes in 43 species.
- 22 specimens of amphibians in 4 species.
- 12 specimens of crustaceans in 1 species.
- 25 specimens of anemones in two species.
- 3 specimens of living coral in 1 species.
- 1 specimen of sea horse in 1 species.

SALT WATER SPECIMENS.

- 778 specimens of fishes in 68 species.
- 90 specimens of crustaceans in 7 species.
- 200 specimens of mollusks in 3 species.

The following donations have been received at the Aquarium :

Eugene G. Blackford—10 goldfish, 10 turtles, 2 alligators, 1 eel.

New Jersey Fish and Game Commission—1 mirror carp, 2 crappies, 8 chub suckers, 2 brown trout, 2 pirate perch, 3 white bass, 2 boney gar, 1 lake sturgeon.

New York Fisheries, Game and Forest Commission—14 rainbow trout, 33 brown trout, 82 brook trout, 33 young lake trout, 25 young steelhead trout, 2 hybrid trout, 4 whitefish, 4 lake pickerel, 10 "little" pickerel.

The Maine Lobster Co.—1 blue lobster.

Fabian & Co.—50 Cuban turtles.

Smithsonian Institute, Washington, D. C.—16 long-eared sunfish, 3 mirror carp, 2 stone rollers, 4 white catfish, 3 spotted catfish, 8 bullheads, 18 brook suckers.

L. von Bermuth—1 harbor seal.

Captain E. J. Dwyer—3 Porto Rican turtles.

Mrs. Gillen—1 box turtle.

Thomas Ayala, Progreso, Yucatan—1 green turtle.

J. A. Pierce—1 sea horse.

Captain Sogdrager—3 young crocodiles.

Captain George B. Ferrill—1 hawk's bill turtle.

Henry Bishop—50 fancy goldfish.

United States Fish Commission, Washington, D. C.—100 young Atlantic salmon, 100 young land-locked salmon, 100 young steel-head trout, 100 young Swiss lake trout.

Southside Sportsmen's Club, Oakdale, L. I.—10 brook trout, 14 rainbow trout, 6 brown trout, 2 hybrid trout.

Walter T. Smith—2 green turtles.

Menagerie.

The attendance at the Menagerie, Central Park, averages several thousand daily. On Saturdays, Sundays and holidays it is not uncommon for 20,000 people to be present. The buildings and animals are in splendid condition and the collection is generally recognized as one of the best, if not the best, in the country. In December, 1900, it included 354 animals and 538 birds, the animals being as follows :

Marsupials, five specimens.	Rodentia, one hundred and thirty-seven specimens.
Ungulates, one hundred and thirty-nine specimens.	Carnivora, forty-eight specimens.
	Primates, twenty-five specimens.

Twenty-four births occurred during the year, as follows :

2 axis deer.	1 hippopotamus.
6 aoudad.	1 American bison.
2 leopards.	2 American elks.
1 camel.	1 fallow deer.
4 nylghau.	3 red deer.
1 monkey.	

There were purchased for the Menagerie during the year :

Ten eagles.

Fifty prairie dogs.

One male aoudad was exchanged for a male mouflon.

One male elk was exchanged for a similar animal from the Prospect Park, Brooklyn, collection.

The donations to the Central Park Menagerie have been as follows :

- 1 monkey, donated by Mrs. G. A. Doherty.
- 1 red fox, donated by Tony Schoreteep.
- 1 parrot, donated by Mrs. Ayers.
- 1 wild duck, donated by Police Captain Smith.
- 1 parakeet, donated by J. D. Prince.
- 2 owls, donated by Frank Mothan.
- 2 alligators, donated by Mrs. Sampers.
- 2 alligators, donated by James E. Jones.
- 1 grey fox, donor unknown.
- 1 owl, donated by C. Luhrs.
- 1 hawk, donated by C. Ande.
- 2 opossums, donated by H. Herman.
- 1 monkey, donated by Mrs. Whitsman.
- 1 monkey, donated by Thomas J. O'Kane.
- 1 red fox, donated by Kohn & Baer.
- 1 parrot, donated by Mrs. Fest.
- 1 parakeet, donated by Mrs. J. W. Thompson.
- 1 canary bird, donated by Isaac Schlesinger.
- 1 guinea pig, donated by C. Barber.
- 1 rabbit, donor unknown.
- 1 parrot, donated by Mrs. R. Kusch.
- 1 brown thrush, donor unknown.
- 1 monkey, donated by Lawrence A. Libbert.
- 1 peccary, donated by Lawrence A. Libbert.
- 1 rabbit, donor unknown.
- 1 cockatoo, donated by Mrs. A. H. McGarren.
- 1 rabbit, donated by Mrs. Wm. C. Damion.
- 1 raccoon, donated by Boyd W. Wenman.
- 8 rabbits, donated by A. H. Holmes.
- 2 rabbits, donated by Mrs. Jones.
- 6 prairie dogs, donated by Mrs. Haff.
- 4 rabbits, donated by Charles Matthias.
- 1 monkey, donated by Mrs. Thompson.
- 1 bald eagle, donated by Mr. Miller.
- 3 rabbits, donated by J. M. Stewart.
- 1 eagle, donated by Edward F. Burke.
- 2 alligators, donated by Mrs. Brennan.
- 2 love birds, donated by Mrs. J. Gebley.
- 1 parrot, donated by Robert Jackson.
- 1 raccoon, donated by J. E. Winterbottom.
- 3 alligators, donated by J. E. Winterbottom.
- 1 monkey, donated by Benjamin C. Risley.
- 1 black bear cub, donated by M. D. Hunt.
- 2 owls, donated by S. R. Hurst.
- 2 canaries, donated by Mrs. Annie Kernars.
- 1 black bear cub, donated by Miss Stella Mills.
- 1 cardinal, donated by Mrs. W. Latimer.
- 1 canary, donated by Mrs. W. Latimer.
- 4 ring doves, donated by Sarah P. del Cashel.
- 1 rabbit, donated by J. P. Jernijan.
- 1 raccoon, donated by Paul M. Young.
- 2 owls, donated by R. K. Schuyler.
- 2 parakeets, donated by Emil Haggberg.
- 1 hawk, donated by J. F. Cunningham.
- 1 sea gull, donated by Mad. Lankow.
- 1 raccoon, donated by Mr. Schank.
- 1 chicken hawk, donor unknown.
- 2 red-tail hawks, donated by F. H. Reilly.
- 1 badger, donated by M. S. Eyler.
- 2 rabbits, donated by Henry Brewer.
- 1 red fox, donated by W. Wenz.
- 2 alligators, donated by Mrs. A. H. Aldon.
- 1 rail bird, donated by B. V. Bergan.
- 1 black bird, donated by Kiesel & Fachner.
- 1 parrot, donated by H. D. Lyman.
- 1 Mexican deer, donated by Jos. Pereirro.
- 1 owl, donated by James Rogers.
- 1 parrot, donated by Miss M. J. Dotter.
- 1 opossum, donated by J. F. Cunningham.
- 3 alligators, donor unknown.
- 5 rabbits, donated by Mrs. Tult.
- 1 opossum, donated by C. E. Brown.
- 2 Mexican deer, donated by Manual J. Suorez.
- 1 parakeet, donated by Irving R. Wiles.

1 parrot, donated by Mrs. E. Watkins.	1 monkey, donor unknown.
1 raccoon, donated by A. H. Laidlaw.	1 opossum, donated by Peter Doelger.
1 rabbit, donated by A. S. Miller.	2 guinea pigs, donated by Alfred S. Levi.
1 rabbit, donated by Alfred Webber.	1 hawk, donated by Jacob Schonberg.
1 monkey, donated by Trenor Park.	1 owl, donated by Mr. Holsten.
1 alligator, donated by Trenor Park.	1 cockatoo, donated by Mrs. Kate Schaefer.
1 opossum, donated by Mrs. R. Bren.	

Annual Report—Expenditures, Including Engineering, etc., 1900.

Riverside Park and Drive—Completion of construction ; grading and constructing drainage and walks.....	\$7,169 59
Riverside Park and Drive—Completion of construction of a viaduct over West Ninety-sixth street.....	19,101 51
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Improvement of Parks, Parkways and Drives—Central Park, Improvement of ; paving, etc., Fifty-ninth street and Eighth avenue.....	1,780 44
Improvement of Parks, Parkways and Drives—Central Park, Improvement of ; erecting additional greenhouses.....	160 00
Improvement of Parks, Parkways and Drives—Erecting buildings in city parks for distribution of milk.....	3,995 02
Improvement of Parks, Parkways and Drives—Widening roadway, One Hundred and Fifty-third street, between Seventh avenue and Macomb's Dam road.....	40 95
Improvement of Parks, Parkways and Drives—Paving with asphalt easterly and westerly sidewalks, Manhattan square.....	113 53
Improvement of Parks, Parkways and Drives—Constructing and improving small park, north of One Hundred and Fifty-third street, etc.....	21 29
Improvement of Parks, Parkways and Drives—Laying asphalt walks, levelling playgrounds, East River Park.....	57 67
Improvement of Parks, Parkways and Drives—Improving Swedish School-house, Central Park.....	7,106 07
Improvement of Parks, Parkways and Drives—Repaving with asphalt roadway to Plaza, Fifty-ninth street and Fifth avenue.....	267 29
Improvement of Parks, Parkways and Drives—Asphalting in other localities in Central Park.....	164 37

Improvement of Parks, Parkways and Drives—Constructing new walks around Arsenal Building and repairing, etc., other walks in Central Park	\$3,390 60
Improvement of Parks, Parkways and Drives—Improving principal entrance to Central Park, Fifty-ninth street and Fifth avenue	9,265 80
Improvement of Parks, Parkways and Drives—Paving sidewalks, west side of Fifth avenue, Eighty-fifth street to One Hundred and Tenth street Plaza	32 77
Improvement of Parks, Parkways and Drives—Resurfacing walks in parks south of Fifty-ninth street	89 06
Improvement of Parks, Parkways and Drives—Transverse Road No. 1, Improvement of, etc.	49 50
Improvement of Parks, Parkways and Drives—Transverse Road No. 2, Improvement of, etc.	27 76
Improvement of Parks, Parkways and Drives—Transverse Road No. 3, Improvement of, etc.	10 56
Improvement of Parks, Parkways and Drives—Transverse Road No. 4, Improvement of, etc.	179 64
Improvement of Parks, Parkways and Drives—Paving with asphalt pavement, etc., the sidewalks of Transverse Roads Nos. 1, 2 and 3	173 88
Jefferson Park—Improvement of	6,552 41
East River Park—Improvement of Extension	6,356 64
Eleventh Ward Park Fund—Hamilton Fish Park	64,682 42
Improvement and Construction of Park at Hester, Essex, Canal streets, East Broadway, etc.	76 94
New York Public Library Fund	131,473 14
Constructing Sewer and Appurtenances, Metropolitan Museum of Art	452 49
Improvement of Fort Washington Park	280 65
Foundation, etc., Bartholdi Statue, Washington and Lafayette, etc.	12 14
Constructing an Equestrian and Pedestrian Entrance to Central Park at Sixty-sixth Street and Central Park, West	2,326 61
Public Driveway—Construction of	34,886 40
Cathedral Parkway—Improvement and Completion of, etc.	8,955 51
Mulberry Bend Park—Construction of	1,586 99
Central Park—Construction of—Laying Asphalt Walks	1,261 87

Statement, Balances Appropriations, December 31, 1900.

TITLES OF APPROPRIATIONS.	AMOUNT OF APPROPRIATIONS.	PAYMENTS.	AMOUNT OF UNEXPENDED BALANCES.
Salaries of Commissioners, Secretary and Employees of the Board of Parks.....	\$29,300 00	\$29,300 00	.....

BOROUGHS OF MANHATTAN AND RICHMOND.

TITLES OF APPROPRIATIONS.	AMOUNT OF APPRO- PRIATIONS.	PAYMENTS.	AMOUNT OF UNEX- PENDED BALANCES.
Administration.....	\$25,580 00	\$25,580 00	.....
Labor, Maintenance and Supplies.....	498,533 00	.....	.....
Supplies .....	.....	123,278 78	.....
Pay-rolls.....	.....	375,222 73	\$31 49
Zoological Department.....	32,500 00	.....	.....
Supplies .....	.....	16,398 08	.....
Pay-rolls.....	.....	16,086 81	20 11
American Museum of Natural History.....	120,000 00	120,000 00	.....
Metropolitan Museum of Art,	95,000 00	95,000 00	.....
Music	24,967 00	24,967 00	.....
Contingencies.....	2,500 00	2,323 00	177 00
Surveys, Maps and Plans.....	2,000 00	1,983 22	16 78
Aquarium.....	40,000 00	39,990 61	9 39
Ambulance Service, Central Park.....	1,200 00	1,199 93	07
Care of Grant's Tomb.....	5,000 00	4,704 14	285 86
Harlem River Driveway	18,000 00	17,997 61	2 39
Sewerage and Drainage.....	20,000 00	19,983 45	16 55

Receipts.

Rents, privileges, etc..... \$31,743 77

BOROUGH OF THE BRONX.

NEW YORK, January 2, 1901.

Hon. ROBERT A. VAN WYCK, Mayor :

SIR—I have the honor to submit herewith my report of the operations of the Department of Parks, Borough of The Bronx, for the year 1900.

1. Financial.
2. Operations.
3. Report of Chief Engineer.
4. Report of Chief Gardener.
5. Report of Director of Botanical Gardens.
6. Report of Director of Zoological Gardens.

I. FINANCIAL EXPENDITURES.

(a) *Appropriation Accounts.*

TITLE OF APPROPRIATION.	AMOUNT OF APPROPRI- ATION.	EXPENDI- TURES.	BALANCES.
Maintenance and Construction.....	\$246,500 00	\$246,489 38	\$10 62
Administration.....	12,780 00	12,542 14	237 86
Maintenance of Botanical Gardens.....	40,000 00	39,999 96	04
Maintenance of Zoological Gardens.....	40,000 00	40,000 00	.....
Surveys, Maps and Plans.....	10,000 00	9,999 57	43
Music.....	12,480 00	12,430 00	50 00
Contingencies.....	1,500 00	1,499 80	20
Totals.....	\$363,260 00	\$362,960 85	\$299 15

(b) *Bond Accounts.*

TITLE OF ACCOUNT.	AMOUNT OF APPROPRIA- TION.	BALANCE ON HAND JAN- UARY 1, 1900.	EXPENDI- TURES, 1900.	BALANCES.
Improvement of Parks, Parkways and Drives—St. Mary's Park, Improvement of.....	\$21,000 00	\$149 22	\$35 80	\$113 42
Improvement of Parks, Parkways and Drives—Cedar Park, Improvement of.....	15,000 00	169 34	169 00	34
Improvement of Parks, Parkways and Drives—Constructing Driveways and Paths in the Botanical Gardens.....	15,000 00	6,789 60	6,789 54	06
Improvement of Parks, Parkways and Drives—Improving Bronx and Pelham Parkway, between Easterly Line of Bronx Park and Bear Swamp Road.....	50,000 00	240 48	240 00	48
Improvement of Parks, Parkways and Drives—Claremont Park—Improving, etc.....	15,000 00	748 14	283 91	464 23
Improvement of Parks, Parkways and Drives—Constructing Cycle and Bridle Paths on Bronx and Pelham Parkway.....	75,000 00	10,641 05	3,013 63	7,627 42
Improvement of Parks, Parkways and Drives—Improving Small Park on Fulton Avenue, between One Hundred and Sixty-ninth and One Hundred and Seventieth Streets.....	4,045 33	3,448 46	3,381 76	66 70
Improvement of Parks, Parkways and Drives—Paving, etc., Pelham Bridge Road, Eastchester Creek to Pelham Bay Park.....	29,000 00	256 57	256 00	57
Construction and Maintenance of Public Parkways, in Bronx Park—Improving, etc., Old Boston Road.....	10,000 00	102 21	101 50	71
Construction and Maintenance of Public Parkways, in Van Cortlandt Park—Improving Moshulu Avenue, from Grand to Jerome avenue.....	6,000 00	3,001 33	3,000 73	60
Construction and Maintenance of Public Parkways, in Van Cortlandt Park—Improving Grand Avenue, from Moshulu to Jerome avenue.....	4,500 00	604 76	603 81	95
Construction and Maintenance of Public Parkways—Improving Bronx and Pelham Parkway.....	100,000 00	100,000 00	64,592 73	35,407 27
Construction and Maintenance of Public Parkways—For Improving Existing Roads in Bronx Park.....	68,000 00	68,000 00	37,893 11	30,106 89
Construction and Maintenance of Public Parkways—For Improving Existing Roads in Pelham Bay Park.....	6,000 00	6,000 00	5,979 12	20 88
Botanical Museum and Herbarium—Construction of.....	516,500 00	147,919 62	139,364 97	8,654 65

TITLE OF ACCOUNT.	AMOUNT OF APPROPRIATION.	BALANCE ON HAND JANUARY 1, 1900.	EXPENDITURES, 1900.	BALANCES.
For Improving that portion of Crotona Park in which is located a Public Building.....	30,000 00	24,727 69	24,256 02	\$471 67
Constructing, Improving, etc., Public Park, East One Hundred and Ninety second Street and Kingsbridge Road	10,000 00	55 01	55 00	01
Spuyten Duyvil Parkway, Constructing and Improving of.....	150,000 00	82,887 27	82,857 44	29 83
New York Zoological Garden Fund.....	234,163 50	225,998 00	67,979 44	158,018 56
Skate and Golf House in Van Cortlandt Park—Erection of.....	20,000 00	20,000 00	4,500 45	15,499 55

RECEIPTS.

(c) For Rents and Privileges 1900.

January.....	\$644 16
February.....	396 66
March.....	371 83
April.....	967 07
May.....	431 49
June.....	417 65
July.....	639 15
August.....	456 82
September.....	585 15
October.....	394 83
November.....	1,224 98
December.....	1,873 25
Total.....	\$8,403 04

List of Buildings in respective Parks and their Uses.

TITLE.	LOCATION.	USE.
Zbrowski Mansion.....	Claremont Park	Offices of Department of Parks.
Stable.....	Claremont Park.....	Department stables.
Lorillard Mansion.....	Bronx Park.....	Police Department.
Lorillard stable.....	Bronx Park.....	Police stable.
.....	Pelham Bay Park.....	Police Department.
Stable.....	Pelham Bay Park.....	Police stable.
Van Cortlandt Manor House.....	Van Cortlandt Park.....	Society of Colonial Dames.
Hunter Mansion.....	Pelham Bay Park.....	Society of Little Mothers.
Firman Mansion.....	Pelham Bay Park.....	Society of St. Vincent de Paul.
One house.....	St. Mary's Park.....	Foreman and Keeper's house.
Gate-house.....	Bronx Park.....	Foreman of Gardeners' house.

Houses Rented.

Pelham Bay Park.....	36
Van Cortlandt Park.....	2
Claremont Park.....	1
McComb's Dam Bridge Park.....	7
Bronx Park.....	1
Poe Park.....	1
Total.....	<u>48</u>

Concerts—1900.

LOCATION.	LEADER.	NUMBER OF CONCERTS.	AVERAGE ATTENDANCE.
Saturdays—Van Cortlandt Park.....	Richard E. Sause.....	12	2,500
“ Crotona Park.....	George Friedgen.....	12	2,800
“ Cedar Park.....	Joseph H. Miller.....	12	1,200
Sundays—St. Mary's Park.....	Frederick W. Hager.....	12	9,000
“ Macomb's Dam Park.....	Peter Berlinghoff.....	12	1,000
“ Claremont Park.....	Richard Helm.....	12	2,700
“ Bronx Park.....	Thomas F. Usher.....	12	7,000
“ Pelham Bay Park.....	August Stover.....	12	2,200

Skating.

January	1, 1900.	Van Cortlandt Park, Attendance.....	6,000
	2,	“ “.....	5,000
	3,	“ “.....	3,000
	4,	“ “.....	3,000
	5,	“ “.....	3,000
	6,	“ “.....	6,000
	7,	“ “.....	10,000
	8,	“ “.....	2,500
	9,	“ “.....	3,000
	10,	“ “.....	2,000
	11,	“ “.....	3,000
	15,	“ “.....	1,000
	17,	“ “.....	2,000
February	1,	“ “.....	3,000
	2,	“ “.....	5,000
	3,	“ “.....	6,000
	4,	“ “.....	5,000

Monthly Average of Employees.

MONTH.	OFFICE.	ENGINEERS, ETC.	SUPERIN- TENDENT, FOREMEN, ETC.	TEAMS.	MECHANICS.	LABORERS.
January.....	8	30	34	61	24	284
February.....	8	30	35	60	26	279
March.....	7	30	36	62	23	275
April.....	7	31	41	41	26	271
May.....	7	31	44	47	27	268
June.....	7	29	44	49	28	268
July.....	7	30	44	51	26	268
August.....	7	30	44	50	26	272
September.....	7	30	44	49	20	272
October.....	7	30	44	50	21	279
November.....	7	31	45	50	22	278
December.....	7	31	44	24	21	278

Total employees' average, 427.

OPERATIONS IN THE SEVERAL PARKS UNDER THE HEAD OF MAINTENANCE AND CONSTRUCTION.

The ordinary work of maintenance in the parks, including the repairing of all the roads, drives, avenues, parkways and paths, the cleaning of snow in the winter, the thorough cleaning of the same during the balance of the year, the sprinkling of all roads, avenues and drives during eight months of the year, the removal of all dead and dangerous trees, the pruning and care of trees, the cutting and trimming of all lawns, mowing of meadow lands, the painting and repairing of all settees and fixed benches, the painting and repairing of all railings and fences, repairing and painting of buildings, music stands, work boxes, signs, etc., repairing and cleaning of sewers, drains, culverts and basins in full, all the ordinary work necessary for the care and maintenance of over four thousand acres of park lands.

In addition to the above, the following work of incidental construction has been performed in the several parks :

Pelham Bay Park (Area, 1,756 acres).

Situated in the extreme eastern section of the Borough of The Bronx, having a water front of over seven miles, fronting upon both shores of Eastchester Bay, both shores of Pelham Bay and upon Long Island Sound.

This park in area, contains more acreage than all the parks combined in either the boroughs of Manhattan and Richmond, or the boroughs of Brooklyn and Queens. Its future improvement is a serious problem. The development of its acreage and its large shore front, must be a matter of future consideration.

During the past year, in addition to the ordinary work of maintenance above-mentioned the following work has been accomplished :

The parkway has been resurfaced to a depth of two inches, from the White Plains road to the "Meadows," a distance of 7,000 feet.

From Williamsbridge road, west, for a distance of one thousand feet, the parkway was resurfaced with shale. Both roadways were rolled with our steam roller.

Built walk upon parkway, from Williamsbridge road to White Plains road, 4,000 feet.

OLD BOSTON ROAD.

Rebuilt sidewalk 400 feet long with broken stone and screenings.

WATERBURY LANE.

Laying Telford pavement complete for a distance of 1,200 linear feet.

FURMAN LANE.

Macadamizing and finishing roadway 1,900 linear feet.

EASTERN BOULEVARD.

Resurfacing 1,000 linear feet.

SHORE ROAD.

Resurfacing 900 linear feet.

GENERAL WORK.

Making new golf course, as follows :

Removing stone walls and trees.

Making and seeding nine greens.

Making two bunkers 150 feet long.

Making one hazard 200 feet long.

Making nine tees.

Repairing Hunter Island and Twin Island roads.

Finishing 500 feet stone wall at Pelham Bridge.

Van Cortlandt Park (Area, 1,132.35 acres).

Situate at the extreme northwest boundary of New York City.

This park contains a deer park with an acreage of nearly one hundred acres, with a herd of twenty-nine elk deer and fawns ; also one buffalo.

The golf links of eighteen holes, patronized by over two thousand players. The old historical Van Cortlandt Manor House under the charge of the Society of Colonial Dames, the lake of eleven acres, base-ball fields, tennis courts, foot-ball fields, the parade grounds of the National Guard of the State of New York.

The following additional work has been performed :

GRAND AVENUE.

A complete Telford macadam pavement has been laid, seventeen feet wide, for a distance of 1,740 linear feet.

OLD MILL ROAD.

New Telford macadam road, fifteen feet wide, 315 linear feet.

NEW SIDEWALKS CONSTRUCTED.

315 linear feet of sidewalk, six feet wide.

6,100 feet of macadam road, resurfaced.

2,475 feet of macadam and dirt paths resurfaced.

GOLF LINKS.

Entire golf course remodelled as per annual report of expert in charge :

"In order to cope with demands caused by the ever increasing popularity of the game, it became necessary to remodel the whole course so that congestion would be prevented and accidents avoided. The putting greens had to be enlarged or new ones made, bowlders removed, a number of bunkers built, various approaches to the putting greens graded, and a lot of filling-in done.

"The items follow—

"First hole—Graded the approach and filled in large washouts caused by heavy rains ; top-dressed and seeded two and one-half acres and removed thirty tons of rock.

"Second—Removed thirty or forty bowlders and sodded a new putting green 100 feet square.

"Third—Carted and put in the approach to this hole 150 loads of loam and seeded it down ; also made and sodded a new green 125 feet square.

"Fourth—Removed a strip of underbrush 300 yards long by 35 yards wide, top-dressed and seeded same.

"Fifth—The approach to this hole on top of hill was encumbered with a large number of rocks, one weighing not less than 10 tons, all of which have been removed.

"Sixth—The small brush to right of this hole has been taken away for a distance of 300 yards, and is now replaced by green sod.

"Seventh—The first 100 yards to this hole has been graded, 200 feet of earth carted away and place seeded down again ; a zig-zag bunker has been erected 200 feet long, 4 feet 6 inches high and sodded on both sides ; there has also been put on either side of this bunker a sand pit 6 feet wide, 175 feet long and 18 inches deep, and 50 loads of fine sand put in same.

"Eighth—Going to this hole, 100 yards from tee, there has been placed a crescent-shaped trap bunker 100 yards long, 25 feet wide and 2 feet deep, with a cop bunker built on outer edge 2 feet high ; the creek which supplies the lake with water has been covered, first with old ties gotten from the railroad, then with earth and sodded over for a distance of 100 yards.

"Ninth—A new putting green has been made for this hole 100 feet square, and two ditches filled up, each 25 feet long, 3 feet wide and 2 feet deep.

"Tenth—The rocks along this hole have all been removed so as to permit mowing with horse machine, filled in, top-dressed and seeded.

"Eleventh—Filled in the old trap bunker, which was wrongly placed, and seeded same.

"Twelfth—Built a new green for this hole and graded the approach.

"Thirteenth—Removed all the underbrush at right of hole for a space of 200 yards long and 25 yards wide.

"Fourteenth—Took out six large bowlders from this green and its immediate vicinity.

"Fifteenth—Lengthened this hole distance, 60 yards, clearing underbrush, top-dressing and seeding same.

"Sixteenth—Made new green for this hole, 100 feet square.

"Seventeenth—Filled in valley to right of this hole where water used to lodge; the diameter of which is about 75 yards.

"Eighteenth—Constructed a trap bunker 125 yards from tee, 100 feet long, 30 feet wide and 2 feet deep, and put 6 inches of fine sand in bottom of same.

"Cleared out all the small brush (tie tree) around the lake for a distance of 600 yards; built a new green 125 feet square, having to fill up to 3 feet 6 inches at lake's edge, to nothing at 125 feet from same.

"The various changes that have been brought about since I took charge at Van Cortlandt Park Links, have in no small measure relieved the spots where congestion used to occur; the long walks between tees have been avoided, especially the climb up that long flight of stairs to play the eighteenth hole, as it used to be played. I hope during the coming season to still further improve the course, so that it will ultimately become, not only as good as, but the best in this country. It possesses all the natural requirements that go to make an ideal golf course, and will no doubt some day be as famous as St. Andrew's in Scotland.

"Truly yours,

"VALENTINE FLOOD,

"Assistant Foreman, Golf Links, Van Cortlandt Park."

Bronx Park (Area, 661.60 acres).

Situated One Hundred and Eighty-second street, Southern Boulevard, etc.

OLD SNUFF MILL.

Repairing Old Snuff Mill and placing same in condition for a practical workshop for the work of the Department. The building has been practically reconstructed. In the basement has been constructed a blacksmith's shop with all its accessories. There is also room for the storage of the steam roller owned by the Department, for all water barrels, lawn mowers, etc.

On the first and second floors there are ample facilities for all the mechanical force of the Department, viz., a carpenter shop, a paint room, etc., in both of which are constructed and painted the hundreds of signs necessary for the use of the several parks. As the appropriations

for the government of the Department permits, this building will be improved to conform to all the requirements necessary for the detail work needful in our parks.

BRONX RIVER IMPROVEMENTS.

Many complaints have been made to this Department during the past two years of the condition of certain sections of the Bronx river lying and situate within that portion of Bronx Park within the jurisdiction of this Department. After repeated personal investigations and frequent consultations with the Chief Engineer and Superintendent, plans were perfected to do away with the menace of stagnant water and at the same time to add a material improvement to the natural beauties of the park.

I accordingly directed plans to be prepared and work to be commenced at the earliest practical moment, to change the stagnant waters at the points designated and to construct in place thereof two lakes. During the year 1900 work was commenced, and I expect that during the present year the work will be completed and the nuisance not only abated but two beautiful lakes will take the place of the two swamps heretofore complained of.

Crotona Park (Area, 154.60 acres).

Situated from One Hundred and Seventy-first to One Hundred and Seventy-seventh street, east of Third avenue, and containing within its boundaries the old Indian pond and the baseball grounds, stand, etc.

In addition to the ordinary work of maintenance a large amount of filling has been done in the low grades, as follows :

At One Hundred and Seventy-first street, west of Crotona avenue, a piece 600 feet long, 150 feet wide, with an average fill of 12 feet.

West of Music Stand, 550 feet long, 50 feet wide, with a fill of 3 feet.

South of Music Stand, a piece 225 feet long, 75 feet wide, with a fill of 3 feet.

North of Music stand, 100 feet long, 80 feet wide, 2 feet fill.

Near Skate-house, a fill 280 feet long, 200 feet wide, 6 feet deep.

In addition to the above, some 10,000 loads of fill were placed in different sections not above enumerated. New roads were made, new gutters constructed and nearly 75,000 square feet of sod laid.

Claremont Park (Area, 38 acres).

Situated Webster and Wendover avenues, One Hundred and Seventieth and Belmont streets.

The reconstruction of the east section necessitated the making over the terrace, regrading and resodding.

In the prosecution of this work there were 135,000 square feet of sod laid, new roads constructed with 12,000 square feet of macadam surface and 9,000 square yards of our own broken stone and screenings laid. New sewers with the necessary connections were constructed and the toilet facilities improved.

St. Mary's Park (Area, 28.70 acres).

Situated at St. Ann's avenue, from One Hundred and Forty-third to One Hundred and Forty-ninth street.

In addition to the ordinary care of the park the site of the old pond facing the Public School Building on St. Ann's avenue has been filled, also the lower southwest section; more than 3,000 cubic yards of filling has been used in this work. A new sidewalk has been constructed on Trinity avenue, from St. Mary's to One Hundred and Forty-eighth street.

All the new-made ground was seeded and sodded where necessary. It is the purpose of the Department to raise the entire grade of the St. Ann's avenue frontage and to lay out the north-western section with walks, plots and flower beds.

Cedar Park (Area, 17.47 acres).

Situated at Mott avenue, Walton avenue and One Hundred and Fifty-eighth street.

In this park during the year 1900, more than 4,000 trees, shrubs and plants were planted by the gardener. Through this work the whole character of the park has been changed. Overlooking the Harlem river its situation was subject to great improvement, and when the work already laid out will bear its fruit this park, formerly barren waste, will be one of the most beautiful in the lower section of our borough.

The Music Stand has been reconstructed, guard-rails and fences have been erected, sewer connections made to connect new sewer and catch-basins constructed, steps cut and set at the One Hundred and Fifty-eighth street entrance, and over 20,000 feet of new pathways made.

Macomb's Dam Bridge Park (Area, 27 acres).

At Jerome avenue, Harlem river, Cromwell's creek and One Hundred and Sixty-second street.

6,000 yards filling used.

4,000 square feet of sodding.

1 large lumber shed removed.

Smaller Parks.

Washington Bridge Park, Fordham Park, St. James' Park, Poe Park, Throggs Neck and the seven triangular parks, situated at the intersection of the several avenues, there has been but little beyond the ordinary work of maintenance; the small area and their peculiar conformation leaves but little to be done beyond their ordinary care, with the exception of University Park, at Sedgwick avenue and One Hundred and Eighty-first street, and St. Augustine's Park, at Franklin avenue and One Hundred and Sixty-seventh street.

These two parks will be materially improved during the coming year. University Park, facing University Heights on the west, having the benefit of a special legislative appropriation of \$10,000, and St. Augustine's, to be laid out at an expense of \$5,300 from the ordinary account of "Maintenance and Construction."

Parkways.

SPUYTEN DUYVIL PARKWAY.

The contract for regulating and grading this parkway has just been completed at an expense of \$135,000. The work was a most important one, the parkway extending from the Harlem river to Van Cortlandt Park, thus making an important link in the great chain of driveways—connecting the parks and parkways of the Borough of Manhattan with those of The Bronx. The amount appropriated by the Special Act of the Legislature, chapter 301 of the Laws of 1897, viz., \$150,000, was about one-half the amount necessary to complete the work specified by the provisions of said Act, the construction of the parkway and the necessary changes to connect, through the medium of intersecting streets, with adjoining avenues. While the plans and specifications were prepared and the bids opened under the previous administration, I have made the best use of the appropriation possible, and, where absolutely necessary, have supplemented the special appropriation with funds from the annual appropriation account for maintenance.

MOSHOLU PARKWAY.

A new footwalk was constructed on the line of the parkway 330 feet long and 15 feet wide. A baseball ground and football ground was constructed for the use of the pupils of Grammar School 81; size of grounds, 450 feet by 180 feet, with back-stop, etc.

Tennis courts have been constructed for the use of the people living in the immediate neighborhood. A footpath and bridge, 360 feet long and 6 feet wide, and new railings, 1,760 feet, have also been constructed.

BRONX AND PELHAM PARKWAY.

The parkway and connecting roads have been resurfaced with shale and screenings where ever necessary. New drains, 1,000 feet, have been constructed; washouts repaired and further washing provided against, wherever possible. The Engineer's report contains all details in relation to new work completed and in progress.

CROTONA PARKWAY.

Plans have been prepared for the improvement and enlargement of this parkway, and are now under consideration by the Corporation Counsel. Upon their adoption, and when the necessary appropriation may be made, work will be at once commenced upon this important improvement.

From the foregoing statement it will be seen that the work accomplished during the year 1900 has greatly exceeded that of any previous year. The utmost exertion of every one connected with this Department was an absolute necessity, to not only keep pace with the rapidly increasing population of the borough, as well as the enormous number of visitors attracted by the great improvements, completed and in progress.

The coming year will witness a still further and important development of our system, and I would respectfully refer you to the accompanying reports of the several heads of bureaus for details, both for the past year as well as the work contemplated, in their several jurisdictions.

All of which is respectfully submitted.

AUGUST MOEBUS,
Commissioner of Parks, Borough of The Bronx.

NEW YORK, January 2, 1901.

Hon. AUGUST MOEBUS, Commissioner of Parks :

DEAR SIR—I herewith submit report on the work done under the supervision of this Department for the year ending December 31, 1900.

The work hereinafter named was between January 1 and May 15, under the supervision of my predecessor, Mr. Daniel Ulrich, and from and after that date under my supervision.

1. Furnishing and delivering paints, oils, etc., in Claremont Park, etc.

C. A. Harper, contractor. Contract price, \$794.39.

This contract was executed February 14, 1900, and final estimates forwarded on February 28, 1900.

2. Furnishing all the labor and furnishing and erecting all the materials necessary to erect and complete, so far as specified, in the Botanical Gardens in Bronx Park, in The City of New York, the new Museum Building, etc., etc., etc.

John H. Parker Company, contractors. Amount of contract, \$347,893.00. Architect's fees, \$17,394.65.

This contract, executed December 28, 1897, and final estimate forwarded on March 8, 1900, was completed in a very satisfactory manner and the building is an ornament to the Botanical Garden section of Bronx Park and a magnificent addition to the public buildings of the City.

3. Furnishing and delivering hardware, etc., in Claremont Park, Borough of The Bronx.

Charles Edel & Son, contractors. Cost of material furnished, \$944.95.

This contract was executed February 7, 1900, and final estimate forwarded March 19, 1900.

4. Furnishing and delivering park settees in the New York Zoological Park, in The City of New York.

V. L. Dunne, contractor. Settees furnished, cost \$1,200.

This contract was executed October 10, 1899, and final estimate forwarded April 23, 1900.

5. Improving small park on the west side of Fulton avenue, between One and Sixty-ninth and One Hundred and Seventieth streets, in the Borough of The Bronx of The City of New York.

William L. Moore, contractor. Amount of contract, as per final estimate, \$3,225.11.

This contract was executed October 5, 1899, and final estimate forwarded May 10, 1900.

6. Furnishing and delivering trap-rock screenings, where required, in The New York Zoological Park in Bronx Park, Borough of The Bronx, in The City of New York.

J. Frank Quinn, contractor.

This contract was executed February 13, 1900, and completed at a cost of \$1,677.90; final estimate forwarded May 14, 1900.

7. Furnishing all the labor and furnishing and erecting all the materials necessary to erect and complete, so far as specified, in the Botanical Garden in Bronx Park, in the City of New York, the range of Horticultural Buildings and other appurtenances.

John R. Sheehan, contractor. Contract price, \$112,000. Architect's fees, \$5,600.

This contract was executed December 6, 1898, and final estimate forwarded on May 23, 1900. This range of buildings is also an ornament to that part of the city and very complete so far as work has progressed.

8. Furnishing all the labor and all materials for constructing four entrances to the New York Zoological Park in Bronx Park, in The City of New York.

John R. Sheehan, contractor. Contract price, \$8,600.

This contract was executed October 5, 1899, and final estimate rendered May 23, 1900.

9. Regulating, grading, constructing retaining-walls and pools for use of New York Zoological Society in Bronx Park, in The City of New York.

John C. Rodgers, Jr., contractor. Amount of contract, \$21,816.73.

This contract was executed September 25, 1899, and final estimate rendered June 9, 1900.

10. Furnishing, delivering and repairing lawn mowers for parks in the Borough of The Bronx. Coldwell Lawn Mower Company, contractors.

Contract for new mowers and repairs for one year amounted to \$925; the contract was executed June 23, 1899, and final estimate rendered June 23, 1900.

11. Furnishing and delivering park settees in Claremont Park, Borough of The Bronx.

Robert S. Bishop, contractor. Contract price, \$2,492.

This contract was executed May 18, 1900, and the final estimate forwarded July 20, 1900.

12. Furnishing all the materials and labor for erecting complete the approach to the public building; also grading and improving the grounds surrounding in Crotona Park, at Third and Tremont avenues, in The City of New York.

Thomas Kelly, contractor. Contract price, \$26,820.67.

Contract executed August 28, 1899, and final estimate forwarded July 21, 1900.

13. Regulating and grading a portion of the Bronx and Pelham parkway, in The City of New York.

This contract was executed August 22, 1899, completed at a cost of \$64,450, and final estimate forwarded on October 15, 1900.

14. Furnishing all labor and all materials for constructing a shelter pavilion in the New York Zoological Park in Bronx Park, in The City of New York.

William H. Wright & Son, contractors. Contract price, \$3,800.

This was executed July 13, 1900, and final estimate rendered October 26, 1900.

15. Furnishing all labor and furnishing and erecting all the materials necessary to erect and complete a greenhouse in Bronx Park, in The City of New York.

Hitchings & Co., contractors.

This greenhouse, which is a work of great value to this Department, cost \$17,990. The contract was executed May 16, 1900, and final estimate rendered November 24, 1900.

16. Regulating, grading and constructing a roadway and appurtenances and otherwise improving Spuyten Duyvil parkway, from New York Central and Hudson River Railroad to Broadway, in the Twenty-fourth Ward of The City of New York.

James Oliver, contractor.

The cost of work done under this contract amounted to \$134,204.32. The contract was executed December 8, 1898, and final estimate rendered December 1, 1900.

17. Furnishing and delivering trap-rock and trap-rock screenings, where required, in Pelham Bay Park.

Andrew A. Bouker, contractor.

The cost of this material amounted to \$1,758.45.

The contract was executed October 13, 1900, and final estimate forwarded December 5, 1900.

18. Regulating, grading and paving the existing roads near the Botanical Museum in Bronx Park, in The City of New York.

John B. Devlin, contractor.

This contract was executed January 10, 1900, and the contractor ordered to begin work on April 2, 1900. The work has progressed very slowly throughout, but it is estimated that it will be completed about the middle of January, 1901.

19. Grading, paving and improving existing roads from Bronx and Pelham parkway to and around Nursery in Bronx Park, in The City of New York.

John B. Devlin & Co., contractors.

This contract was executed July 10, 1900, and the contractors ordered to begin work on July 23, 1900. This work has been going on in a desultory way, but appearances indicate its completion some time in the early part of the year 1901.

20. Furnishing all the labor and materials necessary for the erection and completion of a range of propagating houses in the Botanical Garden in Bronx Park, in The City of New York, together with appurtenances and other work in connection therewith.

Hitchings & Co., contractors.

This contract was executed on August 20, 1900, and the contractors ordered to begin work September 21, 1900. The work is progressing in a satisfactory manner; the final estimate will be forwarded, without doubt, some time in January.

21. Furnishing all labor and all materials for constructing a public comfort building in the New York Zoological Park in Bronx Park, in The City of New York.

N. W. Ryan, contractor.

This contract was executed August 27, 1900, and the contractor notified to begin work on September 21, 1900. The contract, which last year was awarded to T. W. Timpson & Co. (Incorporated), was annulled during the month of April of this year; new specifications were gotten out, the work re-advertised and the contract awarded as stated. The work is progressing as well as the weather conditions will permit and the building, it is estimated, will be completed in time for spring opening.

22. Furnishing all labor and all materials for constructing a greenhouse in the New York Zoological Park in Bronx Park, in The City of New York.

Hitchings & Co., contractors.

This contract was executed October 16, 1900, and the contractor notified to begin work October 30, 1900. The work is nearing completion, the building is about ready for occupancy.

23. Grading, paving and improving existing roads from the Lorillard Mansion gate to Bleecker street and to and across the Blue Bridge connecting with the improved roadway near the Botanical Museum in Bronx Park, in The City of New York.

The John J. Hart Company, contractors.

This contract, executed November 12, 1900, and the contractors notified to begin work December 3, 1900, is progressing in a very satisfactory manner.

24. Furnishing all labor and all materials for constructing complete a skate and golf house at Van Cortlandt Lake in Van Cortlandt Park, in The City of New York.

William Henderson, contractor.

This contract, executed November 24, 1900, and the contractor notified to begin work on December 4, 1900, is in excellent shape; it is estimated the building will be finished and ready for use early in the year 1901.

On September 6, 1900, bids were opened for the construction of a bridge over the New York, New Haven and Hartford Railroad—Harlem River Branch—at the crossing of the Bronx and Pelham parkway, and award of the contract made to John G. Tait. The contract was dated November 26, 1900, but owing to legal requirements the contractor has not as yet been ordered to proceed with the work.

On December 27, 1900, bids were opened for the following works, contracts awarded as stated but contracts not yet executed.

First—For constructing and improving a portion of the Bronx and Pelham parkway, from the westerly terminus of the improved portion of said parkway—400 feet westerly of the Bear Swamp road—to a point 1,275 feet westerly of said terminus, in Bronx Park, in The City of New York. Awarded to William H. Masterson.

Second—For furnishing all labor and all materials for constructing complete a workshop and sheds in the New York Zoological Garden in Bronx Park, in The City of New York. Award made to William T. Wright.

Third—For grading grounds, constructing, regulating, grading and paving walks and roads, furnishing and laying iron water-pipe, setting hydrants, etc., in the Botanical Garden in Bronx Park, in The City of New York. Contract awarded to John H. Devlin.

Three per cent. payments on amount retained for repairs to asphalt were made as follows :

For constructing and improving of a portion of St. Mary's Park, in the Twenty-third Ward of The City of New York, Edward A. McQuade, contractor ; and for constructing and improving of a portion of Claremont Park, in the Borough of The Bronx of The City of New York, John B. Devlin, contractor.

Specifications have been prepared for the improvement of grounds adjacent to the Botanical Museum Building in the Botanical Garden in Bronx Park, estimated to cost \$40,000 ; surveys and soundings have been made, sketches and specifications prepared, for a new bridge to replace the old structure known as Pelham Bridge over Eastchester Bay in Pelham Bay Park, which is estimated to cost \$350,000, and specifications and plans for four music stands in parks in the Borough of The Bronx.

John P. Schermerhorn, Assistant Engineer, has charge of the work in that portion of Bronx Park set apart for the New York Zoological Gardens and the section of the park under the jurisdiction of this Department, also the work in connection with the Bronx and Pelham parkway and bridge on parkway over New York, New Haven and Hartford Railroad and other improvements.

John Toomey, Assistant Engineer, with party are engaged in getting out topographical surveys and maps of Pelham Bay Park, preparing estimates for repairs to roads in that park, and preliminary survey and soundings for the new draw-bridge over Eastchester Bay.

A. Austin Crane, Assistant Engineer, had charge of the construction of the improvement on Spuyten Duyvil parkway and laying out the site for the new skate and golf house in Van Cortlandt Park.

Louis W. Spencer, Assistant Engineer, has under his direction all the work within the boundaries of and adjacent to the New York Botanical Garden in Bronx Park.

All the engineering work under my direction is progressing in a satisfactory manner, with the exceptions hereinbefore mentioned.

The gross amount of the contracts for which final estimates have been forwarded to the Chief Clerk's office during the year, covered by this report, is \$773,587.42.

Respectfully submitted,

MARTIN SCHENCK, Chief Engineer.

JULY 15, 1900.

To the Honorable AUGUST MOEBUS, Commissioner, Department of Parks, Borough of The Bronx :

DEAR SIR—I herewith submit to your kind consideration my third semi-annual report, showing all the garden work in the parks of Bronx Borough which has been performed under my advice and direction during the time from January 1 to July 1, 1900.

1. The Work of Pruning and Thinning out the Trees—The extended pruning work, which was begun chiefly in Cedar, Bronx and Claremont Parks in fall of 1899, was continued and finished during the end of February. Most all of the sick and dead trees, dog-wood and brush have been removed and by a judicious thinning out of all lower branches of the large trees and dense growth of shrubs, a general improvement of the landscape effects has been gained.

2. The Acquisition of Line and Park Trees—During this same period of time I was selecting a large number of young trees and shrubs, chiefly elms, maples and ash trees, in the woods of Bronx Park for the general planting work. All those trees (about 600 and many of them of an extra large size for line and shade trees) were carefully dug out and prepared for the "spring planting" in Cedar Park. In the months of November and December, 1899, a quantity of similar trees had also been obtained and by this the total amount of 1,000 trees was gained without an extra cost of money to the Park Department.

3. The Planting Work in Cedar Park—The planting work in Cedar Park, in accordance to the plan drawn by me and adopted by your Honor in January last, was started about the middle of March and completed in about six weeks after.

The planting was done mostly on the east side of the park and extended to the west side as far as the grounds and slopes permitted. For shade trees on Mott avenue were selected 59 specimens of American elm trees. For the extended inside planting had been consumed 1,337 shade and ornamental park trees of various kinds and sizes, 1,000 native shrubs of various species, 1,250 extra large and fine ornamental and flowering shrubs, obtained by thinning out the dense shrub plantation in Washington Bridge Park ; 313 selected shrubs from the nursery in Bronx Park and 100 various kinds of evergreens purchased from the Bloodgood Nursery in Flushing, New York.

Total, 4,000 trees and shrubs planted.

4. The Planting Work in Bronx Park—The necessary planting work in Bronx Park near the Mansion and in the vicinity of the propagating department was executed during the month of April. The following trees and shrubs were planted :

1,175 trees and shrubs, mostly taken from our Bronx Park nursery, 350 extra large shrubs from Washington Bridge Park and 350 shrubs, trees and evergreens from the Bloodgood Nursery.

5. The Line Trees on Pelham Parkway—For the line trees on Pelham parkway near Bronx Park 19 extra large American elm trees have been taken out of the woods and successfully placed there.

6. The Thinning Out and Replanting Work in Washington Bridge Park—This work began at the same time as planting work commenced in Cedar Park, in order to replace all the large

shrubs without delay. About 1,500 ornamental and flowering shrubs of excellent quality and size had been removed to Cedar Park and Bronx Park. The balance, 1,150, were replaced in the suitable distances, and in accordance to the landscape effects. In addition to this planting, 22 fine specimens of shade trees were also planted on some prominent points.

7. Improvements in Bronx Park—The grounds in the rear of the propagating house, near the steps to the Mansion, have been filled up and planted with ornamental shrubs and trees, and the slope near the new drive arranged in the style of a "rock garden," for the cultivation and exhibition of dwarf perennial and Alpine plants. This had been planted and completed during March and April. All this work for immediate effect was completed in the month of May. About 2,500 hardy perennials, 150 evergreens, 250 dwarf fine and conspicuous shrubs and 100 dwarf ornamental trees have been used for this part of the park.

8. The Enlarging of the Plant Collection by Exchange and Donation—Last January and February I entered into a connection by correspondence for exchange of seeds and plants, etc., with the Botanical Gardens of Paris, Berlin, Breslau, Leipsig, Bonn, Strasburg, Munchen, Giessen, Wien, Hamburg, Sidney (New South Wales, Australia) and Brisbane (Queensland Australia), and received from those celebrated institutes about 2,000 species of selected seeds, which have already been sown, and have commenced to germinate and grow in the nursery as a valuable collection added to our stock. Professor Dr. Zacharias, Director of Botanical Garden in Hamburg, has sent a box containing 60 rare live plants, which are now essential for our collection.

A very liberal collection of plants (about 300) of various species has been received from T. S. Bush, Esq., (Webster avenue, New York) and a collection of succulent plants were presented to the park by Al. Leissig, Esq., Forest avenue.

The number of plants which are now in cultivation in the propagating department is about 50,000, one-half of them being green-house and hot-house plants. They are represented by a large number of species and fine rare specimens. Last fall I was compelled to store for the winter in frames and hot-beds, which had been expressly constructed and arranged for this purpose, a very large number of bedding and green-house plants. I am glad to state that all these plants had been very successfully brought through the winter in spite of the very changeable weather, and that the bedding plants served in spring for the flower beds in the parks and that the green-house plants form now the imposing sub-tropical groups in Bronx Park.

9. The Floral Decorations in the Parks—The number and size of flower beds in St. Mary's Park have been extended and were planted first with flower bulbs in order to give an early spring flower show; they were followed by pansies and daisies, etc. and finally for the summer and fall show, a great many kinds of bedding plants were placed in St. Mary's and the other parks. For Claremont Park, east side of the mansion, a large flower parterre has been taken into consideration for the next spring; for this purpose the place for the flower beds to be erected, have not yet received the necessary filling with rich soil. The large flower garden in Bronx Park had from early spring till now a continuous flower show, beginning with hyacinths, tulips, narcissus, iris and many other kinds of bulbous plants, followed by the masses of rhododendrons, azaleas, kalmias, andromidas, etc. and later by an abundance of flowers of the large collection of hardy perennial plants.

The later show of campanulas, foxgloves, dianthus, phlox and hollyhocks in full bloom was unrivalled.

10. The Nursery in Bronx Park—The condition of the young trees and shrubs in our nursery is very promising. We have at present on hand for planting work about 600 fine ornamental trees from $\frac{1}{2}$ to $2\frac{1}{2}$ inches in diameter of the stems, and about 1,000 smaller trees in various kinds for the next fall planting in other parks. The number of well-grown, large ornamental and flowering shrubs in the very best assortment of species is about 3,500, and those of the young shrubs of the cuttings made last spring and now growing rapidly is about 10,000. The greater number of all the shrubs and trees which had been purchased last spring from the Bloodgood Nursery in Flushing, N. Y., has been added to the nursery stock for propagation purposes. All the seeds of shrubs, trees and evergreens which had been purchased from Thornburn & Co. and carefully sown in separate beds and have begun to grow, and the young evergreen seedlings grown last year are now potted and prepared for planting in the nursery. This is an excellent collection of about 3,000 plants and contains all valuable species from California, Oregon, Japan, China and Europe.

11. The Collection and Stock of Bedding and Ornamental Plants in the Propagation Department—The entire stock of ornamental and decorative plants contains more than 50,000 plants, and is still increasing by seeding and cuttings. All the plants are in the best condition, and there is no doubt that they will fill the new green-houses and will give a magnificent show.

12. The Facilities for Cultivating all Classes of Plants—During the time of the last six months I made provisions to keep a large number of decorative plants in suitable locations but as the plants grow up to the size when they can do service for imposing sub-tropical groups in the parks I hope to be authorized to erect a small rustic arbor in the rear of the propagating house for sheltering such plants during the hot summer season. Said arbor can be erected by my laborers without extra cost.

Finally, I have to report that the supply of water for the flower garden is insufficient, especially during the hot summer season. I should recommend a line of pipes along the west side of the new green-house to be placed for watering the flower garden and nursery.

Very respectfully yours,

ROBERT DEMCKER, Bronx Park.

JANUARY 3, 1901.

To the Honorable AUGUST MOEBUS, Commissioner of Parks, Borough of The Bronx, City of New York :

DEAR SIR—Reviewing all the performances of garden work under my direction during the past, I herewith submit to your kind consideration my semi-annual report for the period from July 1 to December, 1900.

The condition of the flower garden, nursery and Bronx Park in the vicinity of Mansion, etc., as well as the recently planted trees and shrubs in St. Mary's, Cedar and Washington Bridge Parks was satisfactory, in spite of many inconveniences and disturbances caused by the extreme hot and dry weather during the months of July and August. With the great heat and drought,

masses of noxious insects, never seen here before, made their appearance and were very destructive to many plants, but by precautions care taken by a continual watering, cleaning and cultivating of the plants—even after work time—we overcame this evil and so prevented damage in nursery and flower garden.

The latter being in permanent flower, show even till late in fall.

How the rational pruning of the large, fine park trees, chiefly spruces and pines, improved their growth, could be clearly noticed in Bronx and Claremont Parks. The protection of the roots of all the large trees by sodding and filling in some rich soil and chiefly preventing the people from walking on this ground gave very good effect and these noble trees are now secured for many years to come; even the masses of "mealy bugs" which had covered the stems and branches of several pines and spruces have disappeared, as light and air now penetrate the foliage.

Therefore, a continuous pruning of the trees in the parks should now be systematically arranged and inferior and sick trees removed to improve the development of all conspicuous and fine park trees. This work is to be done solely under the strict control of the Landscape Gardener, who is to consider the removal or thinning-out work and spare those which are necessary for landscape effect.

As a soil depot forms the foundation for the cultivation of plants, I started three years ago and have kept on hand such a storage of several kinds of potting soil in the rear of our small propagating house. The enlarging and improving of the rock garden, which will take place next Spring, induced me to arrange for another part of ground. I intend to mass up now the necessary potting soil in the southern part of our nursery, where also all the frames and hot-beds, which are needed for raising the bedding plants for the supply for the other parks will be placed and managed for the future.

1. The New Fernery—The rookery northwest of the propagating house, where tools and other garden utensils, sand and potting soil had been kept, has been chosen for a fernery. The ground work has already commenced and it will be laid out in such a manner as to show our native and other hardy and beautiful ferns on a most attractive spot. This fern garden, with its romantic site, as well as the rock garden above with its sheltering place, filled with sub-tropical and decorative plants, will no doubt be a delightful aspect for all visitors.

For a successful cultivation of all those tender plants during the summer season, I have in view the erection of rustic arbors over separated beds where those fine foliage plants will be placed in a decorative style, to be viewed from the walks nearby.

2. The Sub-Tropical Garden—The grounds at the east side along the new green-houses will be filled in with rich soil, well manured and cultivated for the plantation of masses of conspicuous foliage, plants and species of imposing growth.

This garden is surrounded by wide walks, and visitors can see here all the beautiful sub-tropical plants; and from the upper road, as well as from the large drive, the general effect of the show can also be gained.

The spots on the southern front side of the new green-house will receive an arrangement of "rookwork" and will be planted and decorated with large cactus, alois, agaves, yuccas and plants other succulent suitable for this place, which is exposed to the strong sunlight.

3. The nursery at present comprises a good stock of the leading kinds of trees and shrubs, but it ought to be enlarged by evergreens and many other kinds, so valuable for park planting, which are still missing in our stock. Some of these will be raised from seeds and young seedlings which are offered at very low rates from nurseries in North Carolina.

I intend to surround the nursery by walks and by wide beds in which the assorted specimens of shrubs, dwarf, conspicuous trees and roses can be cultivated, so as to develop to their full beauty.

4. The Landscape Garden Work in the Parks—The tree and shrub plantings in St. Mary's, Cedar, Washington Bridge and Bronx Parks had been kept during the past summer in good condition, in spite of drought and noxious insects. Only a few trees and shrubs had been lost and will be replaced next spring. Preparations for an early planting of trees and shrubs in Claremont Park had been made in due time, but as the work had to be postponed only a small number of trees, chiefly on the new drive, could be planted this fall. The continuation of the planting will commence anew as soon as the weather will permit next spring. As I have calculated, it will take about 350 trees of various kinds and about 1,650 shrubs to complete this planting work; and for some additional plantings in other parks, 500 trees and 2,500 shrubs. This total number of plants will be taken out of our nursery. I shall fill the vacant spaces with young seedlings purchased from nurseries in North Carolina, in order to keep the nursery complete.

5. The construction of the new green-houses commenced at the end of June with blasting rock and laying the foundation. The entire construction was completed by the middle of September and at this time I made all preparations for housing our stock of plants. In the first section of the house (the hot-house) the large centre bed received a filling of rich but porous soil, in order to allow the hot air from the steam-pipes below to penetrate for the benefit of the plants. All the tropical foliage plants were placed in this prepared soil and began to develop rapidly, showing a healthy and luxuriant growth and remained in a splendid condition.

In the second section of the green-house in a more moderate temperature all plants were stored, arranged and decorated in a landscape style. Great care was taken to give all the different species convenient places and accommodation. They developed to their greatest natural and floral state. In December all the hot-house plants were transplanted and arranged again. A general propagation commenced for all those plants which must be kept in stock and will be needed for planting in the new sub-tropical garden. In the new greenhouses, propagating houses, hotbeds and frames, are now about 125,000 plants in healthy and good condition, and they represent a market value of at least \$15,000, and within another year, when the finer decorative plants are grown to excellent specimens, the value cannot be less than \$25,000. I feel obliged to mention the fact that most all of these plants have been raised and cultivated in our propagating department.

I have also received in the summer season several plants as donations from amateur raisers of plants, who are very much interested in helping to enlarge our collection.

6. Late last fall I was commissioned to purchase at auction a collection of rhododendrons, azaleas, lilacs, hydrangeas and other plants for forcing, for the flower show in green-houses next spring. All those plants which I secured in excellent condition and selection at very low prices, have been stored in hot-beds, flanking the new green-houses, while the evergreens were planted to complete the arrangements in Rook Garden. About 300 shrubs and a number of trees from this auction are kept on hand for the spring planting in Claremont Park.

Respectfully submitted,

ROBERT DEMCKER, Bronx Park.

BOTANICAL GARDEN.

"I have the honor to submit herewith my report as Secretary and Director-in-Chief for the year ending January 14, 1901.

Plants and Planting.

1. Herbaceous Grounds—No noteworthy changes in the installation of herbaceous collection, located in the valley south of the Museum Building, have been made during the year; work on this plantation has been mainly restricted to maintaining the groups already planted and in adding to them species derived from exchanges, collecting and grown from seeds in the nurseries. Many of the species planted during the three preceding years have now become well established and show their true character in a very satisfactory way. The increase in the number of species and in the size of clumps previously planted has necessitated taking more of the ground under cultivation in accordance with the general plan originally adopted. The total number of species grown in the herbaceous grounds during the year is about 2,300.

This collection is now the most completely installed and furnishes satisfactory illustration of one hundred and five different natural families. It has been constantly used by students and by the public and has become an important educational feature, and this without in any way marring the natural beauty of the valley, while furnishing in color and in form a very attractive area of the garden.

2. Fruticetum—The collection of shrubs, arranged in natural families on the plain northeast of the Museum Building, has been greatly increased in number of species, through plants drawn from the nurseries and other sources. A noteworthy addition to it was made in the autumn by the purchase from the Biltmore estate in North Carolina, of a large number of specimens representing species not hitherto in the collection. Here, as in the herbaceous grounds, it has been necessary to take considerable more land under cultivation to accommodate the newly planted shrubs, and to give sufficient space to those previously planted; the design being to permit each individual shrub to assume its natural form and character in so far as conditions will permit. The collection now contains about 450 species, being a gain of about 110 species over the record for 1899, and is sufficiently developed to well represent the natural families containing shrubs hardy in this latitude; it has also been considerably used by students.

3. Salicetum—The development of the collection of willows in the marshy grounds north of the fruticetum and near the north end of the garden, has been continued by the planting of additional species moved from the nurseries; sufficient time has not yet elapsed for these

shrubs and trees to attain their true character, but the collection is in good order, though not yet conspicuous; about 40 species are represented there.

4. Arboretum—The planting of trees in the region east of The Bronx river, in accordance with the general plan, has been continued; the number of deciduous species now represented in this collection being 150; this number added to the 50 species native to the grounds, and to the pines, yews and other conifers planted in the pinetum south of the museum, shows that about 220 kinds of trees are now represented in the garden, exclusive of those still in the nurseries. The arboretum planting will necessarily be inconspicuous for a number of years, owing to the length of time required for the growth of trees into their true form and character.

5. Viticetum—The collection of vines and climbers installed on an arbor east of the Museum has been increased in number of species from 45 to 60 during the year. Some of the specimens have now attained sufficient growth to be characteristic.

6. Nurseries—The building of the propagating houses during the fall and the desirability of concentrating the nursery work in their immediate vicinity gave reason for the abandonment of the first nursery planted in 1895, and the moving from it of the plants desirable for preservation to various parts of the grounds; this work was partially accomplished in the autumn and may be completed in the spring. The present design is to return to the provisions of the general plan, which was adopted subsequent to the planting of this first nursery, and to bring all the nursery work together in the region immediately south of the propagating houses and along the east boundary of the garden, where the other nurseries were planted, to take some additional land under cultivation; the new arrangement will facilitate work on these plantations.

7. Boundary Borders—The screens around the borders of the park have been considerably developed during the year by additional planting and substitution. The stretch from the Southern Boulevard to St. John's College grounds along the railway has been planted for the first time, and considerable planting has been done along the line of St. John's College property, from the railroad east to the Southern Boulevard, although no completion of this border screen can be well made until next year, after the traffic road which replaces the present Southern Boulevard is built; this very desirable substitution will be effected during the next season under a contract awarded by the Commissioner of Parks to John B. Devlin on January 3, 1901. The screen along the north border of the grounds has also been strengthened by additional planting, but it has not as yet been desirable to develop the eastern boundary border to any considerable extent, nor is it likely to be in advance of the building of the boulevard, planned by the Department of Public Works to bound the Park on its eastern side from West Farms to Williamsbridge, owing to the necessary modifications of the surface along this line required by the building of this road. It is desirable, from the standpoint of improving the eastern side of the Park, that this boulevard should be built at as early a time as is practicable. I have had some consultation with officials of the Department of Public Works relative to this matter, but nothing tangible has yet been developed.

8. Temporary Greenhouse—The plants growing for several years in the greenhouse of Columbia University on Morningside Heights were moved into the new main conservatories during the summer and furnished an important nucleus for the collections in those buildings;

the decision of the University trustees to demolish the old greenhouse made it possible for us to obtain from them a considerable number of plants additional to those actually grown by us. The use of this old greenhouse has been an important adjunct in our work of preparation and I have expressed to the President of the University our appreciation of the permission to use it.

9. The Main Conservatories—The eight houses of this range, built under the contract of the Department of Parks with John R. Sheehan, were completed in June and the buildings turned over to us by the Department for operation. In addition to the plants derived from the Columbia University greenhouse, a number of specimens obtained by gift and exchange sufficient to effect a preliminary installation of the collections have been reported in the successive numbers of our journal; it is most gratifying to know that the whole collection has been brought together without the actual purchase of more than \$100 worth of specimens. The number of species contained in the collection at the present time is about 1,800, and the number of individual specimens, nearly all of which are now in tubs or potted, is 8,833. Naturally a great many duplicates have been received and grown from seed, some of which have been used in exchanges and some have been given away to visitors. The arrangement of the specimens has been made, as nearly as practicable, under the conditions of temperature and humidity, into natural families; the central dome (House No. 1), the house just east of it (No. 13) and the three houses to the west of it (Nos. 2, 3 and 4) are at present operated as tropical houses under slightly different temperature; the two eastern houses (Nos. 11 and 12) are operated as temperate houses, while the house forming part of the west wing of the range (No. 5) is operated as a succulent house. House No. 1 contains the palms and the cycads; House No. 2 contains the smaller tropical ferns, tropical orchids and pitcher plants; House No. 3 contains the begonias, the bromeliads, the amaryllis family and a number of smaller families; House No. 4 contains the large plants of the lily family, such as dracenas and yuccas, the screw-pines, the bananas and their relatives, the tree-ferns, the aroids, most of the century plants and representatives of other families; House No. 5 contains the cactuses, the crassulas and their relatives, the aloes, and other fleshy plants; the contents of Houses Nos. 11 and 12, operated as temperate houses, have not yet been arranged into groups; House No. 13 contains representatives of a number of tropical families.

Awaiting the completion of the propagating houses it has been necessary to use until within a few days parts of houses 12 and 13 for the growth of seeds and cuttings, so that no permanent arrangement in them has been as yet practicable.

10. The Propagating Houses—These very useful structures were essentially completed during the first week in the year, so that we have now been able to remove to them nearly all the seedlings, cuttings and duplicates not desired for exhibition in the main conservatories.

11. Miscellaneous—Some planting has been done both in the spring and fall of a character not falling within any of the categories above mentioned. The primary planting of some of the plots planned for the vicinity of the station was accomplished in the autumn.

The total number of species now available for study in all the plantations, conservatories and in the wild parts of the park, exclusive of the lichens, fungi and algæ, now aggregates about 5,400.

Further details concerning plants and planting will be found in the reports of Mr. Henshaw, Head Gardener, and of Mr. Nash, Curator of the Plantations, hereto appended.

Buildings.

The contract of the Department of Parks with the John H. Parker Company for the construction of the Museum Building, power-house, stable and closet group was completed in April and the buildings turned over to us for operation by the Department.

Museum—This building has proven to be satisfactory in every way for its purpose. A few minor imperfections in its roof have been corrected by the Parker Company, under their guarantees; some trouble was experienced at first by water in the cellar under the lecture hall after heavy storms, but this has been wholly remedied by clearing the drainage system of obstructions which accidentally got into it while it was being laid, and by grading and the construction of the terraces outside the building. Some trouble has also been experienced from storms driving water under the large window-sills, and this has not yet been wholly remedied, although the conditions have been much improved by additional carpenter work. It was found necessary to supply some additional light-excluding shades in the lecture hall in order to darken that room sufficiently for satisfactory illustration with the electric stereopticon, which was installed and connected with the power cable from the power-house. An especially devised case for filing lantern-slides was built by our own carpenter and placed in one of the laboratory rooms on the third floor; a series of movable wire tables for living plants have been built for use in the physiological laboratory; by means of funds generously contributed by Mr. W. E. Dodge, 12 oak tables, carrying 24 microscopes in glass boxes for public instruction, have been placed in the west wing of the systematic museum on the second floor; several temporary wooden cases for stacking duplicates and unstudied museum and herbarium specimens have been built for the basement, and others for the store-room on the third floor.

The exhibition cases have been filled with specimens, and the public has had access to these floors every day since the completion of the building, it having been found unnecessary to close the museum at any time for either cleaning or repairs; the cleaning and care of the building has been satisfactorily accomplished by five janitors; the elevator has been run at times when its use seemed desirable but it has not been necessary to keep it in constant operation, as the visiting public, having only access to the first and second floors, have only to mount two flights of stairs. Access to the building has been restricted to one of the basement doors pending the building of the paths and driveways to the front entrance; this course has been necessary in order to avoid the tracking of mud into the museum halls. The corps of engineers of the Park Department engaged in the building of roads have been accommodated with a workroom in the basement of the eastern wing of the building. Other rooms in this basement wing are used as a label shop and a carpenter shop; two other rooms in the basement are utilized as store-rooms, and one main basement hall has been temporarily used as a preparation room for museum and herbarium material. The museum cases on the first and second floors, and the herbarium cases in the herbarium room in the east end of the third floor have hitherto proven sufficient to accommodate the collections, but the growth of the latter has been so rapid that additional cases for all these rooms will probably need to be supplied

during the coming year. The number of students using the laboratories on the third floor has made it necessary to supply additional tables and desks, which have been ordered and will be available early in the year. The rapid growth of the library has also required additional shelves for the cases in the stack-room; these have been ordered and will be ready to be put in place in a short time; they will accommodate the growth of the collection for a few months, but it is clearly necessary that the walls of the reading-room be also shelved during the year, and I have caused a design to be made for this casing by the architect.

Power-house—The steam heating apparatus, after some slight changes shown to be desirable by experience in using it, is now apparently satisfactory and sufficient; it has been found possible to heat both the Museums Buildings and the Conservatories with three boilers out of the five, in any temperature yet experienced, although a fourth boiler has been thrown in at intervals when the temperature fell below 10 degrees, this being, however, apparently unnecessary. A few joints of steam-pipe, evidently of imperfect welding, have given away from time to time, but have been promptly replaced either by our own engineers or by the Parker Company, under their guarantee; with such a very extensive system of pipes these defects were to be expected, and could only be discovered by operating the plant. It has been found necessary to supply new grate-bars in some of the furnaces and other new fixtures and fittings, but nothing more than the ordinary working of the steam plant would normally require.

Stable—No changes have been made in this building during the year.

Public Comfort Station—This house, built under the Parker contract, has not yet been connected with the water supply and with the sewer, and consequently has not been operated during the year. It was planned to make these necessary connections, but more important work required the postponement of this construction.

Tool-house—No changes have been made in this building.

The Main Conservatories—The contract of the Department of Parks with John R. Sheehan for the building of eight of the thirteen houses of the main range of Horticultural Houses was completed in June and the buildings were at once accepted by us for operation. Visitors have had access to them every day since their acceptance, from 9 o'clock until 5, it not having been necessary to close them at any time. Some difficulty was experienced at first in leakage in the roofs, but this defect was remedied by Hitchings & Co., the builders of the superstructure, and also by the operation of the houses, the constant moisture from within acting to swell the wood in which the glass is framed, so that the roofs are at the present time essentially rain-proof. A painter and glazier were employed as soon as the buildings were accepted, and have been kept constantly at work in either external or internal painting, and in replacing such panes of glass as have been cracked or broken from any cause. The trouble from breakage has been very much less than was anticipated, considering the vast area of glass, and such as has occurred seems to have been wholly caused by expansion or contraction, with the exception of one or two panes of glass broken by solid objects blown against the roof in a very violent wind-storm during the autumn. An experience with a moderately severe hail-storm in the fall was most satisfactory, the hail-stones glancing from the curved glass surfaces without fracturing a single pane; had the glass of the roofs been flat, instead of curved, there is no doubt that considerable damage would

have been done. The heat-radiating surface of the steam-pipes within the houses has proved wholly adequate to yield any desired temperature, at any external temperature yet experienced; in fact, not more than one-half of it has been used at any time. The great palm-house, central to the system, has proved, perhaps, the easiest of all the houses to control. Some difficulty was experienced in the early winter by a gaseous emanation from the trench carrying the steam-pipes longitudinally under the houses; the exact nature of this gas was not determined; the difficulty was remedied by ventilating the trench in its southeastern end and by sealing up the manhole covers in the floor of the houses. A defect in the floor of House No. 5, due to imperfections in the asphalt, by which water got into the cellar, was corrected by the contractor; defects in the vault lights outside of this house, through which storm water was driven into the cellar, have been partially remedied by our own engineers and can probably be completely remedied after the next storm, when it has shown exactly where they are located; a defect in the floor of House No. 4 which is built on filled ground, caused by the failing of the contractor to properly stamp the filling, has caused a sinking of the paths within that house and of certain portions of the floor itself together with a parting by a few inches of the rain-water leaders from the roof. This can only be remedied after the full amount of settling has taken place, when the paths will probably have to be partly relayed and the floor partly reconstructed. A defect in the feed-water heater in the basement of the west vestibule has been corrected by the contractor, under his guarantee.

The floors of Houses Nos. 1, 4 and 11 were made of broken stone, of which a little more is needed for a finish; the floors under the benches in Houses Nos. 3, 4, 12 and 13 were made with good soil, and variously planted. The plant benches in these houses were surfaced with a bottom layer of cinders and a top layer of fine crushed gneiss rock. All this work was done with our own force, it not having been included in the Sheehan contract.

New Railway Station—The New York Central and Hudson River Railroad Company is constructing a new station on the site of the old one and has changed the name, according to our request, from Bedford Park to Bronx Park (Botanical Garden). It is expected that this structure will be completed later in the winter.

Propagating Houses—A contract was awarded by the Commissioner of Public Parks in August to Hitchings & Co. for the building of three of the four propagating houses together with the potting shed planned, for \$16,362, and work was at once commenced on them on the site indicated by our general plan, on the east side of the garden near the stable and nurseries. These buildings are now completed and are being operated by us, although awaiting some slight changes to be made by the contractor; they have not yet been formally accepted by the Park Department.

Drainage and Sewerage.

In connection with the building of roads, the Department of Parks constructed large earthenware pipe land-drains along the driveways built during the year, together with numerous surface basins, all essentially as contemplated in our general plan. I have supplemented this work by the construction of several additional surface basins to drain low places near the driveways. Two main drainage systems have thus been established, the one extending from the triangle south of the Museum Building northward to the railroad station, the other extending from a point east

of the curve in the Southern Boulevard northeast to the western lake ; a portion of the roof water from the Museum Building now flows into this second system ; as soon as the final grading along this line is accomplished, sufficient water will be supplied from ordinary rain-storms to fill the two lakes. The eastern one of these two lakes nearly east of the Museum Building has been made by merely overflowing the former marsh at this place by means of a dam at its eastern end ; an iron drainage pipe with a water gate has been placed in this dam in order to permit the drawing off of the water should occasion require it. The western lake has never yet been completely filled with water, owing to the deficiency in rainfall since the portion of the main driveway separating the two lakes, and serving as a dam for the western one, was completed. The two lakes are connected through the embankment of the driveway by an iron pipe, also with a water gate, and an overflow earthenware pipe has been laid through the embankment at a level calculated to give about 4 feet of water in the western lake, at its deepest point ; it may, perhaps, be found necessary to excavate the bottom of the marsh here to some extent.

A modification of the roof drainage of the power house which was, last year, temporarily laid into a cesspool, was found necessary during the autumn, and it was diverted temporarily into an earthenware pipe opening on the surface of the ground near the southwestern corner of the garden ; the storm water from the Southern Boulevard, which had given us considerable trouble around the power house, was temporarily diverted by an open ditch to near the same point. The whole system of land drains south and west of the Southern Boulevard which will be built during the construction of the new driveways in that part of the park, will necessarily supply a permanent outlet for this drainage.

Water Supply.

No extension of the system of water pipes has been made during the year. Provision for a considerable amount of additional pipe has been made in the new contracts for grading and road building about the conservatories and the Museum Building. It is very desirable that the system should, if possible, be extended this year to and across the Bronx river so far as the stable and the propagating houses ; the best method of accomplishing this is not yet apparent ; it has not yet been possible to include it in any city contract.

Grading.

Grading operations outside the lines of building and road contracts have been prosecuted by means of our teams and laborers throughout the year, carrying out the provisions of the general plan.

A slope has been nearly completed along the south side of the Southern Boulevard, opposite the power house, thus making and supporting the high stone wall which formed the southern side of the road embankment at this point ; it was found impracticable to finally complete this slope, however, in advance of the building of the new traffic road which is to replace the present Southern Boulevard through the grounds.

Terraces were built and sodded around both ends of the Museum Building, greatly improving the immediate surroundings of that building.

The land between the Museum Building and the station was brought to a finished surface and sown, except along the margins of the paths and driveways where it was sodded.

Some additional excavation has been done at the rear of the Museum Building, but only sufficient to effect satisfactory drainage.

The land between the station, the Southern Boulevard and the piece of driveway connecting the Southern Boulevard with the plaza facing the station, has also been brought to an approximately finished surface and sown. The land immediately east of this piece of driveway has also been partially graded.

Some work has been done in establishing the sub-grade of the path planned to extend from this piece of driveway southeast toward the Hemlock Forest, but the completion of this work has been deferred until the architectural features contemplated in front of the Museum are executed.

The slope from the Museum Building west to the main driveway has been partially made and some work has been done at other points along this driveway to make it secure from storm water during the winter; the swampy piece of ground which formerly existed at the point where this driveway connects with the Southern Boulevard has been filled; the triangle formed by the intersection of the driveways south of the Museum has also been filled, brought to a finished surface and sown.

Considerable work has been done in completing the terraces around the main conservatories, the portions immediately against that building having been brought to a finished surface and sown; work is still progressing here, to meet the new contract for grading and road building in that part of the park.

The immediate surroundings of the propagating houses have also been graded by means of laborers and teams kindly placed under our direction for about a month by Mr. Peter Gecks, Superintendent of Parks for the Borough of The Bronx.

The new contracts for road building and grading now awarded or in preparation by the Department of Parks will satisfactorily complete nearly all the work of that kind in the vicinity of the main buildings contemplated by the general plan.

Roads and Paths.

Work on the contract awarded by the Commissioner of Parks to John B. Devlin, in November, 1899, alluded to in my last annual report, was commenced in the spring and has since been continuously prosecuted. It is now nearly completed, but the final surfacing of a part of the roadway built under its provisions must be deferred until warm weather. The execution of this contract has given us telford-macadam driveways from the Southern Boulevard near the power house, past the station plaza previously built, and around the Museum Building to the lakes; also from the Museum Building to the Southern Boulevard near the herbaceous grounds, a total length of about 4,000 feet.

By means of another unexpended balance in an appropriation for the improvement of existing roads, the Commissioner of Parks awarded in September, a contract to the John J. Hart Company for the construction of driveways, connecting with the Devlin contract above alluded to

at the lakes, extending over the Bronx river, across the "blue bridge," at the northern end of the Hemlock Forest ; thence eastwardly across the garden to the Bleecker street entrance at the stable ; also the construction of the driveway from near the stable to the Lorillard Mansion, within the garden reservation, and thence through park land to the Pelham parkway. The western portion of this road, which is actually indicated as a path on our general plan, has been built only 16 feet in width, the ultimate design being to have it revert to a path after the broad driveway contemplated by the general plan, running through the fruticetum across the river above the "blue bridge" and thence to Bleecker street, is constructed. The portion, however, from Bleecker street to the southern boundary has been built full width just as called for by the general plan, with the exception of a few hundred feet near the Lorillard mansion where the roadway was narrowed in order to save existing trees. The cost of this Hart contract will be about \$13,000 ; work is being continued on it under considerable disadvantage during the winter, but it should be completed very early in the spring. The length of this road within the garden is about 3,600 feet ; it extends beyond our southern boundary, past the Lorillard Mansion to Pelham parkway, furnishing a very beautiful drive.

Under an appropriation of \$200,000 made by the City during last year, finally confirmed by the Board of Aldermen on December 11, 1900, the Commissioner of Parks awarded to Mr. John B. Devlin, on January 3, 1901, a contract for the building of the driveways and paths around the conservatories, south and west of the Southern Boulevard, in accordance with the plan formerly approved by him and by the Board of Managers. This contract provides for the building of a traffic road from the power house along the southern boundary of the Garden, about 40 feet from the property of St. John's College to the Southern Boulevard where that road enters the Garden from the south ; this traffic road will replace the straight portion of the Southern Boulevard as it now runs between the conservatories and the Museum ; the contract will also provide a park driveway between the conservatories and the St. John's College property, as indicated on our general plan ; it also provides for all the grading necessary to place the conservatories on a low terrace, as originally designed, and for the reconstruction of the area through which the straight portion of the Southern Boulevard now runs, to approximately its original surface, by filling in over the old road and other modifications of the present surface. It is believed that in the development of the Garden this is one of the most important pieces of construction work yet undertaken ; it should be completed under the terms of the contract in about a year. The approximate cost of the work, based on the contract as awarded, will be \$62,000.

As opportunity has been afforded, our own laborers and teams have been occupied during the year with the building of portions of the paths near the railroad station and the Museum Building ; about 400 feet of finished path has been thus constructed and about 900 feet additional has been laid up with stone without final surfacing ; the sub-grade for several hundred feet in addition has also been approximately made.

A temporary cinder road has also been built from the stone driveway leading to the Lorillard Mansion, to the new propagating houses, by the aid of the laborers and teams kindly furnished by the Superintendent of Parks.

A contract is being printed, under the \$200,000 appropriation above mentioned, for the construction of the driveway approaches to the front of the Museum Building, including the grading

of the rough knoll, now an unsightly feature of that part of the grounds, and also including the architectural additions in front of the building, with the exception of the large fountain contemplated by plans already approved ; the foundations, water connections and basin of the large fountain are, however, included in this contract. It is expected that this contract may be advertised for bids within a few weeks.

A delivery road to the rear door of the Museum Building, from the driveway east of it, has been partly graded, but not yet completely constructed.

A temporary cinder road from the Southern Boulevard to the power house, for the delivery of coal, has also been built ; also a temporary cinder path from the Southern Boulevard to the main door of the conservatories.

In all the work of construction I have had the most cordial co-operation of Hon. August Moebus, Commissioner of Parks of the Borough of The Bronx ; of his Engineer-in-Chief, Hon. Martin Schenck, and of his Chief Clerk, Gunther K. Ackerman ; to these gentlemen I desire to express my sincere appreciation of their aid and advice.

Care of the Grounds.

The rapidly increasing number of visitors has made it necessary to pay somewhat more attention to the care of the grounds, although no depredations worthy of remark have been committed. Especial watch has been kept on the Hemlock Forest and the scattering of refuse by visitors has been considerably reduced. In addition to the police patrol, the plantations and the forest have been guarded on Sundays and holidays by some of our own men, while others have been kept on guard in the Museum Building and in the conservatories ; it has been possible to arrange this without throwing continuous holiday work on any one person. Some member of the staff has been in charge of the institution on every Sunday and holiday.

The grass of the Garden was cut by our own force in the summer and stacked for fodder for the horses, most of it being put into a hay-barrack built by our own men near the stable ; this hay-barrack was constructed with four locust logs for uprights, about thirty feet high, which support a roof which may be raised or lowered at will, a floor of rough logs being added ; this has the advantage of keeping both the bottom and the top of the hay-stack free from dirt and water.

Lawn-mowers have been used on the newly sown grounds and around the plots in the herbaceous garden ; the undeveloped meadow areas of the Park were cut with an ordinary two-horse mowing machine.

Considerable work has been done in clearing dead branches from trees and a few dead trees have been cut down ; this work may go on during the rest of the winter.

Library.

The growth of the library has been very rapid, by gifts, exchanges and purchases. As appears from the report of the Librarian hereto appended, the number of books added during the year aggregates 1,415 volumes, besides several thousand pamphlets and parts. The Special Book Fund referred to in my last annual report, subscribed by members of the Board of Managers and other friends of the Garden, has been useful and has enabled us to secure over 600 volumes, many of them of great value in our work ; a small balance of this fund still remains unexpended.

Additional exchanges for Garden Bulletin and Contributions have been arranged with a number of journals and societies, the number of journals and publications of societies or institutions now regularly received from all sources being over 250. The cataloguing of the Library has progressed satisfactorily, the number of cards written during the year being about 4,000. The accession of works on Agriculture and Horticulture, on which considerable work was done in 1899, has been further prosecuted during the past year.

Museums and Herbarium.

The installation of the public museums on the first and second floors of the museum building was commenced in the spring immediately upon the completion of the Parker contract for the construction of the building, and by the middle of the summer a temporary arrangement of the available specimens then at hand had been made in the cases on those floors. Since this preliminary arrangement work has been continuously prosecuted in increasing the exhibits, in labeling them, and in substituting for the specimens first installed others illustrating the plant or the product in a better way.

The herbarium room at the eastern end of the third floor was also occupied early in the year, the herbarium of Columbia University having been completely moved to this room by the end of January. Work in conserving and arranging it and also the collection accumulated by the garden, has gone on continuously during the year and much progress has been made in making the specimens more available and useful to students. The reports of the Curator of the Museums and the Curator of the economic collections, hereto appended, describe this work in detail; the number of specimens added to the museums and herbarium collections during the year is over 50,000 and the number of specimens mounted for the herbarium is about 112,000, a large number of specimens received during previous years having been mounted during 1900.

I have accepted from Columbia University, acting for Barnard College under the agreement entered into between the Board of Managers and the Trustees of Columbia College, January 8, 1896, and the subsequent memorandum adopted by both corporations in 1899, the herbarium formed by the late Dr. Thomas Morong, the property of Barnard College. This collection will be mounted and incorporated with the Columbia Herbarium, already on deposit at the Garden, in so far as the specimens do not duplicate those of the latter.

Laboratories.

The equipment of the laboratories has gone forward as apparatus and supplies have been needed for the research work of students and of the staff; as appears from the report of Dr. MacDougal, hereto appended, 28 regular students have been accommodated; in addition to these, laboratory facilities for short periods of time have been supplied to specialists from other institutions who have wished to use the facilities afforded by us in their investigations.

Lectures.

A course of public lectures on Saturday afternoons, to which all members of the Garden have been specially invited, began on April 14 and extended until June 23; a second course, commencing October 13, extended until November 27; the two courses comprised seventeen

lectures; these were well attended, the largest audience numbering nearly 500 persons, the smallest about 75; the subjects of these lectures were duly announced in the monthly "Journal." The Lecture Hall has proven satisfactory in every way, since its equipment with the electric stereopticon and light-excluding shades; in addition to the use of the lantern, some of the lectures have been freely illustrated by living plants brought from the grounds and conservatories.

The appreciation of these lectures by our members and by the public makes it desirable to increase the number to be delivered this year; the invitations to our members to visit the Garden on Saturday afternoons in advance of the lectures has been taken advantage of by many, who have thus kept in touch with the development of the institution. No evening lectures have yet been attempted.

Publications.

Bulletin No. 5, including reports to Officers and Committees for the year 1889, together with five scientific papers, written by members of the staff, was issued March 30, 1900; this will complete the first volume.

The monthly "Journal" has been regularly issued from January to December, together with an Index, under the editorship of Dr. MacDougal. Its contents have been restricted to articles and reports bearing on the work of the Garden, together with a detailed list of accessions to the several departments. The "Journal" has proved to be a very valuable medium for informing our members, and others interested in our work, about the progress in developing the Garden, and it might be somewhat enlarged to advantage, inasmuch as there is an abundance of interesting material available to fill its pages.

The first volume of the Memoirs, containing the catalogue of the Flora of Montana and the Yellowstone National Park, prepared by Dr. Rydberg, Assistant Curator of the Museums, was issued on February 15. This document included an unexpectedly large amount of new scientific information, and is a valuable contribution to our knowledge of the flora of the northern Rocky Mountains.

Under the title of Contributions we have issued ten reprints of papers written by members of the staff of the Garden printed in other periodicals; these have been consecutively numbered, and many of them have been distributed to our correspondents; most of the pamphlets and books received by members of the staff in exchange with other investigators have been turned in to the Garden Library, and this is an important means of keeping the library supplied, without cost, with the recently published papers of many botanists.

Meteorological Observations.

Meteorological stations were established on April 1 at (1) Herbaceous Garden, where a rain-gauge, maximum and minimum thermometers, and a thermograph were installed; (2) in the Hemlock Forest, a thermograph; (3) Fruticetum, a thermograph. Station 3, which is established for comparison with Station 1, was abandoned after six months. The principal data obtained have been published monthly in the Journal. The thermometric apparatus was housed in standard instrument shelters, United States Weather Bureau pattern.

Thermometers, hygrometers and thermographs have been used continuously in the conservatories and propagating houses and their records tabulated.

Investigations.

Although but a few months have elapsed since the laboratories, library and collections have been accessible and fully open for use, yet a number of researches have been brought to a successful termination and the results described in publications of the garden or other periodicals.

Some of these investigations were begun elsewhere and finished in the Garden, but many of them were carried forward from their inception upon material furnished by the Garden and by the aid of its other facilities.

The accumulation of living material in the conservatories and the completion of the propagating houses furnish the widest opportunity for cultural tests of all kinds and place at our command the means for experimental work upon all of the more important questions in botany.

Professor L. M. Underwood, of Columbia University, has continued his studies on the ferns and fern-allies of North America, and also investigated certain families of fungi, making use of the abundant material in the Ellis Herbarium.

Dr. H. H. Rusby, Curator of the Economic Collections, has continued his investigations of problems relating to economic botany and his studies upon the flora of Bolivia.

Dr. D. T. MacDougal, First Assistant, has published several papers upon the nutrition of plants, dealing chiefly with mycorrhizas, and has continued his work upon the relations of plants to light, and upon the climatic relations of plants.

Dr. J. K. Small, Curator of the Museums, has continued his work on the flora of the South-eastern United States. His manual of this flora is now in press.

Dr. P. A. Rydberg, Assistant Curator of the Museums, has published a series of studies upon the flora of the Rocky Mountains, upon which he is yet engaged.

Mrs. E. G. Britton, Voluntary Assistant, has continued her investigations of American mosses.

Mr. R. S. Williams, Museum Aid, has classified the large collections of mosses made by him in the Yukon territory and in Montana.

Mr. Person Wilson, Museum Aid, has pursued studies upon trees of the walnut family and upon the local flora.

Professor F. E. Lloyd of Columbia University has studied the embryology of the rubiaceæ and allied groups, made an arrangement of the lycopodiums of North America, and brought out other papers of general interest.

Dr. M. A. Howe, of Columbia University, has been occupied with researches upon the hepaticæ, having brought out in Memoirs of the Torrey Botanical Club a fine column on the Californian plants of that group; more recently he has devoted himself to the critical study of algæ.

Mr. George V. Nash has pursued studies upon numerous horticultural problems, and also upon the taxonomy of North American grasses. He contributes the descriptions of grasses to

Dr. Small's Manual of the Flora of the Southern States and to my Manual of the Flora of the Northern States and Canada, both of which are in press.

Dr. David Griffiths, student, carried out an extensive study of the sordariaceæ, a family of minute fungi growing on decaying animal matter.

Dr. Tracy Hazen, student, has been busy with an arrangement of the confervæ, a group of light-green algæ of this region.

Mr. J. E. Kirkwood, student, has been concerned chiefly with embryological questions, especially on plants of the squash family, but has carried to an advanced stage a chemical study of germinating cocoanuts.

Miss Sarah H. Harlow, student, made a study of the mycorrhizal roots of a number of plants, including those of the hemlock from our forest.

Mr. F. H. Blodgett, Museum Aid, has investigated the fungus diseases of carnations, a study commenced at the New York Agricultural Experiment Station, and also certain morphological features of erythronium.

Mr. Charles W. Gilman, student, has been engaged in classifying collections of local mosses and others from the State of Washington.

Mr. R. M. Harper, student, continues his studies upon the flora of Georgia, having spent a portion of the summer collecting in that State by means of financial assistance kindly furnished by Judge Brown.

Miss R. J. Rennert, student, made an extended study of the transpiration of twigs and buds in winter.

My own original studies have been mainly directed toward a better knowledge of the plants of Northeastern North America, though I have given considerable attention to the flora of Porto Rico, based on the specimens secured through the Vanderbilt Exploration Fund, and also to the collection made in the Yukon Territory by Messrs. R. S. Williams and J. B. Tarleton. I have given all the time possible to the assistance of other members of the staff and students in their investigations. Care has been taken that the research work of the members of the staff should not interfere with their administrative or curatorial duties.

Respectfully submitted,

N. L. BRITTON, Director-in-Chief.

REPORT OF THE DIRECTOR OF THE NEW YORK ZOOLOGICAL PARK.

The first year of the actual existence of a Zoological Park or Garden is necessarily its year of severest trial. The actual test of new and previously untried accommodations for animals is, to those who plan and erect them, necessarily a source of great anxiety. There is always to be dreaded the discovery of new and unexpected physical conditions, which will nullify the most anxious forethought and thwart the most lavish expenditure.

The first year's work of the Curators and Keepers of Animals was a continuous effort on their part to adjust themselves to their positions, and their animals to their strange environment.

Of the animals themselves, the great majority have been recent captures, bearing visible marks of traps and forcible subjugation. It is well understood among animal dealers that of all newly captured or newly-imported animals, a heavy percentage die during their first year. The term "acclimated" is now in general use to distinguish those individuals which have settled down in captivity, and seem willing to act rationally in the very important matters of eating, drinking and exercising.

Next in the catalogue of the initial year's anxieties stands the adjustment of the Zoological Park to the needs of the public. The members of the Society were fully aware of the fact that the Park was opened to the public long before the comfort of visitors was adequately provided for. But the public desired to enter and observe the progress of improvements, regardless of the lack of restaurants, shelter pavilions and other provisions for comfort, and therefore the gates were opened. Although the Society and the Park Department did everything possible to promote the comfort of visitors, the things undone were a constant cause of regret.

But the public has accepted the situation with a degree of patience and loyalty to the undertaking which has been a constant surprise and gratification. As quickly as the materials could be procured the imperfect walks of last year were wholly resurfaced, seats were provided, a temporary lunch room was hastily fitted up by the Society in the east end of the reptile house and opened to visitors; a soda fountain was established, ice water provided and a large shelter pavilion erected. Visitors have been permitted to open their boxes of luncheon in every portion of the grounds. While this has involved quite an amount of extra labor, the privilege has been so greatly enjoyed by visitors that their pleasure in it has afforded compensation for the extra labor.

Relations with the Public.

So far as the Director is aware, the relations between the public and the employees of the park have been generally satisfactory. Offenses against the posted rules have been very few in number, and all save a very few have been directed against the proper protection of the grounds. There are a few persons who are provokingly slow in recognizing the fact that the trees in the park are not to be climbed and broken, that shrubbery must not be destroyed, and that wild flowers must not be dug up and carried away wholesale.

Since the formal opening of the park there have been no serious cases of annoyance or cruelty to animals in the collections. On the contrary, the extent to which visitors not only refrain from annoying or injuring the animals, but actually co-operate in their protection, has been to the Society a source of profound satisfaction.

Of complaints by the public against park employees for rude treatment, only one case has been brought to the attention of the Director. This was quickly investigated and settled on a basis satisfactory to the aggrieved party. It is the belief of the undersigned that all the permanent employees of the park, from the highest to the lowest, are faithfully striving to carry out the wishes of the Society that all visitors to the park who conduct themselves properly should be accorded the most polite and helpful consideration.

The rules and regulations adopted at the opening of the park have proven to be well adapted both to the regulation of the public and the general administration of the park. In fact during the entire year it has not been found necessary to make any changes in either set of regulations.

Working Force.

There have been but few changes in the permanent force, beyond the promotion of four Helpers in the animal departments to Keepers' positions. The work of caring for and exhibiting the living animals has been as well systematized as the imperfect facilities available would permit. The lack of the service building has been a most serious drawback in caring for the property of the park and food supplies, in the preparation of food, etc. However, that much needed building is now under construction, and its completion about May 1 will be of great advantage to the entire administration.

Collections.

During the past year many new species of living creatures were added to the collections. The Director's desire to have the collections of animals and birds represent as many as possible of the most important species, led him into what he now regards as an error in accepting species for which no proper accommodations had been prepared. In more senses than one it was a mistake to acquire animals properly belonging in the lion house, antelope and monkey houses, when none of those buildings were in existence. Our attempts to keep carnivorous animals in temporary quarters have resulted in too many losses by death. The temporary small mammal house has admirably preserved its living contents, but in cold weather it is filled to overflowing, which necessitates the placing elsewhere of numerous animals that require constant warmth. The Florida otters, which could not have survived a northern winter in the otters' pool, have usurped the marine turtles' tank in the reptile house, where all their wants are well provided for, but where they themselves are quite out of place.

The buffalo house has been fitted up with stalls and stoves and is now occupied by the tropical deer, peccaries and other animals requiring artificial heat. About one-half of the wall cages of the bird house are occupied by a miscellaneous gathering of land birds, which have displaced an equal number of water birds belonging there. These, being duplicate specimens, have been provided with a heated shelter house that was hurriedly erected in the animal yard.

To accept specimens for which there are no satisfactory quarters is to invite difficulty, and it would seem to be wise to return to our former policy of resolute refusal of all animals for which suitable homes have not yet been provided.

Department of Mammals.

J. ALDEN LORING, ASSISTANT CURATOR IN CHARGE.

The collections of quadrupeds were increased during the year by 113 gifts, and 315 purchases. The special efforts put forth for the increase of these collections were almost wholly directed to the securing of important and representative American forms, and it was found that some of the most desirable species were the most difficult to obtain. Of mammals from the eastern half of the United States a very good selection was brought together, but the Rocky Mountain region and westward thereof proved to be a field very difficult to exploit by correspondence. Accordingly, in October, the Society instructed the Director to make official tour to and through the west and northwest to purchase desirable animals and establish relations with resident collectors which will yield permanent supplies of desirable species. Already that effort has

produced a gratifying number of mule deer, antelope, Columbian black-tailed deer, moose and many smaller animals, with a reasonable certainty of future supplies.

Regarding two important species the Society has had annoying experiences. It was believed that a reasonable amount of effort would secure, either by gift or purchase, a sufficient number of beavers to stock the beaver pond and several otters for the otter pools. Both those installations were completed several months ago, and, although the efforts to secure colonies of animals for them have been persistent and unremitting, and standing orders have been placed in the hands of at least twenty men who have asserted their ability to fill them, not one beaver has yet been received, and until last November no otters were secured. This unlooked for failure in regard to beavers has been a source of intense mortification.

Once, indeed, in Maine, two fine beavers actually in hand were offered to the Society at a satisfactory price, accepted forthwith, and two cages were made in which to ship them. At the last moment the State Game Commissioners refused to grant a permit for the exportation of the animals. The Governor of Maine was appealed to but quite in vain. The Zoological Society has paid \$10 for the construction of the useless shipping cages and lost the beavers. This action of Game Commissioners Carleton and Oak was, to say the least, very unexpected. Several other States—Minnesota, Colorado, Texas, Montana and British Columbia—have willingly and promptly granted to the Society permits to receive and export protected animals. Fortunately for the Zoological Society, the State of Maine stands alone in its novel policy of allowing no beavers to be exported unless they are furnished directly by the Game Commissioners or their agents.

At last we are in receipt of information that one of our resident collectors has secured ten beavers for the Zoological Park, that the animals are feeding properly and very soon will be shipped to New York. In November two fine otters were purchased, and it is hoped that the Society's vexations on account of these two species of animals are about at an end.

During the year the herd of buffaloes was increased by the addition of two fine adult male animals, received by gift from Hon. William C. Whitney, two calves born, and three adult cows received on deposit for two years from David J. Gardiner. These additions bring the total number of individuals in the herd up to fourteen. Mr. Charles T. Barney presented two fine moose from Manitoba, and Mr. Austin Corbin, for the Blue Mountain Forest Association, presented a herd of five Virginia deer and a wild boar. Mr. William Rockefeller presented four fine specimens of typical fallow deer and a pair of European red deer, and the Duke of Bedford donated a large specimen of the equine deer of the East Indies and two Sambar deer. The month of August produced a discouraging degree of mortality amongst the large ruminant animals from the plains and mountains of the west. The difficulties involved in acclimatizing moose, antelope, caribou, mule deer and Columbian black-tailed deer anywhere on the Atlantic coast or in the Mississippi Valley has from the first been fully recognized. The great majority of the efforts that have been made to rear these species to maturity and induce them to breed anywhere east of the great plains have resulted in failure and disappointment. Notwithstanding this, the Zoological Society long ago determined to experiment and persevere with these species until at least the majority of them have been successfully established here. For this reason special efforts have been bestowed upon procuring specimens and their care has been the Director's special charge.

It must be admitted that during the summer of 1900 deaths from climatic influences amongst these five species have been distressingly numerous. Although the cost of specimens is by no means great, never exceeding \$100, even for moose and Newfoundland caribou, and the total loss in money value has by no means equaled the cost of a single Siberian tiger, yet the sense of loss and disappointment is not diminished. The services of veterinary surgeons were frequently requisitioned, but in the majority of cases nature has obstinately refused to assist them in the least. However, instead of yielding to the discouragements encountered last summer, the Society has redoubled its determination to achieve success with its western ungulates.

Our work thus far has established several important facts, the most interesting and valuable of which is that the prong-horned antelope cannot live on eastern grass, and its existence here requires that it be kept on land so sterile that rich, soft grass will not grow upon it, or else in yards wherein it can be limited to dry food.

At present the park ranges contain 10 prong-horned antelope, 4 moose, 1 caribou, 7 mule deer and 7 Columbian black-tailed deer, besides other herds that have thriven continuously, and require no special mention here. By the authority of the Executive Committee, a skilled veterinary surgeon, Dr. H. Amling, Jr., has been engaged for a short daily attendance at the park to study closely into the causes of sickness and deaths amongst the animals, and assist in solving some of the numerous problems in acclimatization which have not yet been solved by any one. It is hoped that in time results of permanent value to the promoters of zoological parks and gardens may be reached, and if so they will be published by the Society.

During the past year the burrowing rodents' quarters have been completed, and filled with rodents and small carnivores of about twenty species, several of which were collected in California for the Society, and are new to the public of this locality.

It is a pleasure to be able to report that the first year's use of the bear dens has proven them to be admirably adapted to their purpose. They are all that it was hoped they would be, and the animals inhabiting them have been both healthy and happy to a degree rarely seen in captive bears. All the young bears have developed rapidly and well. This is particularly true of the Kadiak bears, the grizzly and cinnamons. The abundance of floor space has led all the younger animals to spend their waking hours in wrestling, boxing, climbing and chasing each other, and also in frequent bathing in the pools. It is doubtful whether wild bears of the same age would have had more exercise in the same time than has been indulged in by these specimens. This healthful exercise has promoted both good health and good temper, and by preventing all annoyance or teasing of these animals, and feeding them in such a manner that there is no excuse for quarreling, there has never, save once, been any real fighting, and the bears are perfectly friendly with their Keepers.

The only serious disagreement in the bear dens was caused by the introduction of a very bad-tempered and pugnacious black bear cub which tyrannized over all its cage mates and made itself so generally obnoxious that finally it was deliberately sought out for punishment by the large cinnamon bear, who bit it so savagely and persistently, in spite of the severe punishment inflicted upon him instantly by Keeper Hoey, that eventually it died from its injuries.

For several months the two large polar bears were confined, temporarily, in one of the dens rightfully belonging to the grizzlies in consequence of which they suffered in a peculiar way.

Being very playful, their antics in the pool, which was too small for them, rubbed the hair off their backs and produced eventually a condition which resembled a skin disease. Finding that the animals could not be prevented from injuring their backs in their temporary den the construction of their own den at the north end of Rocking Stone hill was hurriedly begun and hastened by every means. It was completed and occupied by the polar bears.

From that day the backs of the animals began to heal, the hair began to grow and to-day there is no visible sign of their former condition. The polar bears' den is by far the most spacious and the finest of the series and its situation is very picturesque.

On January 1, 1901, the mammal collections of the park contained the following representatives:

Primates	14 species.....	17 specimens.
Insectivora	41 "	66 "
Carnivora	1 "	2 "
Ungulata	18 "	74 "
Rodentia	24 "	226 "
Edentata	2 "	3 "
Marsupialia	4 "	17 "
Seven orders.....	<u>106</u>	<u>405</u>
Received by gift		113 specimens.
Purchased		315 "
Born		<u>28</u> "

Net gain during year, 62 species, 254 specimens.

Department of Birds.

C. WILLIAM BEEBE, ASSISTANT CURATOR IN CHARGE.

In this department the most noteworthy event of the year was the satisfactory completion of the great flying cage and its occupancy by about 25 species of water birds, numbering nearly 100 individuals. The evident happiness of the birds and their freedom of action, combined with the abundance of tree and plant life and of running water, rendered the flying cage one of the chief attractions of the park. A series of pictorial identification labels painted by Charles B. Hudson adds very greatly to the scientific value of the collection.

In the department of birds important increases have been made in the collection of geese and ducks, which now contains 186 specimens, representing 28 species. As heretofore in winter, a representative series of these birds is now installed in the bird house. Noteworthy additions to the bird collection were four fine cassowaries and two crown pigeons, imported direct from the Malay Archipelago which have thriven satisfactorily. During the warm weather, the cassowaries were exhibited in the corral of the Caribou Range, directly south of the Bird House, where they attracted universal attention. Mr. A. Edward Pond presented to the Society a flock of five wild turkeys, which finally represent that important species, the largest and finest of all game birds.

On November 7, 1900, the wild geese on the Aquatic Mammals' Pond received a very noteworthy increase. A flock of nine wild geese migrating southward flew over the Park, observed the pond and the wild geese upon it, and immediately alighted and joined the captive birds. Finding that the Park offers abundant food, freedom and security, the wild flock elected to remain. With Page gates, a huge coop with guiding wings was set up on the eastern bank of the pond, and food employed as a bait. The first day's efforts to entrap the wild birds proved unavailing. At last Chief Clerk Mitchell, with two assistants, devoted an entire Sunday afternoon to the task of driving the wild birds into the trap, which he finally accomplished. Their primaries were clipped, and the Canada geese which voluntarily adopted the Zoological Park as their home were duly entered in the list of "gifts." To all those who believe in omens, this strange accession will seem full of significance.

Late in the year the Zoological Park received from the heirs of the late Samuel B. Schieffelin a valuable gift consisting of a collection of forty-seven pheasants of four species—golden, silver, Reeves and Amherst—together with six shelter houses, and an extensive series of runways. All these buildings and materials have been transported to the Park, and a series of temporary runways and shelters is now being erected for the accommodation of the pheasants.

The need of permanent aviaries for the eagles and vultures, pheasants, cranes and upland game birds is very great, and it is hoped that they may be erected during the present year.

On January 1, 1901, the Bird Department contained the following birds:

Struthiones.....	1 species.....	4 specimens.
Longipennes.....	5 ".....	23 "
Steganopodes.....	4 ".....	14 "
Anseres.....	28 ".....	186 "
Odontoglossæ.....	2 ".....	5 "
Herodiones.....	15 ".....	41 "
Paludicolæ.....	2 ".....	6 "
Gallinæ.....	7 ".....	58 "
Columbæ.....	4 ".....	8 "
Raptores.....	19 ".....	50 "
Psittaci.....	10 ".....	16 "
Coccyges.....	1 ".....	2 "
Passeres.....	6 ".....	12 "
<hr/>		
Thirteen orders.....	104 ".....	425 "

Received by gift.....	106 specimens.
Purchased.....	310 "
Hatched.....	49 "

Net gain during year, 61 species, 240 specimens.

Department of Reptiles.

RAYMOND L. DITMARS, ASSISTANT CURATOR IN CHARGE.

The Reptile House is permanently fixed in the minds of visitors as a center of attraction. Both in the preservation and exhibition of its living contents, it has successfully endured the test of fifteen months actual use. Since the opening of the Park not one death of first-class importance has occurred in this department. The largest specimen lost was a rock python nine feet in length, all others having been small and unimportant. Excepting that specimen, all the large pythons, anacondas and boas are in fine condition.

All things considered, the Alligator Pool is perhaps the most satisfactory single feature in the Reptile House. All the alligators have grown with astonishing rapidity, and are in perfect health. The largest specimen measured in September, 1899, 12 feet 1 inch. In January, 1901, it measured 12 feet 11½ inches, a gain of nearly a foot. Two large abscesses which it developed on its front feet from rubbing them against the sides of the pool were operated upon by Dr. Amling, and in a short time were permanently cured.

During the past year, Assistant Curator Ditmars developed a system of compulsory feeding of large serpents, which has produced very valuable results. Heretofore, though not in our collection, it has frequently occurred that large pythons and boas which were unwilling to take food voluntarily have been permitted to die by slow starvation. Mr. Ditmars prepares a string of dead rabbits, pigeons or other food animals, and with the aid of several keepers, and the exercise of much skill and judgment, forces the whole collection down the serpent's throat. If the food is immediately disgorged, it is immediately reintroduced. Strange to say, food thus thrust by force into a serpent is properly digested, and assimilation appears to be as perfect as when it is brought about by more natural processes.

Notwithstanding the number of poisonous serpents in the collection, and the frequency with which their cages are opened, thus far none of the members of the working force of the reptile department has been bitten.

The needs of the public required the temporary use of the Tortoise House as a lunch room, but for which that feature would long ere this have been fully developed. At present the tortoises are much scattered and the group is devoid of character.

The most important additions to the collections of the Reptile Department, consisted of two very large regal pythons, 27 feet 4 inches and 25 feet long, respectively, and two fine specimens of the king cobra, all imported direct from Singapore, and an anaconda 16 feet in length, from Demerara. During the summer of 1900, Curator Ditmars and Keeper Charles Snyder spent their vacation in the swamps of South Carolina, as guests of the Pineland Club, where they made an exceptionally fine collection of the showy water snakes which there abound. A selection from this series, with the addition of two diamond-back rattlesnakes, was sent to the London Zoological Society in exchange for African Puff Adders.

On January 1, 1901, the Reptile House contained the following specimens:

Crocodylia.....	2 species.....	30 specimens.
Chelonia.....	30 ".....	38 "
Lacertiilia.....	15 ".....	57 "

Ophidia.....	45 species.....	340 specimens.
Batrachia.....	18 ".....	98 "
	<u>110</u> ".....	<u>663</u> "

Received by gift.....	261 specimens.
Purchased.....	103 "
Collected.....	422 "
Born.....	<u>89</u> "

Net gain during year, 18 species, 218 specimens.

Summary of Live Animals on Hand on January 1, 1901.

Mammals.....	106 species.....	405 specimens.
Birds.....	104 ".....	425 "
Reptiles.....	110 ".....	663 "
Total.....	<u>320</u>	<u>1493</u>

Received by gift during the year.....	480 specimens.
Received by purchase.....	728 "
Born in the park.....	<u>166</u> "

Department of Administration.

R. H. MITCHELL, CHIEF CLERK.

During the past year this department has transacted a great amount of business in a very satisfactory manner. The semi-monthly pay-rolls have been heavy, the bills payable have been numerous, and owing to the necessity for triplicate copies of all these, they have involved a serious amount of labor and attention. The Society and Park accounts have involved the keeping of four sets of books, and the production of numerous statements and balance sheets, including the itemised annual statements of the Treasurer.

In addition to the above, the Chief Clerk, assisted by Mr. Elwin R. Sanborn, has purchased all supplies, conducted all business in connection with the entrance gates, watch service, Park privileges, tenants, sales of guide books and photographs, and also established and maintained the lunch room in the eastern end of the Reptile House. Through the energetic efforts of Mr. Mitchell the total income accruing during the year to the credit of the Animal Fund has amounted to the very acceptable sum of \$4,005.58, all of which was expended in the purchase of animals.

During the absence of the Director in the Northwest, the Chief Clerk filled very acceptably the position of Acting Director, and the business of the Park went forward quite as usual.

The monthly attendance of visitors during the year 1900 was as follows :

January.....	20,480
February.....	21,208
March.....	42,652

April	62,140
May	94,965
June	70,115
July.....	56,311
August.....	39,446
September	45,545
October	25,990
November.....	29,710
December.....	17,366
Total attendance during the year.....	<u>525,928</u>
Greatest attendance in one day, May 30	<u>20,134</u>

Department of Forestry.

HERMANN W. MERKEL, CHIEF FORESTER.

To this department also great credit is due for the amount of intelligent and effective work accomplished by it during the past year. Its organization is admirable, and its usefulness covers a wide field. The following is an exhibit of the most important items of work accomplished during the year 1900 :

Regraded, top-soiled and seeded the banks of Cope Lake and the Elk Pond ; also built overflow for both.

Excavated and brought to a finish the pool near Bird House and the brook running through Bird Valley.

Excavated and lined with stone two bathing pools in the caribou and moose corrals.

Planned and carried out the planting of about 900 shade and evergreen trees in border plantations in Bird Valley, Elk Range, and along exposed walks in other portions of the park.

Thoroughly inspected and pruned about 1,200 forest trees, and cut out about 90 dead or dangerous trees.

Cut, stored and distributed 52 tons of ice, and distributed 102 tons additional.

Built walks at doors of Mammal House, west of Fox Dens, and to toilet buildings ; also scraped service road, and all walks in the Park preparatory to their being top-dressed.

Built 21 walk drains with iron gratings and brick catch-basins.

Built dam and laid 650 feet of 6-inch pipe to conduct brook into head of Beaver Pond.

Erected nearly 1,000 feet of wire guard along walk borders.

Graded, top-soiled, seeded and decorated interior of Flying Cage.

Graded, top-soiled and seeded about 7 acres of ground in various portions of the Park.

Distributed and placed in position 200 park settees.

Cut and stacked 12 tons of hay.

Collected and transported a carload of trees from Garrison, New York, to the Nursery, and set them in the Nursery.

Demolished and removed an old barn in Bronxdale.

Maintained and cleaned daily all walks and roads, mowed lawns and meadows, removed garbage and ashes, distributed some food, and assisted in the cleaning and maintaining of buildings and aviaries.

Built at the Nursery a large root cellar, and excavated the cellar for the new greenhouse.

Raised and distributed, or stored, the following food for animals: About 11 tons of root crops, 2,500 heads of cabbage, 4,500 roots of celery, 4,279 heads of lettuce, 2,500 ears of sweet corn, 100 bundles of cornstalks, 354 pumpkins, squash and melons, 2 tons of clover hay, and other vegetables in smaller quantities.

Department of Construction and Repair.

SAMUEL P. SENIOR, CHIEF CONSTRUCTOR.

During the past year the only important change in the Zoological Park staff was the resignation of Mr. W. H. Puffer as Chief Constructor. Mr. Samuel P. Senior was immediately appointed to fill the vacancy thus caused. Mr. Senior is a graduate of the Engineer Department of the Lehigh University (1897), since which his experience in engineering, architectural construction, roadmaking, etc., has admirably fitted him for the wide range of his duties as Chief Constructor, and the Society is fortunate in having secured his services in that position.

The most important item of work in this Department was the construction of the Polar Bears' Den, against the precipitous northern face of Rocking Stone Hill. Of all the dens for carnivorous animals ever constructed thus far, this is believed to be the most spacious and imposing. Its rear wall is a perpendicular cliff of pink and gray granite, about 25 feet in height, so smooth and precipitous that the bears cannot climb it. This is without bars or overhang at the top. A very spacious, brick-lined sleeping den, resembling a cave, has been constructed in the south-eastern face of the cliff. The floor of the inclosure consists chiefly of the natural ledge of rock which was uncovered for the purpose. The deep and very roomy swimming pool which was blasted out of the solid rock has proven of incalculable benefit to the inmates of the den. The coping which carries the steel cage work has been built wholly of weathered granite, and is far more pleasing to the eye than the best concrete. Mr. Puffer and the masons working under his direction are entitled to great credit for the skill and judgment displayed in the large amount of rock construction involved in this improvement. The steel cage work was constructed and erected in a manner highly satisfactory to the Society by the Page Woven Wire Fence Company. The total cost of this fine improvement was about \$3,500.

The remainder of the work of the Construction Department consisted of a great number of miscellaneous tasks, such as the following examples:

The erection of the Soda-fountain Pavilion.

Erection of twelve iron folding gates and improvement of sixteen exit turnstiles at the entrance pavilions.

Construction of new walks around Polar Bears' Den, Restaurant and in front of first Bear Dens.

Construction of temporary lunch-room and kitchen.

Construction of Shelter House for pelicans and cassowaries.

Construction of winter stalls and doors in Buffalo Barn for tropical deer.

Erection of permanent metal guard rails around Polar Bears' Den, areas at Bird House and near northwest entrance.

Erection of four flagstaffs on entrances.

Laying of water lines to lower Buffalo Range, Polar Bears' Den and Soda-water Pavilion.

Barrier erected at waterfall to protect park.

Stone coping laid under about two miles of fences.

Sewer constructed at Polar Bears' Den.

Fences erected at two entrances, for Wild Turkeys' Inclosure, at Fallow Deer Corral and in Ducks' Aviary.

Gutters of brick and cement constructed near Bear Dens.

All cage work in the park repainted, also all shelter houses in animal ranges.

Civil Engineering Department.

GEORGE M. BEERBOWER, ENGINEER.

The amount of work to be done by the Park Engineer continues undiminished, and the demands upon Mr. Beerbower have been so numerous that thus far it has been an impossibility for him to complete the large map designed to show all completed improvements. During the year Mr. Beerbower prepared the plans and specifications for the Polar Bears' Den and Soda-water Pavilion, surveyed and platted the extension of the motor road, about 4,500 feet of new walks, the entire sewer system between Baird Court and West Farms, the Elephant Inclosures and the site of the Service Building. For about six weeks his time was devoted to the surveying, platting and profiling of various trial lines for the eastern extension of the motor road, a section of which seems to present unusual difficulties in connection with other features of the Park.

Improvements and Expenditures by the Park Department.

As heretofore, the Park Department for the Borough of The Bronx, under Commissioner August Moebus, has pushed forward with all possible dispatch the improvement work which has devolved upon it. Not even one day has been lost unnecessarily by this Department, and the development of the park has been hastened in every possible way. The settlement of accounts between the Society and the Park Department has been prompt, and all plans laid before the Commissioner have been acted upon with gratifying dispatch. Chief Engineer Martin Schenck has taken a lively personal interest in the park and the Society's work therein, and the interests of both the public and the Zoological Society have been greatly advanced and promoted by him.

One of the most important items of the general work of the past year was the surfacing with trap-rock screenings and crushed gneiss top-dressing of all the walks in the park and the service

road to the Reptile House. This gave a perfectly smooth surface, which is also dry everywhere save in a few spots where special side drainage is necessary, and will soon be provided.

On August 9 a new contract for the erection of the Rocking Stone Restaurant (known officially as "Public Comfort Building No. 1") was let to Messrs. Ryan & McFerran, at \$17,300 who immediately began work upon the building, and expect to complete it in a satisfactory manner on or before March 15, 1901.

Messrs. Wm. H. Wright & Son erected a spacious Shelter Pavilion in front of the Wolf and Fox Dens in a very acceptable manner, for the sum of \$3,800. On December 27 a contract was awarded to Wilbur T. Wright for the erection of the Service Building, at a cost of \$12,900.

On January 24, 1901, a contract for the erection of the Primates' House, commonly known as the "Monkey House," was awarded to Thomas Cockerell & Son, at \$59,700, and there is every reason to believe that the contract is in good hands. Active work on this building began on February 10, 1901, and it will undoubtedly be completed during the present year.

Plans for the Lion House, for the extension of the sewer system, for the northern extension of the motor road and for about 2,000 feet of new walks have been filed with the Park Department, inspected and approved, and contracts will be advertised very shortly.

The following statement of funds appropriated by the Board of Estimate for ground improvements in the Zoological Park and expenditures therefrom has been kindly prepared by Mr. G. K. Ackerman, Chief Clerk of the Park Department, Borough of The Bronx :

Receipts from Appropriations.

July 27, 1898—First part of first appropriation.....	\$62,000 00
March 17, 1899—Second part of first appropriation.....	63,000 00
November 27, 1900—Installment of second appropriation.....	100,000 00
Premium on bonds.....	11,163 50
Balance of bonds authorized and to be issued.....	60,000 00
Total.....	<u>\$296,163 50</u>

Expenditures.

1898-1899—Contract, Bart. Dunn, "for constructing and improving grounds for Zoological Gardens".....	\$30,970 48
1898—Sundry bills for lumber, cement, etc., September 9 to December 31, 1898...	434 09
1898—Sundry bills, L. V. F. Randolph, Treasurer, expenses, etc.....	799 45
1898—Engineers, Inspectors, etc., to December 31, 1898.....	870 82
1898—Labor pay-rolls to December 31, 1898.....	6,200 66
1899—Contract, T. W. Timpson & Co., "for furnishing all labor and all materials for constructing four toilet buildings".....	1,400 00
1899—Contract, Page Woven Wire Fence Company, "for erecting complete all wire fences, etc.".....	10,571 84
1899—Contract, V. L. Dunne, "for furnishing 200 settees".....	1,200 00
1899—Contract, J. Frank Quinn, "for furnishing trap-rock screenings".....	1,677 90

1899—Contract, John C. Rodgers, Jr., "for constructing walls, pools, etc.".....	\$21,816 73
1899—Contract, John R. Sheehan, "four entrances".....	8,600 00
1899—Engineers, Inspectors, etc., from January 1 to December 31, 1899.....	4,001 41
1899—Labor pay-rolls, from January 1 to December 31, 1899.....	1,860 51
1900—Contract, William H. Wright & Son, "for constructing Shelter Pavilion".....	3,800 00
1900—Contract, N. W. Ryan, for constructing Public Comfort Building, on account.....	5,999 00
1900—L. V. F. Randolph, Treasurer, monthly bills for preparing grounds.....	25,251 26
1900—Engineers, Inspectors, etc., from January 1 to December 31, 1900.....	5,775 99
1900—Labor pay-rolls, from January 1 to December 31, 1900.....	6,914 80
1900—Balance, December 31, 1900.....	158,018 56
Total.....	<u>\$296,163 50</u>

Work during the Year 1901.

The current year will be for the Zoological Park a year of great activity and advancement. It will witness the completion of the Rocking Stone Restaurant, the erection of the Service Building (\$12,900), the Primates' House (\$59,700), the Lion House (about \$90,000), the completion of the sewer and water systems and the Motor Road, the construction of about 3,000 feet of new walks, the extension of the Antelope Corral, construction of a Moose Pond and the erection of about two miles of fencing. In addition to the above, the following new installations for birds and quadrupeds will be constructed by the Society: The Pheasants' Aviary, Eagles' and Vultures' Aviary, Cranes' Aviary, Mountain Sheep, Mountain Goat, Squirrel and Raccoon Inclosures.

The need for the Antelope House is more serious than ever before. Many tropical hoofed animals have been presented to the Society, for the care and display of which there is no provision whatever. Until this very important building has been provided, it is impossible to keep elephants, rhinoceroses, tapirs or large tropical hoofed animals of any kind. The plans are complete and on file with the Park Department, and the need for the building is distressingly great.

In addition to the future work enumerated above there remains a long list of miscellaneous items. One very important item will be the inclosing of Baird Court and its northern approach with a wire fence and suitable gates and the construction of the roadbed of the northern approach or concourse, in order that the immense inward traffic of contractors' teams with building materials may be entirely segregated from the remainder of the park grounds. This is a measure demanded in the joint interests of the grounds, the public and the contractors, and all save a very small small portion of the roadmaking to be done will be in the nature of a permanent improvement for the benefit of the concourse. This work will be undertaken forthwith.

Respectfully submitted,

WILLIAM T. HORNADAY, Director

BOROUGHS OF BROOKLYN AND QUEENS.

OFFICE OF THE DEPARTMENT OF PARKS—BOROUGHS OF BROOKLYN AND QUEENS, }
 ROOM No. 14, BOROUGH HALL, BROOKLYN, }
 January 1, 1901.

Hon. ROBERT A. VAN WYCK, Mayor of The City of New York :

SIR—I have the honor to submit herewith the report of the Department of Parks of the Boroughs of Brooklyn and Queens for the year 1900.

One of the principal improvements contemplated by the Department is the extension of the Bay Ridge parkway (Shore drive). The property between Sixty-sixth and Sixty-seventh streets was purchased by the former Shore Road Commissioners, excepting a small cemetery, the Kings County Gas and Illuminating Company's property and a plot of several lots. The owner of the lots and the trustees of the cemetery have negotiated for a sale, and deeds will be delivered in the ensuing year, which will give the Department title to all the land required (with the exception of the property of the gas company above referred to), between Sixty-sixth and Sixty-seventh streets, from Fort Hamilton avenue to the Shore road.

The former "Shore Drive Commissioners" contemplated the construction of a broad driveway, between Sixty-sixth and Sixty-seventh streets, with stone archways where the road passed under Second and Third avenues, at a cost of of \$3,500,000. Under the present management of the parks and parkways, it was thought that a boulevard constructed at such a great expense would not be either artistic or necessary, as it would place three public driveways (Sixty-sixth street, the proposed boulevard and Sixty-seventh street) parallel with each other. A system was therefore devised whereby most of the property purchased will be made into small parks and playgrounds, to be known as the "Bay Ridge Ramble." Sixty-seventh street will be opened and paved with macadam pavement, from Fort Hamilton to Fourth avenue, and from Fourth to First avenue (the point of intersection with the Shore road proper) the road will swerve between Sixty-sixth and Sixty-seventh streets in graceful curves and under substantial and artistic archways at Second and Third avenues, the surrounding grounds being planted with shrubbery and trees. Walks will be constructed for pedestrians and the boulevard when completed will have all the characteristics of a drive and walk through the park. It is expected that the work will be far enough advanced to permit of driving thereon before the close of next year. When the entire work is completed it will be more attractive and useful than the proposed boulevard and will save the taxpayers about \$3,500,000. This saving will be almost sufficient to complete the Shore drive and its surroundings, and at the same time will give the necessary driveway to connect with the Shore road and form a line of parks from Hamilton avenue to the Shore road proper.

In addition to keeping the entire park and boulevard system in good condition, a number of new improvements have been made. Among them is the Twelfth Ward, or Red Hook, Park. The work of construction has been substantially completed, and the park will be opened to the public in the early spring. This park is in a locality where parks are very much needed, and when completed it will be one of the most attractive of the smaller parks of the city.

The plaza at Fort Greene has been reconstructed, the old tar pavement having been taken up and carted away. The walks on the plaza were then paved and the ground graded and seeded

down, ready for the ensuing year. This spot, which was formerly an eye sore, will prove very attractive and will restore a number of acres to reinforce the beauties of Fort Greene.

The capacity of the cold greenhouses in Prospect Park has been doubled by the erection of a new palm-house, about one hundred feet long and fifty feet wide, this building being necessary for the proper protection of the many plants we are obliged to keep over from year to year.

Another feature that has been greatly appreciated is the improvement of the Fifteenth street entrance to Prospect Park. A roadway was built of trap-rock screenings, with stone copings and brick gutters, the cabbie stone pavement was removed and paving bricks laid, trees were planted around the circle and the lawns planted with shrubbery, making this entrance very attractive.

In addition to the above, a great demand was made by the pleasure drivers of Brooklyn for a "speedway." In order to satisfy this demand the Department of Parks undertook the reconstruction on Ocean parkway, from Twenty-second avenue to King's highway, of what is now known as the "Brooklyn Speedway." The Boulevard was sewered, graded and covered with fine loam, suitable for speeding purposes, giving a fine course for a mile and a half upon which horses could be speeded, and which has given general satisfaction to the horsemen, without detriment to the use of the Boulevard for other purposes. All of the above improvements, excepting the work on the Shore drive, were paid for out of the fund appropriated for the maintenance of the parks.

The details of the work performed by the Department will be found in the accompanying report of the Landscape Architect and Superintendent of Parks. The Secretary's and Chief Clerk's reports cover the finances, and the report of the Captain of Police of the Seventy-third (Prospect Park) Precinct shows the work performed by the men constituting said precinct and includes such other information as to games, etc., as is of general interest.

Respectfully submitted,

GEO. V. BROWER,

Commissioner of Parks, Boroughs of Brooklyn and Queens.

REPORT OF THE LANDSCAPE ARCHITECT.

BROOKLYN, January 1, 1901.

Hon. GEORGE V. BROWER, Commissioner, Department of Parks, Boroughs of Brooklyn and Queens:

SIR—Although the past year has witnessed the completion of no great work of landscape architecture or design in the parks under your commissionership, it has seen an amount of work and attention to detail in those already in use far beyond that of any previous year.

While it is to be regretted that the means at your disposal did not permit the construction of any new works, many of which are much desired by the public for health, recreation and enjoyment, it has seen the successful inauguration of the work at Fort Hamilton and Red Hook Parks, which will doubtless be completed during the coming season, and the beginning of the new Bay

Ridge Parkway extension, connecting Fort Hamilton avenue with the Shore road. Although presenting many difficulties of construction, owing to the sandy nature of the ground, this new driveway promises to be one of the most attractive of Brooklyn's many parkways.

The need of new parks and parkways is attested every pleasant day by the overcrowding of those already in existence. The constant growth of the city not only brings ever-increasing crowds of people, but covers the remaining open ground, leaving less and less space for playgrounds as the city increases in size and population. The parade ground, probably the most popular plot of ground under the jurisdiction of the Department of Parks, is far too small, causing every fine day a great deal of disappointment to the many who are unable to find space for their games. These games often number several hundred in one day. If additional land adjoining the parade ground could be secured, it would prove to be one of the most highly appreciated and popular improvements that could be brought about.

The following statement shows the improvements made and the work performed by the Department of Parks of the boroughs of Brooklyn and Queens, during the year 1900:

Prospect Park.

FLOWER GARDENS.

After the annual display of hyacinths, tulips and other early flowering bulbs, the gardens were dug over and new and varied designs planned and executed. The fancy caladiums, crotons and flowering cacti were especially fine during the summer.

The perennial garden on "Breeze Hill" continued its popularity. The luxuriance of growth developed by many of the coarser species crowded and injured the more delicate ones, but careful thinning and cultivation has greatly improved the varieties and their growth.

The rose garden and water lily ponds have been replanted and received careful attention, rewarding this with a luxuriant display of bloom in June. Three hundred new rose bushes were purchased and planted.

An iron rose arbor in the Italian style has been constructed and will be covered with running roses.

GREENHOUSES.

The greenhouses have been, if possible, more popular than ever. The exhibitions were continuous with flowering plants and shrubs, with the exception of during the summer months, and the display of chrysanthemums in November, was very fine and largely attended. The display of orchids was exceptionally fine, and the completion of the new palm house afforded accommodations for the ever growing collection of tropical trees, although it was not completed in time to allow a permanent arrangement to be made. A new fountain in the show house proved particularly attractive.

Over three hundred thousand bedding plants, crotons, geraniums, alternantheras, coleus, echeverias, etc., were propagated and planted out in the different flower beds.

The new "cold house" has proved a most valuable adjunct to the other houses, both for storing and retarding the growth of plants required for exhibition purposes.

TREES, SHRUBS, ETC.

During the year large numbers of flowering shrubs and trees were planted in Prospect Park.

The trees were cared for and carefully pruned, and during the early summer they were sprayed and brushed to destroy caterpillars and other insects. A number of old and diseased trees throughout the park were removed.

The woodland, where it consisted of native trees, was reinforced by planting young oaks, tulips, maples and other indigenous varieties, to take the place of those destroyed by gales and the ravages of time.

Valuable additions were made to the exotic planting around the flower gardens and other places, especially in evergreens. The evergreen screen around the easterly and southerly portions of the park, which had largely disappeared, has been replaced, principally with white pines and hemlocks, with more rare and peculiar specimens on the park side to give interest and variety.

LAWNS, MEADOWS, ETC.

Over three thousand cubic yards of prepared compost were received and distributed over the lawns and plantations, and one hundred tons of Canada unleached wood ashes were spread upon the meadows, which were regularly mown and their borders trimmed from time to time. All bare places were resown, borders sodded and wire guards erected to prevent intruders from making cross-walks. The mounds around the plaza received similar attention.

All catch-basin and the lakes were cleaned and the banks of the lake repaired in many places.

In the easterly side of the Park 23,308 square feet of new asphalt walks were laid, as well as a new walk leading to the miniature yacht-house on the peninsula. In addition, 69,942 square feet of old tar-walks were repaired and resurfaced under contract.

MECHANICAL WORK.

The mechanics were employed in making, repairing and painting the shelters, fountains, fences, comfort-houses, sprinklers, wagons, trucks, etc., and in making settees, loam-boxes, picnic tables, engineers' stakes, etc. Fifty-one horses were kept well shod by the horseshoer, and the following new work was performed by the various mechanics :

Fifteen hundred new settees were put together and placed in the various parks, new walks, steps and heat-guards were constructed in the new palm house, new brick basins were built at Ninety-second street and Fort Hamilton avenue, seats and stands (accommodating 15,000 persons) were erected for the Sunday-school anniversary parade, a stand was constructed for the Decoration day parade, rooms in the Litchfield mansion were fitted up for the use of the Brooklyn Public Library, stands built in Flushing and Jamaica Parks for concerts on July 4, and a reviewing stand was built for the bicycle races on Ocean parkway on Labor day.

"Vandal bridge," over Rocky pass, was reconstructed in rough stone in the most thorough and substantial manner, so as to be a permanent feature of the park.

A large stone and cement water-basin was built in the deer paddock for the animals to bathe in.

The boulder work in Rocky pass and along the water-course was extensively repaired, and will continue to receive attention until the whole has been overhauled.

PARADE GROUNDS.

The old wooden fence along the Franklin avenue and Prospect Park sides of the parade grounds was taken down, sidewalks graded, trees trimmed, and top-soil placed on the borders.

The lockers in the buildings, for the use of baseball players, were changed and repaired.

EAST SIDE LANDS.

Over 18,036 cubic yards of soil have been received and distributed in the formation of the mounds, according to the accepted plans.

Two new propagating houses were built by park employees, as the old houses in Prospect Park were no longer adequate to propagate the large number of plants required for use in the various parks.

A new tool-house was also built on the East Side Lands for use in storing tools and implements, etc.

The Outside Parks.

TOMPKINS PARK.

The regular work of keeping this park in good condition was carried on throughout the year. The walks and shelters were cleaned daily, the lawns cut and their borders trimmed, the trees and shrubs pruned and sprayed to destroy caterpillars and other insects, 100 truck-loads of compost were spread upon the lawns (in January), grass seed was sown in bare places, flower beds planted and cared for, and bulbs planted in the fall for spring display.

The banks around the shelter in the centre of the park were graded and covered with grass, and new tile walks were laid around the buildings.

FORT GREENE PARK.

The walks and shelters received attention, as well as all the plumbing, fences, borders, etc., and the trees and shrubbery were trimmed and sprayed to destroy insects. Three hundred truck-loads of compost and 20 tons of unleached wood ashes were received and spread upon the lawns. New flower beds were designed and planted, and bulbs for spring display were planted in the fall. Three thousand grass sods were laid along the borders.

On the plaza below the Martyrs' Tomb 41,265 square feet of asphalt tile walks were laid. This plaza has been greatly improved by the removal of the old tar pavement and its conversion into a fine lawn, with convenient and interesting walks. It is hoped to erect a fountain on the plaza in the near future.

On Saturday, June 16, the Martyrs' Tomb was opened for the purpose of interring the remains of the prison-ship martyrs which had been unearthed in the Brooklyn Navy Yard, and the usual ceremonies were held there on July 4

Concerts were given in Fort Greene Park during the months of July and August.

RED HOOK PARK.

The work of constructing this park is nearly completed and it will be opened to the public early in 1901. Over three thousand cubic yards of poor soil have been worked over with fertilizers, mounds have been built and shaped, grass, trees and shrubs have been planted, and the walks have been graded and tiled with 71,143 square feet of asphalt paving tiles.

Two fountain basins, with water connections and graceful stone copings, were constructed in the park, and a comfort-house and shelter have been erected. This park has been frequented and enjoyed by crowds of people even in its unfinished state.

SUNSET PARK.

As the men could be spared from other places the construction of the rustic stonework on the Fifth avenue side of Sunset Park was continued, the following amount of work having been performed : 9,875 square feet of sods were cut and laid, excavations were made for 200 cubic yards of boulders, which were set in place ; 1,200 cubic yards of earth were carted from the street to the mounds, 150 trees were planted on the bank, and 250 cubic yards of top-soil, for sodding and treeholes, were carted to the park.

The object of this work on the banks (40 feet high), left by excavating and grading the bordering streets, is to prevent the attrition and wear of the elements, which were rapidly reducing the height and area of the park. This work has most successfully served its purpose, and no injury whatever has occurred, either from frosts or washouts, where it has been done. The work will be continued as circumstances and funds permit.

FOREST PARK.

No changes have been made in this park, the small force of men available being engaged in guarding the park from fires and depredations, which are numerous, and necessitate a constant watch.

DYKER, CANARSIE AND BENSONHURST BEACHES, AND NEW LOTS PLAYGROUND.

No new work was performed in these parks, but they were all kept clean and maintained in good condition.

FORT HAMILTON PARK.

The work of grading this park was commenced and carried on as the men could be spared from other work. Denyse street, adjoining the park, was graded, 630 cubic yards of earth were removed and the roadbed was covered with gravel.

A 20-inch Parrott gun, weighing 52 tons, was presented to the Department by the United States Government, and was placed in Fort Hamilton Park.

THE SMALLER PARKS.

In all the smaller parks throughout the boroughs of Brooklyn and Queens, namely, Winthrop, Bushwick, Underhill, Highland, Carroll, City, Zindel, Bedford, Long Island City, Flushing, College Point, Poppenhausen, Municipal, Woodpoint, Kings (Jamaica), Lincoln Terrace, Linton, City Hall, Brooklyn Heights, Stuyvesant, Cooper, Cuyler, Cooper Gore and

Saratoga and Irving squares, the regular work of maintenance was carried on as carefully as circumstances would allow, throughout the year. The walks, shelters and gutters were cleaned daily, the plumbing, fences, etc., kept in order, the lawns mowed and their borders trimmed, flower beds planted and taken care of, bulbs planted in the fall for spring display, trees and shrubs trimmed and sprayed, and dead and diseased trees were removed and new ones planted. Over seven hundred truck-loads of composted manure were received during the months of January and February and spread over the lawns.

Concerts were given on Saturday afternoons during part of July and August in Tompkins, Winthrop and Bushwick Parks, and on Sunday afternoons in City Park.

THE BOULEVARDS.

MAINTENANCE, ETC.

All of the boulevards and drives under the jurisdiction of the Department of Parks were properly maintained and sprinkled as the weather required.

The trees were trimmed, old and diseased trees were removed and replaced by new ones, and over eight hundred golden willows, Carolina poplars and maples were planted on the Ocean parkway.

The trees on Ocean and Eastern parkways were sprayed with insecticide to destroy caterpillars, and the grass along the sides of the roadways was cut and the borders trimmed.

NEW WORK.

Part of the westerly bicycle path on Ocean parkway was rebuilt, from Fort Hamilton avenue south to Avenue C, the improvement consisting of a foundation of 1½-inch limestone, 4 to 5 inches in thickness, bound and topped with a layer one inch thick of limestone screenings.

Repairs were made to the westerly traffic road at various points between Bay parkway (Twenty-second avenue) and Kings Highway, an area of 21,000 square yards being resurfaced with trap rock and screenings.

The bridle-road, on the easterly side of the parkway, was partly recoated with clean gravel, and the southerly portion of the main drive, from King's Highway to Coney Island, was treated in the same manner.

From the plaza at the Park entrance to Avenue E, the main drive of Ocean parkway was resurfaced with Marcellus shale sandstone screenings, the area of the improvement being 48,750 square yards.

THE SPEEDWAY.

The work of constructing the speedway upon the main drive of Ocean parkway, from Twenty-second avenue to Kings Highway, was carried on in the early part of the summer, and was entirely completed, by park employees, within twenty-seven working days.

The work was done as follows: The old surface was picked up with rollers to a depth of from two to three inches, and then rolled with a five-ton roller, and upon the surface was spread a layer of clean, sharp sand, two inches thick. The stones were raked out, and upon the new foundation

a layer of selected loam, two and a half to three-inches thick, was placed, which was raked over, stones taken out and levelled. The area of this improvement measures 56,000 square yards.

For the purpose of draining the speedway, sixteen large catch-basins, with granite heads, and four cesspools, twelve feet in diameter by sixteen feet deep, were built.

Five thousand three hundred and eighty feet of twelve, fifteen and eighteen-inch drain-pipe were laid, to carry off the surface water.

EASTERN PARKWAY.

This entire parkway, from the plaza at Prospect Park to the Eastern parkway extension, was resurfaced with Marcellus shale, Hudson river gravel and trap rock screenings, after having been picked up by steam rollers.

STONE AVENUE.

Stone avenue was cleaned throughout and all refuse carted away. It was then resurfaced with Hudson river gravel and trap rock screenings, covering an area of 17,500 square yards.

GLENMORE AVENUE.

The section of Glenmore avenue, between Stone avenue and Sherman street, was picked up and all large stones and unsuitable material removed. It was then resurfaced with trap rock and trap rock screenings, the improvement covering an area of 10,920 square yards.

BAY PARKWAY (TWENTY-SECOND AVENUE).

This parkway was kept in good condition throughout the year, and a number of minor repairs were made.

Three new large catch-basins, with granite heads, were built at Bay parkway and Seventy-third street.

FORT HAMILTON AVENUE.

The section of Fort Hamilton avenue, between Coney Island avenue and Ocean parkway, was repaved. The roadbed between the railroad tracks and the southerly curb-line was excavated to a depth of 10 inches below finished grade, and the surplus material carted away. A gutter of granite blocks was then laid. The improvement consisted of 11,400 square yards of new macadam pavement and 811 square yards of granite block gutters.

BAY RIDGE PARKWAY (SHORE DRIVE).

The improvement of the Bay Ridge parkway extension embraces two contracts, one with Thomas Monahan for building a roadway from Fourth avenue to the present Shore road, and the other with the Eastern Stone Company for the construction of two brick-and-stone archways, one under Second avenue and one under Third avenue.

The work on this extension was commenced about July 1, 1900. The work done to date under contract with Thomas Monahan is as follows :

Excavation, 49,545 cubic yards ; macadam replaced, 5,166 square yards ; curbing reset, 1,421 lineal feet ; Belgian block pavement relaid, 753 square yards ; cobble-stone pavement relaid,

135 square yards ; 24-inch sewer-pipe relaid, 1,336 lineal feet ; 18-inch sewer-pipe laid, 550 lineal feet ; 15-inch sewer-pipe laid, 925 lineal feet ; 12-inch sewer-pipe laid, 345 lineal feet ; manholes built, 13.

The contract of the Eastern Stone Company, for brick and Ohio sand-stone archways under Second and Third avenues, has progressed as follows :

Earth excavation, 17,710 cubic yards ; concrete in foundation, 671 cubic yards ; rubble masonry, 1,227 cubic yards ; Ohio sand-stone, cut and in place, 4,638 cubic feet ; brick laid in arches, 222,000.

The lower end of the Shore Drive, paved last year by Kelly & Byrnes under contract, was cleaned, repaired and recoated with trap-rock screenings by the contractors, and was then turned over to the Department of Parks.

DONATIONS TO THE DEPARTMENT.

From Mrs. Johnssen, No. 322 Carroll street, Brooklyn, one century plant ; Mr. Thomas A. Eddy, No. 30 Broad street, New York, one Chinese sampan ; Mr. Charles Briggs, No. 95 Garfield place, Brooklyn, four pigeons ; Mr. William Morrison, No. 27 Seventh avenue, Brooklyn, one white-headed monkey ; Mr. G. Gauge, Barrington, Rhode Island, one lot (50 plants) of orchids (cypripediums) ; Mrs. H. Leonard, No. 334 Dean street, Brooklyn, one large pomegranate plant ; Mrs. Richard Kamphes, No. 184 Euclid avenue, Brooklyn, one lot of cacti ; Mr. Charles I. Bloom, No. 1456 Atlantic avenue, Brooklyn, five wild ducks ; Mr. H. S. Salt, Crooke avenue and Parade place, Brooklyn, small buck deer, from Trinidad ; Mr. W. F. Forkeos, No. 37 Sandpole street, Brooklyn, one guinea hen ; Mrs. Baird, No. 391 Bergen street, Brooklyn, one anteater ; Mr. John F. Maillie, No. 1245 Prospect place, Brooklyn, one large Chinese magnolia tree ; Mr. William True, No. 465 Flatbush avenue, Brooklyn, one armadillo and one ferrett, from South America ; Mr. H. Beasley, No. 187 Van Buren street, Brooklyn, one pair of doves ; Mr. Frank Ibert, Evergreen avenue, Brooklyn, one pair of ground hogs ; Mr. George Reiger, No. 119 Conover street, Brooklyn, one tiger cat, from Brazil ; Dr. H. Goubeaud, No. 518 Carlton avenue, Brooklyn, six German canaries ; Mr. George Pope, No. 871 Bushwick avenue, Brooklyn, one owl ; and from Mr. Henry H. Lewis, No. 148 Sixth avenue, Brooklyn, one gray eagle and two Canadian geese.

Respectfully submitted,

JOHN DE WOLF, Landscape Architect.

ALVIN BOODY, Superintendent of Parks.

REPORT OF THE CAPTAIN OF POLICE.

BROOKLYN, January 1, 1901.

Hon. GEORGE V. BROWER, *Commissioner, Department of Parks, Boroughs of Brooklyn and Queens :*

SIR—I have the honor to submit herewith my annual report of the work accomplished by the men constituting the police force of the Prospect Park (Seventy-third) Precinct, together with such other information in relation to music, games, etc., as is of general interest, and which comes under police supervision.

Prospect Park Police Force.

The police permanently assigned to duty in the Seventy-third Precinct are sixty-six in number, and consist of the following officers :

One Captain, five Sergeants, three Roundsmen and fifty-seven Patrolmen.

One Sergeant, permanently assigned to duty in this precinct, is in charge of the horses and equipments of the Police Department of the Borough of Brooklyn, and is therefore not on our active list.

Of the above mentioned three Roundsmen and fifty-seven Patrolmen, one Roundsmen and eleven Patrolmen are mounted, thus leaving two Roundsmen and forty-six Patrolmen for foot-patrol duty ; of the eleven mounted Patrolmen, five are posted on Ocean parkway, two on Eastern Parkway and the remaining four within Prospect Park.

One Detective Sergeant was transferred to the Central Office Detective Bureau, and one Patrolman was retired since my last Annual Report. The retired Patrolman was replaced by another of similar rank, but the Detective Sergeant was not replaced by another, thus leaving our total force one man short of what it was a year ago.

The Arrests in the Park.

There were sixty-four arrests made by members of this precinct during the year ending December 31, 1900, of which fifty-two were sent to Court for trial, and twelve were not held on account of lack of sufficient evidence.

Of the twelve prisoners arrested and not held on account of insufficient evidence, six were for violation of park ordinances, one for assault in the third degree, one for petit larceny and four for disorderly conduct.

The fifty-one prisoners sent to Court for trial were charged with the following offenses : Violation of park ordinances, 23 ; petit larceny, 3 ; indecent exposure, 4 ; malicious mischief, 1 ; intoxication, 8 ; disorderly conduct, 5 ; begging, 1 ; vagrancy, 1 ; assault in the third degree, 2 ; suspected larceny, 1 ; carrying concealed weapons, 1 ; criminal negligence, 1 ; and grand larceny, 1.

Music in the Parks.

The following concerts were given in Prospect Park and some of the larger outside parks during the summer months :

Saturday concerts in Prospect Park, fifteen ; first concert, June 2 ; last concert, October 21.

Sunday concerts in Prospect Park, fourteen ; first concert, June 3 ; last concert, October 21.

The concert given on September 15 was under the auspices of the Grand Army of the Republic, and that on October 21 was under the auspices of the United German Singing Societies of Brooklyn. There was also a special patriotic concert in Prospect Park on July 4.

In Fort Greene Park there were nine Saturday concerts given, the first being on July 7 and the last on September 1, with an additional special concert on July 4, making ten concerts in all.

In City Park there were six Sunday concerts, the first being on July 15 and the last on August 19.

In Winthrop Park there were five Saturday concerts, the first on July 21 and the last on August 18.

In Bushwick Park there were five Saturday concerts, the first on July 21 and the last on August 18.

In Tompkins Park there were four Saturday concerts, the first being given on July 28 and the last on August 18.

There were also special concerts given in Flushing and in Kings Parks, Jamaica, on July 4.

Summer Picnics.

During the year there were 446 picnics in Prospect Park, representing an attendance of 49,739 persons. Of these there were 169 Sunday-school picnics, with an attendance of 38,631 persons; 262 social picnics and family parties, with an attendance of 9,933 persons, and 15 private school picnics, with 1,175 persons in attendance.

During the month of May there were 115 picnics, with an attendance of 6,044 persons; in June, 108 picnics, with an attendance of 13,046 persons; in July, 125 picnics, with an attendance of 17,240 persons; in August, 50 picnics, with an attendance of 6,952 persons; and in September, 48 picnics, with an attendance of 6,457 persons.

Field Sports.

There were 1,854 games of baseball played on the Parade Ground during the season, as follows: In April, 77; in May, 241; in June, 353; in July, 335; in August, 391; in September, 338; in October, 119.

There were 97 games of cricket played during the following months: May, 8; June, 24; July, 21; August, 33, and September, 11.

There were 167 games of football played during the months of October and November.

There were 9 days of skating during the months of January and February.

There were (estimated) about 1,300 games of croquet and 4,000 games of lawn tennis played in Prospect Park during the summer months.

List of Accidents:

The total number of accidents of all kinds during the year was 134, and the number requiring medical attendance was 55. Of these 55 cases 33 were removed to the hospital and 22 were sent or taken to their homes.

The accidents above-mentioned were as follows : Miscellaneous accidents to carriages and sleighs, 18 ; accidents to bicyclists, 8 ; accidents to saddle horses and their riders, 7 ; collisions between carriages and other vehicles, 14 ; collisions between carriages and bicycles, 3 ; collisions between trolley cars, trucks, carriages and vehicles of other descriptions, 9 ; injured while playing baseball and football on Parade Ground, 4 ; injured while skating on park lake, 3 ; fell in park and injured, 13 ; sick and injured in park and removed to hospital, 33 ; sick and injured in park and removed to their homes, 22 ; demented persons restored to their homes, 2.

There were 10 lost children found wandering in the park, all of whom were restored to their parents, and 3 lost horses and 1 wagon were restored to their respective owners.

There were 2 suicides, 1 by poison and 1 by firearms, and 1 attempted suicide, during the year. There were 4 sudden deaths from the following causes : Sunstroke, 1 ; heart failure, 1 ; unknown but natural causes, 1 ; and 1 man was instantly killed by a falling derrick at the new extension to the Museum of Arts and Sciences.

Respectfully submitted,

MICHAEL A. McNAMARA, Captain, Seventy-third Precinct.

REPORT OF THE SECRETARY.

Statement of Expenditures of the Department of Parks of the Boroughs of Brooklyn and Queens during the year 1900.

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT
1900			
Jan. 6	Hayden & Meeder	Insurance on Bedford Park building.	\$25 00
" 6	John McAlpin.	25 loads of manure.	31 25
" 6	Peter McCormack.	25 "	31 25
" 6	John Owens.	25 "	31 25
" 6	Harris & Maguire.	Blue limestone and limestone screenings.	2,408 80
" 6	"	Trap rock and trap rock screenings.	4,955 20
" 6	Frederick W. Starr.	Lumber.	596 33
" 9	The Eastern Stone Company.	{ Stone for Fifteenth street entrance to Prospect } Park.	{ 1,438 67 }
" 12	Hayden & Meeder	Insurance on buildings in Forest Park.	85 50
" 12	John F. Maillie	Hudson river gravel.	3,606 57
" 12	Robert T. Brown, Secretary.	Office disbursements	16 36
" 15	Farrell Duffy.	25 loads of manure.	31 25
" 15	Photogravure and Color Company.	Illustrations for 1898 annual report	189 00
" 15	American District Telegraph Company.	Messenger service.	2 65
" 15	Thomas Rice.	10 barrels of carrots	12 50
" 15	Harris & Maguire	Blue limestone and limestone screenings	1,158 40
" 17	Mann & Co.	50 gallons disinfectant	45 00
" 17	G. W. Bennett	1 Rambler bicycle.	40 00
" 17	Samuel W. Cornell.	Hardware, etc	16 90

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Jan. 17	William N. Kenyon.....	Brick and cement.	\$49 50
" 17	I. S. Remson Manufacturing Company..	1 buggy with rubber tires	275 00
" 18	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	79 20
" 20	Charles J. Dunne.....	Meat and fish for animals.....	21 66
" 20	F. Donovan & Son.....	Cracked corn.....	4 70
" 20	John Kick.....	25 loads of manure.....	31 25
" 20	I. S. Remson Manufacturing Company..	One buggy.....	150 00
" 20	W. F. Doyle, D. V. S.....	Professional services.....	241 50
" 20	Lord & Burnham Company	Second payment on contract for greenhouse.	9,200 97
" 24	J. Frank Quinn.....	Trap rock and trap rock screenings.....	5,370 00
" 24	"	Trap rock.....	1,457 96
" 24	W. F. Doyle, D. V. S.....	Professional services.....	70 50
" 24	E. T. Buckingham.....	Bulbs.....	19 75
" 24	Flatbush Water Works Company.....	Water for sprinkling.....	9 37
" 31	New York and New Jersey Telephone } Company	Telephone service.....	313 15
" 31	P. Kane Harness Manufacturing Com- } pany.....	Repairs to harness, etc.....	18 65
" 31	Lord & Burnham Company.....	Repairing grate and heater in greenhouse.....	7 50
" 31	Ruwe Boos.....	One set of horse pads.....	2 40
" 31	The Brooklyn Union Gas Company....	Gas, from November 29 to December 30, 1899...	16 91
" 31	Long Island Water Supply Company..	Water for sprinkling parkways	496 50
Feb. 8	A. E. Willis.....	Photographic views.....	12 50
" 8	Delaware and Hudson Stone and Con- } struction Company	Marcellus shale sandstone screenings.....	1,260 00
" 8	Delaware and Hudson Stone and Con- } struction Company	"	357 84
" 8	John Golden.....	25 loads of manure.....	31 25
" 8	James Smith.....	25 "	31 25
" 8	Patrick Connor.....	25 "	31 25
" 8	Timothy Conklin	25 "	31 25
" 8	Patrick Keegan.....	50 "	62 50
" 8	Patrick Hart.....	25 "	31 25
" 8	Farrell Duffy	15 "	18 75
" 8	Patrick McDermott.....	60 "	75 00
" 8	Peter Gill	25 "	31 25
" 9	A. Martin.....	25 "	31 25
" 9	Edward Smith	25 "	31 25
" 9	Peter Connors.....	25 "	31 25
" 9	Mrs. Sarah Kelly.....	25 "	31 25
" 9	Patrick Dagnan.....	25 "	31 25
" 9	Fred. Robinson	25 "	31 25

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Feb. 9	P. McLaughlin	25 loads of manure.....	\$31 25
" 9	F. Donvan & Son.....	Corn, meal and screenings.....	12 85
" 9	Thomas McDermott	25 loads of manure.....	31 25
" 9	Charles Zeller & Son.....	Plants.....	28 00
" 9	John Kick.....	25 loads of manure.....	31 25
" 13	James T. Shillinglaw.....	Horse medicines.....	6 55
" 13	John J. Fenton.....	Clipping six horses.....	18 00
" 13	Brooklyn Lumber Company	Lumber.....	82 50
" 13	Robert T. Brown, Secretary.....	Office disbursements.....	18 46
" 13	Andrew Riley	25 loads of manure.....	31 25
" 13	P. J. McCormick.....	25 "	31 25
" 13	Michael Buggy	25 "	31 25
" 13	Edward Buggy.....	25 "	31 25
" 13	Henry Armstrong.....	25 "	31 25
" 13	Robert H. Taylor.....	Milk for animals.....	28 02
" 15	Timothy Conklin.....	25 loads of manure.....	31 25
" 15	Owen Cullen	25 "	31 25
" 15	Daniel J. Duggan.....	25 "	31 25
" 15	William Foy.....	25 "	31 25
" 15	Mrs. R. H. Attlesley.....	25 "	31 25
" 15	Michael Gill.....	25 "	31 25
" 15	Timothy Conklin.....	25 "	31 25
" 15	Thomas Connor	25 "	31 25
" 15	Thomas Corrigan.....	25 "	31 25
" 15	Frank Heeney.....	25 "	31 25
" 15	Patrick Keegan.....	25 "	31 25
" 15	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	49 24
" 16	P. McCanna.....	50 loads of manure.....	62 50
" 16	James Slavin.....	25 "	31 25
" 16	George Kane.....	50 "	62 50
" 16	John Holland	25 "	31 25
" 16	P. H. Nannery.....	25 "	31 25
" 16	M. J. Keeley.....	25 "	31 25
" 16	Thomas Harrigan.....	25 "	31 25
" 16	Patrick Hart.....	25 "	31 25
" 16	John F. Maillie.....	Top-soil for Red Hook Park	4,296 92
" 23	Patrick Boice.....	25 loads of manure.....	31 25
" 23	William Lynch.....	25 "	31 25

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Feb. 23	Thomas Kane.....	25 loads of manure.....	\$31 25
" 23	P. Keegan.....	25 "	31 25
" 23	P. Keenan.....	25 "	31 25
" 23	M. J. Keeley.....	25 "	31 25
" 23	John M. Bulwinkle	2 books	8 65
" 23	Thomas Rice.....	10 barrels carrots.....	12 50
" 23	John O'Brien.....	25 loads of manure.....	31 25
" 23	James T. Shillinglaw	Neatsfoot oil.....	1 25
" 23	The J. L. Mott Iron Works.....	Grates, etc., for stoves	8 71
" 23	Ruwe Brothers.....	Blacksmithing materials.....	201 30
" 23	H. Aschenbach.....	6 Whalebone whips.....	12 00
" 23	Nelson Brothers.....	Coal.....	334 50
" 23	Spratt's Patent (America), Limited.....	100 pounds dog biscuit.....	5 00
" 23	F. Donovan & Son.....	Forage.....	400 88
" 23	Ruwe Brothers.....	Materials for buckboard wagon.....	59 50
" 23	The American District Telegraph } Company.....	Messenger service.....	4 25
" 23	C. W. Keenan.....	75 gallons creosote stain	56 25
" 23	P. Kane Harness Manufacturing Com- } pany.	Repairs to harness, etc.....	11 65
" 23	Samuel W. Cornell	Hardware	128 82
" 23	" Brooklyn Daily Eagle".....	Printing tickets.....	2 75
" 23	Patrick McDermott.....	25 loads manure.....	31 25
" 23	James Harrigan	25 "	31 25
" 23	Joseph Crane.....	25 "	31 25
" 23	James Sheridan.....	25 "	31 25
" 23	Timothy Conklin.....	25 "	31 25
" 23	Thomas Rice.....	25 "	31 25
" 23	P. McLoughlin	50 "	62 50
" 23	Thomas Monroe.....	25 "	31 25
" 23	James C. O'Brien	25 "	31 25
" 23	Pioneer Iron Works.....	Repairs to boiler at well	6 58
" 23	Ellwood Weeks.....	Cement.....	18 90
Mar. 2	James G. Shaw, Assignee of Manhattan } Construction Company	Work on Fort Hamilton avenue.....	8,173 73
" 14	John A. Scollay	New boiler and repairs.....	348 89
" 14	William N. Kenyon.....	16 barrels of cement.....	16 00
" 14	S. B. Krause.....	3 barrels kerosene oil.....	11 30
" 14	John S. Loomis	Hire of bay mare.....	20 00
" 14	Jamaica Water Supply Company.....	Water at Forest Park.....	11 25
" 14	F. Donovan & Son.....	Corn, screenings and meal.....	13 70

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Mar. 14	Robert T. Brown, Secretary.....	Office disbursements.....	\$8 50
" 14	Daniel Duggan.....	25 loads of manure.....	31 25
" 14	P. Nannery.....	25 ".....	31 25
" 14	Michael Padden.....	25 ".....	31 25
" 14	William Walsh.....	25 ".....	31 25
" 14	Patrick Connor.....	25 ".....	31 25
" 14	P. Degnan.....	25 ".....	31 25
" 14	John Holland.....	25 ".....	31 25
" 14	John Kick.....	25 ".....	31 25
" 14	Michael Byrnes.....	25 ".....	31 25
" 14	John Monroe.....	25 ".....	31 25
" 14	Thomas J. Ryan.....	25 ".....	31 25
" 14	John Fullam.....	75 ".....	93 75
" 14	Photogravure and Color Company.....	Designs for concert programs.....	225 00
" 14	Abraham & Straus.....	Carpet sweeper and mats.....	25 20
" 14	Stdebaker Brothers Manufacturing Company.....	Repairs to sprinklers.....	94 25
" 14	Ruwe Brothers.....	Repairs to wagons.....	7 00
" 14	Department of Correction.....	30 dozen brooms.....	153 00
" 15	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	67 14
" 20	H. Badeau.....	2 maps.....	4 00
" 21	Michael Mullady.....	75 loads of manure.....	93 75
" 21	James Slavin.....	25 ".....	31 25
" 21	John Daley.....	25 ".....	31 25
" 21	William Buckley.....	50 ".....	62 50
" 21	Mrs. Mary Kennington.....	25 ".....	31 25
" 21	Richard O'Brien.....	25 ".....	31 25
" 21	James Dempsey.....	50 ".....	62 50
" 21	Lawrence Ledwith.....	25 ".....	31 25
" 21	N. Ryan.....	50 ".....	62 50
" 21	Peter Gill.....	25 ".....	31 25
" 21	C. H. Joosten.....	Trees.....	62 50
" 21	Charles J. Dunne.....	Meat and fish for animals.....	40 19
" 21	Spratt's Patent (America), Limited.....	Dog biscuit.....	10 00
" 21	Robert H. Taylor.....	Milk for animals.....	28 44
" 21	Joseph A. Manda.....	Moss and peat.....	45 00
" 21	The Brooklyn Union Gas Company.....	Gas at Litchfield Mansion.....	18 32
" 23	The John H. Shults Company.....	Bread for animals.....	22 00
" 23	F. N. DuBois.....	Plumbing materials.....	76 75

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Mar. 23	Harris & Maguire.....	Axle grease.....	\$5 40
" 23	Samuel W. Cornell.....	Lanterns and nails.....	32 20
" 23	Nelson Brothers.....	1 ton blacksmith's coal.....	4 75
" 23	Flatbush Water Works Company.....	Water at Willink entrance.....	7 87
" 23	New York & New Jersey Telephone } Company.....	Telephone service.....	100 81
" 23	S. B. Kraus.....	Kerosene oil.....	31 56
" 23	American District Telegraph Company.....	Messenger service.....	3 50
" 23	Samuel W. Cornell.....	Hardware.....	57 44
" 23	Harris & Maguire.....	Axle grease.....	90
" 23	Nelson Brothers.....	Coal.....	422 80
" 28	Lord & Burnham Company.....	Final payment on contract for Greenhouse.....	5,966 93
" 28	Flatbush Water Works Company.....	Water at Willink entrance.....	9 24
" 28	Thomas Rice.....	Carrots.....	12 50
" 28	P. Kane Harness Manufacturing } Company.....	Repairs to harness, etc.....	6 55
" 28	Robert H. Taylor.....	Milk for animals.....	23 64
" 28	Brooklyn Union Gas Company.....	Gas at Litchfield Mansion.....	17 76
" 28	The John H. Shults Company.....	Bread for animals.....	31 50
" 28	F. Donovan & Son.....	Meal, corn and screenings.....	13 45
" 28	Samuel W. Cornell.....	Hardware.....	462 34
Apr. 6	The Woodhaven Water Supply Com- } pany.....	Water at Forest Park.....	11 89
" 6	George V. Brower.....	Expenses of official visit.....	39 25
" 6	Nason Manufacturing Company.....	Plumbing materials.....	73 26
" 6	Ellwood Weeks.....	82 barrels of Portland cement.....	220 80
" 6	Frederick MacMonnies.....	Fifth payment on contract for side groups for } Memorial Arch.....	10,000 00
" 6	F. Donovan & Son.....	Forage.....	357 73
" 6	Ruwe Bros.....	Blacksmithing materials.....	350 53
" 6	Flemmer & Felmy.....	Plants.....	5 00
" 6	Brooklyn Lumber Company.....	Lumber.....	9 38
" 6	J. N. Pigot & Co.....	2 barrels machine oil.....	31 20
" 6	New York and New Jersey Tele- } phone Company.....	Telephone service.....	172 86
" 6	Richardson & Boynton Company.....	Grate-bars, etc., for furnace.....	4 00
" 6	C. & R. Poillon.....	Lumber.....	79 80
" 6	John Claffy's Sons.....	Derrick, etc.....	220 00
" 6	J. C. Vaughan.....	Seeds.....	25 06
" 6	Thomas C. Dunham (Inc.).....	Painting materials.....	185 06
" 6	J. C. Vaughan.....	Plant labels.....	1 30
" 6	James Corcoran.....	25 loads of manure.....	31 25
" 6	John Smith.....	25 ".....	31 25

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Apr. 6	John Kick.....	75 loads of manure	\$93 75
" 6	P. McCanna	25 "	31 25
" 6	P. B. Meissner.....	Plants	206 25
" 6	Robert T. Brown, Secretary.....	Office disbursements.....	15 85
" 6	C. A. Bloomingdale.....	Forage.....	468 46
" 13	F. Donovan & Son.	Corn, screenings and meal	15 50
" 13	American District Telegraph Company.	Messenger service.....	3 30
" 13	C. H. Joosten	Rhododendrons.....	75 00
" 13	Ruwe Bros.....	Blacksmithing materials.....	297 66
" 13	John F. Warth.....	Refilling two brooms.....	40 00
" 13	J. M. Thorburn & Co.....	Grass seed.	172 00
" 13	W. A. Manda.....	Plants	93 00
" 16	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	79 62
" 16	" "	"	28 80
" 18	John F. Maillie.....	Top-soil for Red Hook Park.....	6,174 82
" 19	"	Trap-rock screenings.....	1,674 63
" 23	Brooklyn Daily Eagle.....	Printing Report for 1898.....	45 30
" 23	James L. Robertson & Sons.....	Supplies for well.	101 04
" 23	Mann & Co.....	Fifty gallons disinfectant.	45 00
" 23	Brooklyn Lumber Company.....	Lumber.....	187 32
" 23	Buffalo Pitts Company.....	One disc harrow for steam roller.....	20 00
" 23	Thomas C. Dunham (Inc.).....	Whiting and putty.	3 35
" 23	P. Kane Harness Manufacturing Com- pany.	Harness repairs, etc.	21 45
" 23	Ellwood Weeks.....	Brick and cement.	123 75
" 23	William Churchill Oastler.....	Repairs to steam rollers.....	232 00
" 23	John F. Maillie.....	Top-soil for Fort Greene Park	106 08
" 23	"	Top-soil for Red Hook Park	40 80
" 23	Samuel W. Cornell	Hardware.....	748 88
" 23	Brooklyn Lumber Company.....	Lumber.....	25 00
" 23	Nelson Bros.....	Coal.....	368 42
" 23	Samuel W. Cornell.....	Hardware.....	92 80
" 23	Watson & Pittinger.....	Spruce timber.....	4 95
" 23	Nathan Lane's Sons.....	Stationery.....	9 00
" 23	M. Fitzsimmons.....	Bird gravel.....	2 00
" 23	The Brooklyn Citizen.....	Printing tickets.....	80 00
" 23	Ruwe Brothers.....	One set of rubber tires.....	55 00
" 23	Frederick W. Starr.....	Cedar posts.....	95 00
" 23	F. Donovan & Son.....	Axle grease.....	3 24

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Apr. 26	Charles D. Smith.....	Ground bone and wood ashes.....	\$989 61
" 26	F. Donovan & Son.....	Forage.....	518 48
" 26	".....	Corn, meal and screenings.....	19 00
" 26	Ed. T. Buckingham.....	Plants and grass seed.....	503 35
" 26	A. V. Benoit.....	Engineer's supplies.....	48 59
" 26	N. C. Walter & Sons.....	Key checks and rings for tennis.....	4 00
" 26	Ruwe Brothers.....	Blacksmithing materials.....	240 94
" 26	John Lewis Childs.....	Plants.....	34 20
" 26	Edward E. Peirson.....	25 loads of manure.....	31 25
" 26	James Casey.....	50 ".....	62 50
" 26	Charles J. Dunne.....	Meat and fish for animals.....	15 66
" 26	The John H. Shults Company.....	Bread for animals.....	12 50
" 26	Shady Hill Nursery Company.....	Moss pinks.....	18 00
" 30	Peter Fruh.....	Boulders for Sunset Park.....	363 96
" 30	W. W. Livingston.....	Coal.....	654 84
" 30	Audley Clarke.....	Fire-clay, brick, etc.....	13 75
" 30	Ellwood Weeks.....	North River brick.....	7 50
" 30	John N. May.....	Chrysanthemums, etc.....	31 50
May 10	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	94 18
" 10	Robert T. Brown, Secretary.....	".....	16 05
" 12	Anderson & Frandsen.....	Repainting flag-poles.....	125 00
" 12	Brooklyn Lumber Company.....	Lumber.....	93 35
" 12	Gillis & Geoghegan.....	Work at Litchfield Mansion.....	30 00
" 12	Stud-baker Brothers Manufacturing } Company.....	Sprinkler attachments.....	240 00
" 12	Richardson & Boynton Company.....	Range, etc., for picnic shelter.....	52 65
" 12	Ed'son Electric Illuminating Company.....	Electric-light at Lake House, Prospect Park....	19 04
" 12	Brooklyn Heights Railroad Company..	Labor and materials at Electric Fountain.....	436 18
" 12	Department of Correction.....	Brooms.....	3 90
" 12	David F. Dobie, Agent, Dannemora } Prison.....	Grass baskets.....	50 72
" 12	J. Warren Mead, Agent and Warden } Auburn Prison.....	Desk and chair.....	51 25
" 12	Standard Oil Company of New York..	Kerosene oil.....	20 05
" 12	Addison Johnson, Agent and Warden, } Sing Sing Prison.....	Brooms, dusters, etc.....	74 65
" 12	F. N. DuBois.....	Plumbing materials.....	22 50
" 14	John F. Maillie.....	Trap-rock.....	1,982 85
" 14	".....	Top-soil for Red Hook Park.....	1,573 52
" 23	The J. L. Mott Iron Works.....	Repairs to stoves, etc.....	18 39
" 23	The Woodhaven Water Supply Company	Water at Forest Park.....	11 00
" 23	Edison Electric Illuminating Company.	Electric-light at Farmhouse and Shelter House..	126 07

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
May 23	F. N. DuBois.....	Plumbing materials.....	\$2,754 62
" 23	John Claffy's Sons.....	Supplies for derrick.....	92 15
" 23	The Fairbanks Company.....	1 Fairbanks scale.....	29 40
" 23	Richard Dudgeon.....	1 hydraulic jack.....	50 00
" 23	The I. S. Remson Manufacturing Com- pany.....	Stable supplies.....	21 00
" 23	The P. Kane Harness Manufacturing Company.....	Repairs to harness.....	13 30
" 23	Standard Oil Company of New York....	Kerosene oil.....	35 56
" 23	The Antozone Chemical Company.....	1 Barrel of disinfectant	52 00
" 23	M. S. Ray.....	Typewriting financial statement.....	10 50
" 23	P. Kane Harness Manufacturing Com- pany.....	Harness supplies, etc.....	17 10
" 23	James T. Shillinglaw.....	Horse medicines	16 00
" 23	W. F. Doyle, D. V. S.....	Professional services.....	109 00
" 23	Philip Strobel & Sons.....	Tables	210 00
" 23	Nelson Bros.....	Coal	371 74
" 23	Ruwe Bros.....	One barrel cylinder oil	25 00
" 23	Thomas C. Dunham (Incorporated)	Painting materials.....	101 15
" 23	Brooklyn Lumber Company.....	Lumber.....	97 28
" 23	Ellwood Weeks	Cement	158 40
" 31	F. W. Howell.....	Trees and shrubs	309 44
" 31	M. Kelly	4,500 grass sods	45 00
" 31	Robert H. Taylor.....	Milk for animals	36 60
" 31	Charles J. Dunne.....	Meat and fish for animals.....	16 80
June 8	The Brooklyn Union Gas Company....	Gas at Litchfield Mansion.....	17 38
" 8	New York and New Jersey Telephone) Company.....	Telephone service	103 22
" 8	C. H. Joosten.....	Roses.....	67 00
" 8	Flatbush Water Works Company.....	Water at Willink entrance.....	17 45
" 8	The Brooklyn Union Gas Company....	Gas at Litchfield Mansion	15 26
" 8	The John H. Shults Company.....	Bread for animals	10 00
" 8	C. H. Joosten.....	Japanese maple trees.....	45 20
" 8	Jacob Schlaefer	Tree protectors.....	12 00
" 8	F. Donovan & Son.....	Corn, seed, etc.....	11 35
" 8	Dunne & Co.....	Trees and shrubs.....	34 35
" 8	Herman W. Wipperman.....	Plants.....	6 00
" 8	Neostyle Company.....	Supplies for neostyle.....	4 00
" 8	F. Donovan & Son.....	Forage.....	194 18
" 8	Brooklyn Lumber Company.....	Lumber.....	184 50
" 8	Ruwe Bros.....	Blacksmithing materials.....	268 53
" 13	Louis Borjes.....	Concert at Prospect Park, Saturday, June 2.....	215 00

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
June 13	G. E. Conterno.....	Concert at Prospect Park, Sunday, June 3.....	\$210 00
" 13	John Condon.....	Plants.....	315 50
" 13	John Scott.....	Azaleas.....	36 00
" 13	Frederick W. Kelsey.....	".....	75 00
" 13	The Elizabeth Nursery Company.....	Trees and shrubs.....	51 18
" 13	Ellwanger & Barry.....	".....	79 25
" 13	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	94 96
" 13	Peter Fruh.....	Boulders for Sunset Park.....	181 97
" 13	Parsons & Sons Company (Limited)....	Trees, shrubs and plants.....	84 55
" 13	James Hines.....	2,000 grass sods.....	20 00
" 13	M. Kelly.....	1,500 grass sods.....	15 00
" 14	George Sykes.....	Plans and specifications for palm house.....	200 00
" 14	Edison Electric Illuminating Company.	Electric light at farm house and shelter house...	47 87
" 14	Frederick W. Kelsey.....	Six American lotus.....	3 25
" 14	Thomas Meehan & Sons.....	Trees and shrubs.....	20 10
" 14	Andorra Nurseries.....	Plants.....	82 50
" 14	John F. Maillie.....	78 loads of manure.....	78 00
" 14	N. C. Walter & Sons.....	Repairs to badges.....	6 00
" 18	Brooklyn Daily Eagle.....	Printing.....	6 00
" 18	Samuel W. Cornell.....	Rope and wire baskets.....	27 60
" 18	Thomas Ineson.....	Algae jell.....	37 50
" 18	Frank D. Creamer & Co.....	Brick.....	180 00
" 18	Adriance, Platt & Co.....	Mower repairs and parts.....	140 26
" 18	P. Kane Harness Manufacturing Com- pany.....	Harness repairs.....	8 95
" 18	The J. L. Mott Iron Works.....	Castings for hydrants.....	9 00
" 18	James T. Shillinglaw.....	Horse medicines.....	6 85
" 21	A. V. Benoit.....	Blue-print paper.....	10 00
" 21	Shady Hill Nursery Company.....	Plants.....	113 43
" 21	George E. Saulnier.....	Oriental plants.....	36 75
" 21	Samuel W. Cornell.....	Hardware, etc.....	70 78
" 21	F. Donovan & Son.....	Corn and meal.....	9 80
" 21	D. W. Binns.....	Drain heads, etc.....	17 50
" 21	C. & R. Poillon.....	Flag pole.....	54 00
" 21	Robert T. Brown, Secretary.....	Office disbursements.....	17 99
" 21	William Eatterman.....	1 screen.....	7 85
" 21	Robert H. Taylor.....	Milk for animals.....	18 60
" 21	The John H. Shults Company.....	Bread for animals.....	12 50
" 21	Charles J. Dunne.....	Meat and fish for animals.....	17 92

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
June 25	Nelson Bros.....	Coal.....	\$335 58
" 25	Ellwood Weeks.....	16 barrels of cement.....	38 40
" 25	Brooklyn Lumber Company.....	Lumber.....	877 60
" 27	Ellwood Weeks.....	12 barrels of cement.....	28 80
" 27	Samuel W. Cornell.....	Hardware.....	156 00
" 27	Ellwood Weeks.....	Brick and cement.....	72 50
" 27	F. Donovan & Son.....	Forage.....	296 78
" 27	T. E. Crimmins.....	Marcellus shale sandstone screenings.....	4,095 00
" 27	Ruwe Bros.....	Carriage bolts.....	98 22
" 27	G. E. Conterno.....	Concert at Prospect Park, Sunday, June 10.....	215 00
" 27	".....	Concert at Prospect Park, Saturday, June 9.....	215 00
" 27	Louis Conterno.....	Concert at Prospect Park, Sunday, June 17.....	215 00
" 27	".....	Concert at Prospect Park, Saturday, June 16....	215 00
" 27	Flatbush Water Works Company.....	Water at Willink entrance.....	11 43
" 27	American District Telegraph Company.....	Messenger service.....	6 30
" 27	P. Kane, Harness Manufacturing Com- pany.....	Harness supplies.....	13 25
" 27	W. F. Doyle, D. V. S.....	Horse food.....	8 50
" 27	Brooklyn Daily Eagle.....	Note heads and printing.....	6 75
" 27	John F. Maillie.....	Hudson river gravel.....	1,763 19
" 29	Louis Borjes.....	Concert at Prospect Park, Saturday, June 23..	215 00
" 29	Thomas F. Shannon.....	Concert at Prospect Park, Sunday, June 24.....	195 00
July 3	John F. Maillie.....	Hudson river gravel.....	851 40
" 3	".....	Trap-rock screenings.....	871 45
" 9	Robert T. Brown, Secretary.....	Office disbursements.....	26 44
" 9	Henry A. Dreer.....	Aquatic plants.....	48 75
" 9	Thomas C. Dunham (Incorporated).....	Painting materials.....	201 79
" 9	F. N. Dubois.....	Plumbing materials.....	3,259 87
" 11	Henry Hawkes, Jr.....	Water connections at Red Hook Park.....	121 70
" 11	American District Telegraph Company.....	Messenger service.....	7 35
" 11	Thomas F. Shannon.....	Concert at Prospect Park, Sunday, July 1.....	215 00
" 11	Louis Borjes.....	Concert at Kings Park, Jamaica, Wednesday, July 4.....	110 00
" 12	Thomas F. Shannon.....	Concert at Flushing Park, Wednesday, July 4....	110 00
" 12	Louis Conterno.....	Concert at Prospect Park, Saturday, June 30....	215 00
" 13	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	92 71
" 17	Baker, Voorhis & Co.....	Session Laws of 1900.....	3 75
" 24	John F. Maillie.....	Hudson river gravel.....	2,694 78
" 24	".....	Top soil for Red Hook Park.....	201 14
" 24	".....	Trap-rock screenings.....	991 80

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
July 31	James W. Herrick.....	Printing	\$6 50
" 31	John Condon.....	Plants.....	245 00
" 31	Otto N. Bergner	Concert at Fort Greene Park, Wednesday, July 4.	110 00
" 31	E. J. McCormick.....	" " Saturday, July 7...	110 00
" 31	M. Kelly.....	Sods.....	7 00
" 31	James Hines.....	"	10 00
" 31	Conrad Frank.....	Concert at Fort Greene Park, Saturday, July 14.	105 00
" 31	E. J. McCormick.....	Concert at City Park, Sunday, July 15.....	110 00
" 31	R. L. Halle.....	Concert at Winthrop Park, Saturday, July 21...	110 00
" 31	Edward S. Duffy.....	Concert at City Park, Sunday, July 22.....	110 00
" 31	Louis Borjes.....	Concert at Prospect Park, Sunday, July 8.....	215 00
" 31	"	" " Saturday, July 21....	215 00
" 31	Louis Conterno.....	" " " 14....	215 00
" 31	Thomas F. Shannon.....	" " " 7....	215 00
" 31	"	" " Sunday, July 15....	215 00
" 31	"	" " " 22.....	215 00
Aug. 9	Ellwood Weeks.....	Brick, cement, etc.....	594 20
" 9	Nelson Brothers.....	Coal.....	230 40
" 9	Brooklyn Lumber Company.....	Lumber.....	2,070 70
" 9	William E. Verity.....	"	160 65
" 9	Ruwe Bros.....	Blacksmithing materials.....	88 10
" 9	Samuel W. Cornell.....	Hardware, etc.....	64 30
" 9	Thomas C. Dunham (Incorporated)....	Turpentine and oil.....	52 00
" 11	Frederick MacMonnies.....	Third payment on contract for Slocum statue....	3,000 00
" 11	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	105 15
" 11	The California Track Harrow Company	Improved track machine.....	135 00
" 11	Edwin W. Stowe.....	Concert at Bushwick Park, Saturday, July 21...	110 00
" 11	"	Concert at Winthrop Park, Saturday, August 4..	110 00
" 11	"	Concert at City Park, Sunday, August 5	110 00
" 11	E. J. McCormick.....	Concert at Fort Greene Park, Saturday, July 21..	110 00
" 11	R. L. Halle.....	" " " 28..	110 00
" 11	"	Concert at Bushwick Park, Saturday, August 4..	110 00
" 11	Louis Borjes	Concert at Prospect Park, Saturday, August 4..	210 00
" 11	Louis Conterno.....	" " " July 28....	215 00
" 11	"	" " Sunday, August 5....	215 00
" 11	Thomas F. Shannon.....	" " " July 29.....	215 00
" 15	John F. Maillie.....	Hudson river gravel.....	911 79
" 15	"	Trap-rock screenings.....	3,653 99

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Aug. 15	Thomas F. Flaherty.....	Concert at Tompkins Park, Saturday, August 4..	\$110 00
" 17	The Brooklyn Alcatraz Asphalt Company	Resurfacing walks in Prospect Park.....	12,500 00
" 17	P. J. Carlin & Co.....	First payment on contract for centre pavilion } of Museum of Arts and Sciences..... }	20,419 21
" 17	Seth Griffin.....	1 track machine.....	175 00
" 17	Robert T. Brown, Secretary.....	Office disbursements.....	12 86
" 21	R. L. Halle.....	Concert at Winthrop Park, Saturday, August 11.	110 00
" 21	John F. Cunningham.....	Concert at City Park, Sunday, July 29.....	110 00
" 21	W. F. Connelly.....	Concert at Winthrop Park, Saturday July 28.....	110 00
" 21	Edward S. Duffy.....	Concert at Bushwick Park, Saturday, August 11.	110 00
" 21	Edward S. Duffy.....	Concert at City Park, Sunday, August 12.....	110 00
" 21	Edwin W. Stowe.....	Concert at Fort Greene Park, Saturday, August 11.....	110 00
" 21	Louis Borjes.....	Concerts at Prospect Park, Saturday, August 11, and Sunday, August 12.....	420 00
" 21	The John H. Shults Company.....	Bread for animals.....	10 00
" 21	".....	".....	12 50
" 21	J. Condon.....	Geraniums.....	18 00
" 21	Robert H. Taylor.....	Milk for animals.....	18 00
" 21	".....	".....	18 60
" 21	Ed. T. Buckingham.....	Plants and bulbs.....	97 05
" 22	Otto N. Bergner.....	Concert at Tompkins Park, Saturday, July 28...	110 00
" 22	Coldwell Lawn Mower Company.....	Maintaining lawn mowers.....	675 00
" 22	William N. Kenyon.....	8 barrels of lime.....	8 80
" 22	Charles J. Dunne.....	Meat and fish for animals.....	34 20
" 22	M. S. & P. C. Brown.....	Repairs at Farm House.....	4 54
" 22	Fred. Thomass.....	Staking out gravel pit.....	35 00
" 22	Nelson Brothers.....	1 ton of Cumberland coal.....	4 75
" 22	Abraham & Straus.....	Flags and bunting.....	174 88
" 22	George W. Bennett.....	1 Rambler bicycle.....	40 00
" 22	Photogravure and Color Company.....	Programs for park concerts.....	616 20
" 23	John Claffy's Sons.....	Connecting gear for derrick.....	3 50
" 23	P. Kane Harness Manufacturing } Company..... }	Harness repairs.....	5 15
" 23	P. Kane Harness Manufacturing } Company..... }	".....	19 50
" 23	James T. Shillinglaw.....	Horse medicines.....	5 95
" 23	William E. Verity.....	Lumber.....	95 68
" 23	Jackson & Perkins Company.....	Hydrangeas.....	10 00
.....	Charles Hart.....	Retained percentage, work on Shore road.....	3,675 00
July 27	John F. Schlosser, as Committee of } the Estate of John J. Sackman, an } incompetent person..... }	Property on Eastern parkway.....	1,100 00
Aug. 29	G. E. Conterno.....	Concert at Prospect Park, Wednesday, July 4..	210 00

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Aug. 29	The Eastern Stone Company	First payment on contract for archways, Bay Ridge parkway	\$1,632 41
" 29	David G. Yates & Co	Trees, shrubs and plants	160 40
" 29	Edison Electric Illuminating Company }	Electric light at Farm House, Shelter House and Boat-house	120 14
" 29	Peter Henderson & Co	50 pounds of raphia	6 50
" 29	W. F. Doyle, D. V. S.	Professional services	110 25
" 29	"	Horse food	8 50
" 29	New York and New Jersey Telephone Company	Telephone service	205 79
" 29	David F. Dobie, Agent, Dannemora Prison	3 dozen watering pots	31 60
" 29	David F. Dobie, Agent, Dannemora Prison	Pails, dippers and buckets	106 00
" 29	Florists' Exchange	1 Florists' Directory	2 00
" 29	The Hastings Pavement Company ..	Asphalt paving tiles	86 25
" 29	F. Donovan & Son	Axle grease	8 94
" 29	William Churchill Oastler	Picks for steam roller	55 50
" 29	Standard Oil Company of New York ..	Kerosene oil	18 44
" 29	A. V. Benoit	Tracing cloth and blue-print paper	15 50
" 29	Samuel W. Cornell	Matches and galvanized wire	14 78
" 30	"The Brooklyn Citizen"	Printing	7 00
" 30	Pioneer Iron Works	Steam gauge, etc.	28 45
" 30	D. W. Binns	Grates for drains	24 00
" 30	John C. Duncan's Son	1 wagon jack	3 75
" 30	F. Donovan & Son	Corn, meal and screenings	21 15
" 30	William E. Verity	Lumber	30 00
" 30	"	"	139 55
" 30	Samuel W. Cornell	Hardware	21 92
" 30	Long Island Railroad Company	Freight on paving tiles	32 75
" 30	I. S. Remson Manufacturing Company ..	Repairing and painting buggy	45 00
" 30	Ruwe Bros.	Blacksmithing materials	76 40
" 30	The American District Telegraph Company	Messenger service	6 00
" 30	D. W. Binns	Manhole heads and covers	48 00
" 30	J. S. Woodhouse	Smoothing harrows	28 05
" 30	Flatbush Water Works Company	Water at Willink entrance	24 20
Sept. 6	T. E. Crimmins	Marcellus shale sandstone screenings	4,123 66
" 6	Otto N. Bergner	Concerts at Fort Greene Park, Saturday, August 4, and at Tompkins Park, Saturday, August 11 }	220 00
" 6	Edward S. Duffy	Concert at Winthrop Park, Saturday, August 18 ..	110 00
" 6	G. E. Conterno	Concert at Tompkins Park, Saturday, August 18	110 00
" 6	Louis Conterno	Concert at Prospect Park, Saturday, August 18 ..	215 00
" 6	Thomas F. Shannon	" Sunday, August 19	215 00
" 6	R. L. Halle	Concert at Fort Greene Park, Saturday, August 18	110 00

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Sept. 10	Henry Hawkes, Jr.....	Water and sewer connections.....	\$208 95
" 10	E. J. McCormick.....	Concert at Fort Greene Park, Saturday, August 25	105 00
" 10	".....	Concert at Fort Greene Park, Saturday, September 1.....	110 00
" 10	Otto N. Bergner.....	Concert at City Park, Sunday, August 19.....	110 00
" 10	G. E. Conterno.....	Concert at Prospect Park, Saturday, August 25..	215 00
" 10	".....	" Sunday, August 26...	215 00
" 10	".....	" Saturday, September 1	215 00
" 10	John F. Maillie.....	Trap-rock screenings.....	909 15
" 10	".....	".....	1,629 80
" 10	".....	Hudson river gravel.....	1,136 52
" 13	The Brooklyn Alcatraz Asphalt Com- } pany.....	Resurfacing Coney Island Concourse (retained } percentage).....	292 31
" 13	F. Donovan & Son.....	Forage.....	787 86
" 13	Nelson Bros.....	Coal.....	325 05
" 13	Elwood Weeks.....	Portland cement.....	26 40
" 13	William E. Verity.....	Lumber.....	60 55
" 13	Ruwe Bros.....	Blacksmithing materials.....	436 13
" 13	F. Donovan & Son.....	Forage.....	311 59
" 13	Thomas Monahan.....	First payment on contract for work on Bay } Ridge parkway.....	2,677 22
" 13	Robert T. Brown, Secretary.....	Office disbursements.....	26 53
" 13	Harris & Maguire.....	2,500 cubic yards of loam.....	1,175 00
" 14	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	89 94
" 15	Frank D. Creamer & Co.....	10 barrels of whiting.....	22 12
" 15	".....	Brick.....	249 75
" 15	".....	16 barrels of cement.....	40 00
" 17	J. Warren Mead, Agent and Warden, } Auburn Prison.....	Chairs.....	626 66
" 17	F. Donovan & Son.....	Meal, corn, screenings, etc.....	24 25
" 17	Lord & Burnham Company.....	Clips and brackets.....	120 00
" 17	Martin B. Brown Company.....	Letter-heads, etc.....	14 72
" 17	Read, Holliday & Sons.....	5 gallons germol fluid.....	7 50
" 17	George T. King.....	Supplement to "Nicholson's Dictionary of Gar- } dening".....	5 00
" 17	I. S. Remson Manufacturing Company.....	Web halters and sponges.....	9 10
" 17	Nelson Bros.....	1 ton of blacksmith's coal.....	4 00
" 17	William E. Verity.....	Sawing cedar stakes.....	20 81
" 17	Mann & Co.....	Chloro-naphtholeum.....	45 00
" 17	W. L. Glidden.....	2 ladlers.....	4 90
" 17	The American District Telegraph } Company.....	Messenger service.....	4 70
" 17	John F. Maillie.....	Gravel.....	942 48
" 17	E. C. Stevenson.....	Concert at Bushwick Park, Saturday, July 28...	110 00

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Sept. 19	Thomas C. Dunham (Incorporated)....	Atlantic white lead.....	\$58 80
" 19	F. N. DuBois.....	Plumbing materials.....	275 75
" 19	James Casey.....	Cement pipe, etc.....	2,218 64
" 19	Thomas F. Shannon.....	Concert at Prospect Park, Saturday, September 15	215 00
" 21	J. W. Fiske.....	2 drinking fountains.....	262 50
" 21	C. H. Joosten.....	2,000 cane plant stakes.....	12 00
" 21	Abraham & Straus.....	6 window shades.....	12 55
" 21	Standard Oil Company of New York....	Kerosene oil.....	18 44
" 21	".....	".....	17 26
" 21	William H. Smith's Sons.....	Flagpoles.....	400 00
" 21	Samuel W. Cornell.....	1 pair rubber boots.....	4 25
" 22	Curtis & Curtis.....	Repairs to pipe-threading machine.....	5 55
" 22	M. A. Burroughs.....	Landau, for use of Commissioners.....	9 00
" 22	Estate of B. C. Hollingsworth.....	Use of carriage.....	6 00
" 22	Robert H. Taylor.....	Milk, for animals.....	18 60
" 22	The John H. Shults Company.....	Bread, for animals.....	10 00
" 22	Joseph A. Manda.....	Moss and peat.....	67 50
" 22	New York and New Jersey Telephone Company.....	Telephone service.....	166 70
" 22	F. N. Dubois.....	Plumbing materials.....	232 30
" 22	Ellwood Weeks.....	16 barrels of cement.....	17 60
" 22	Ruwe Bros.....	Blacksmithing materials.....	79 00
" 22	William E. Verity.....	Lumber.....	243 93
" 26	H. V. Monahan.....	Chairs for musicians.....	10 50
" 28	Thomas Ineson.....	One barrel of Algae Jell.....	37 50
" 28	Edwin W. Stowe.....	Concert at Bushwick Park, Saturday, August 18.	110 00
Oct. 4	John F. Maillie.....	Trap-rock.....	894 65
" 4	".....	Hudson river gravel.....	3,510 54
" 5	Robert T. Brown, Secretary.....	Office disbursements.....	18 46
" 8	John F. Maillie.....	1,000 cubic yards of loam.....	625 00
" 8	Robert H. Taylor.....	Milk for animals.....	18 00
" 8	The John H. Shults Company.....	Bread for animals.....	12 00
" 8	Charles J. Dunne.....	Meat and fish for animals.....	56 94
" 8	W. F. Doyle, D. V. S.....	Stock food.....	17 00
" 8	Thomas E. Wheeler.....	75 loads of manure.....	37 50
" 8	Jamaica Water Supply Company.....	Water at Forest Park.....	11 25
" 8	J. M. Thorburn & Co.....	Seeds and bulbs.....	61 05
" 8	F. Donovan & Son.....	Cracked corn, oats, etc.....	55 40
" 8	Flatbush Water Works Company.....	Water for sprinkling.....	283 33

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1903			
Oct. 10	R. L. Halle	Concert at Winthrop Park, Saturday, August 25.	\$110 00
" 10	Peter Fruh	Boulders for Sunset Park	87 14
" 10	P. Kane Harness Manufacturing Com- pany	Repairs to harness, etc.	8 45
" 10	Pioneer Machine Works	Repairs to steam roller.	240 00
" 10	F. N. DuBois	Manhole heads and covers.	135 00
" 10	F. Donovan & Son	Oats, hay, straw, etc.	410 23
" 10	F. X. Kerrigan, Chief Clerk	Office disbursements.	78 73
" 15	New York and New Jersey Telephone Company	Telephone service.	107 36
" 15	William E. Verity	Lumber	16 20
" 15	Samuel W. Cornell	Hardware	63 84
" 15	"Brooklyn Daily Eagle"	Printing	2 00
" 15	The P. Kane Harness Manufacturing Company	Six hair cart pads.	7 50
" 15	Milbury Atlantic Supply Company	Trousers and coats for workmen.	15 40
" 15	The J. L. Mott Iron Works	Covers for drinking fountains.	7 50
" 15	Standard Oil Company of New York	Kerosene oil.	16 61
" 15	Frank D. Creamer & Co.	Brick and whiting	107 97
" 16	Thomas Monahan	Work on Bay Ridge parkway extension.	1,722 00
" 17	Eastern Stone Company	Work on archways, Bay Ridge parkway.	4,458 55
" 22	Photogravure and Color Company	Music programs.	319 55
" 23	William E. Verity, assignee of Brook- lyn Lumber Company	Lumber	292 50
" 23	William E. Verity, assignee of Brook- lyn Lumber Company	"	173 00
" 23	Thomas C. Dunham (Incorporated)	Painters' supplies.	117 35
" 23	Samuel W. Cornell	Hardware, etc.	271 49
" 23	Ruwe Brothers	Round iron and horse shoes.	69 14
" 24	Pioneer Iron Works	Repairs to steam roller.	29 05
" 24	Flatbush Water Works|Company	Water at Willink entrance.	24 46
" 24	Brooklyn Union Gas Company	Gas at Litchfield Mansion	22 20
" 24	C. H. Joosten	Hyacinth and Freesia bulbs.	30 00
" 24	Estate of David G. Yates	Evergreens.	106 50
" 24	P. J. Carlin & Co.	Second payment on contract for centre pavilion } of Museum building.	22,622 75
" 26	T. E. Crimmins	Marcellus shale sandstone-screenings.	3,549 00
" 27	William Batterman	One folding screen	7 85
" 27	George M. Eddy & Co.	Steel tapes and repairs.	35 25
" 27	Keuffel & Esser Company	Engineers' supplies.	35 09
" 27	New York and New Jersey Telephone Company	Telephone service.	97 32
" 27	William Fitzgerald	Second-hand granite paving blocks.	412 92
" 29	Thomas F. Shannon	Concert at Prospect Park, Sunday, October 21.	215 00
" 29	John F. Maille	Trap rock	1,936 47

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Oct. 29	John F. Maillie.....	Hudson river gravel.....	\$4,019 40
Nov. 1	John S. Loomis.....	Hire of bay mare.....	45 50
" 1	John F. Maillie.....	Hudson river gravel.	946 44
" 9	Robert T. Brown, Secretary.....	Office disbursements.....	14 92
" 9	F. Donovan & Son.....	36 boxes of axle grease.....	3 24
" 9	Samuel W. Cornell.....	5,000 dowels.....	25 00
" 9	The Autozone Chem'cal Company.....	One barrel of disinfectant.	52 00
" 9	Frank D. Creamer & Co.....	Vitrified sewer-pipe	134 25
" 9	Pioneer Iron Works.....	New safety plug and repairs to steam boiler.	19 35
" 9	" "	Repairs to steam boiler.....	4 00
" 9	Duparquet, Huet & Moneuse Company.....	Water back, etc., for range.....	8 50
" 9	The B. F. Goodrich Company.....	One pair of bicycle tires.....	5 00
" 15	The Hastings Pavement Company.....	Furnishing and laying asphalt paving tiles.....	12,076 66
" 15	Harris & Maguire.....	Laying sewer pipe on Ocean parkway.....	989 00
" 15	J. Frank Quinn.....	Trap rock.....	592 49
" 15	F. X. Kerrigan, Chief Clerk.....	Office disbursements.....	78 65
" 16	Thomas Monahan.....	Work on Bay Ridge parkway.....	1,601 78
" 17	William Campion.....	Cleaning and repairing well at Kings Park, } Jamaica	15 00
" 17	The P. Kane Harness Manufacturing } Company	Repairs to harness, etc.....	20 65
" 17	Henry R. Worthington	Expert test of pumping station at well.....	30 00
" 17	Henry Hawkes, Jr.....	Water connections at Red Hook Park.....	153 90
" 17	M. Kelly.....	1,000 grass sods.....	10 00
" 17	Hugo Mulerit.....	Collection of Japanese plants.....	50 00
" 17	Thaddeus N. Yates, successor to } David G. Yates & Co.....	Trees for Brooklyn Heights parks.....	21 00
" 17	F. Donovan & Son.....	Oats, hay, etc.....	17 40
" 17	Thomson Bros.....	Roof paint and cement.....	92 80
" 17	The Eastern Stone Company.....	Third payment on contract for archways, Bay } Ridge parkway.....	5,077 30
" 19	P. J. Carlin & Co.....	Third payment on contract for centre pavilion } of Museum building	27,502 60
" 20	The John H. Shults Company.....	Bread for animals.....	13 50
" 20	Flatbush Water Works Company.....	Water for sprinkling	50 00
" 20	Samuel W. Cornell.....	Oilskin coats, hardware, etc.....	34 44
" 20	Nelson Bros.....	One ton of Cumberland coal.....	4 75
" 20	I. S. Remson Manufacturing Company..	Harness supplies, and repairs to two carriages..	104 75
" 20	A. H. Hews & Co.....	Flower pots and pans.....	394 00
" 20	Ruwe Bros.....	One barrel of cylinder oil.....	30 00
" 20	Robert H. Taylor.....	Milk for animals	18 60
" 20	Frederick MacMonnies	Fourth payment on contract for Slocum statue..	4,000 00
" 22	M. Kelly.....	Two thousand grass sods.....	20 00

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Nov. 22	Washington Bulkley.....	Top-soil.....	\$117 00
" 22	The Brooklyn Union Gas Company	Gas at Litchfield Mansion.....	12 12
" 22	American District Telegraph Company.	Messenger service.....	3 55
" 22	"	"	6 05
" 22	James T. Shillinglaw.....	Horse medicines.....	16 00
" 23	Mann & Co.....	One barrel chloro-naphtholeum.....	45 90
" 23	R. J. Macaulay.....	Ground glass.....	30 00
" 23	Thomas C. Dunham (Incorporated).....	Sixty boxes of glass	210 00
" 23	F. Donovan & Son.....	Axle grease.....	6 00
" 23	Edison Electric Illuminating Company }	Electric-light at Farm-house, Shelter-house }	142 39
" 23	Department of Correction.....	and Boat-house, Prospect Park	
" 23	Flatbush Water Works Company.....	Brooms.....	29 25
" 23	Standard Oil Company of New York....	Water, at Willink entrance.....	12 62
" 24	John F. Maillie.....	Kerosene oil.....	16 44
" 24	"	Trap rock and trap-rock screenings.....	2,726 00
" 24	"	Hudson river gravel.....	2,852 19
" 26	F. N. DuBois.....	Plumbing materials	102 00
" 26	Nelson Bros.....	Coal.....	367 86
" 26	F. N. DuBois.....	Plumbing materials.....	180 79
" 27	Samuel W. Cornell.....	Hardware	11 38
" 27	Ellwood Weeks.....	Dyckerhoff Portland cement.....	50 40
" 27	F. Donovan & Son	Oats, hay, straw, etc.....	428 61
" 27	Ruwe Bros.....	Blacksmithing materials.....	84 01
" 27	William E. Verity, assignee of Brook- }	Lumber.....	268 65
" 27	lyn Lumber Company	"	295 18
" 27	William E. Verity, assignee of Brook- }		
" 27	lyn Lumber Company	Coal.....	383 28
" 27	Nelson Bros.....		
" 27	New York and New Jersey Telephone }	Telephone service.....	100 32
" 27	Company.....		
" 27	Joseph A. Manda.....	10 barrels of moss.....	22 50
" 27	Andorra Nurseries.....	300 golden willows.....	105 00
Dec. 7	John A. Scollay.....	New boiler and pipes for greenhouse.....	514 00
" 7	Samuel W. Cornell.....	One gross boxes matches.....	4 75
" 7	Standard Oil Company of New York....	Kerosene oil.....	15 78
" 7	John J. Fenton.....	Clipping horses.....	15 00
" 7	Robert T. Brown, Secretary.....	Office disbursements.....	17 03
" 7	F. X. Kerrigan, Chief Clerk.....	"	102 96
" 7	C. H. Joosten.....	Bulbs.....	80 00
" 11	W. F. Doyle, D. V. S.....	Professional services.....	92 50
" 11	Dr. George H. Berns.....	Veterinary services.....	67 00
" 11	David Dahlman.....	One horse.....	400 00

DATE.	NAME.	FOR WHAT PURPOSE.	AMOUNT.
1900			
Dec. 11	James T. Shillinglaw	Horse medicines.....	\$2 55
" 11	The P. Kane Harness Manufacturing } Company.....	Repairs to harness, etc.....	7 15
" 11	Brooklyn District Telegraph Company	Messenger service.....	7 10
" 11	A. V. Benoit.....	One Locke hand level.....	9 00
" 11	John A. Scollay.....	Ventilating apparatus for greenhouse.....	179 22
" 11	R. J. Macaulay	Glass.....	11 18
" 11	The P. Kane Harness Manufacturing } Company.....	One pair of driving reins.....	6 00
" 11	The Brooklyn Union Gas Company.....	Gas, at Litchfield Mansion.....	14 25
" 11	"	"	22 39
" 12	J. Frank Quinn.....	Blue limestone-screenings.....	828 44
" 12	Ruwe Bros.....	Blacksmithing materials.....	172 05
" 12	Ellwood Weeks.....	Cement.....	69 20
" 14	The Eastern Stone Company.....	Stone coping for Red Hook Park.....	1,556 20
" 14	Thomas Monahan.....	Work on Bay Ridge parkway	2,731 22
" 19	P. J. Carlin & Co.....	{ Fourth payment on contract for centre pavilion } of Museum building.....	31,737 30
" 19	J. Fred. Lavine.....	One bay horse.....	400 00
" 19	T. E. Crimmins.....	Marcellus shale sandstone-screenings.....	1,075 62
" 20	The Eastern Stone Company.....	{ Fourth payment on contract for archways, Bay } Ridge parkway	3,746 28
" 22	Williamsburgh City Fire Insurance } Company	Insurance on houses on the Bay Ridge parkway.	174 75
" 22	George V. Brower, Commissioner	Expenses of official visit to Philadelphia.....	23 90
" 24	Kelly & Byrnes	{ Retained percentage on contract for work on } Bay Ridge parkway terminus.....	3,719 06
" 27	McKim, Mead & White.....	Architects' fees, Museum of Arts and Sciences ..	9,167 39
" 27	Nelson Bros.....	Coal.....	687 54
" 31	F. Donovan & Son.....	Oats, hay and corn.....	215 15
" 31	Ed. T. Buckingham.....	Bulbs.....	1,807 66
" 31	The Hastings Pavement Company.....	Furnishing and laying asphalt paving tiles.....	6,725 34

Salary Pay-Rolls for the Year 1900.

Salary Pay-roll for the month of January.....	\$1,762 30
" " February.....	1,754 30
" " March.....	1,766 30
" " April	1,758 30
" " May	1,658 30
" " June	1,658 30
" " July	1,658 30
" " August.....	1,658 30
" " September.....	1,658 30

Salary pay-roll for the month of October	\$1,449 97
“ “ November	1,803 97
“ “ December	1,804 33

Pay-Roll and Disbursements of the Museum of Arts and Sciences, Under Jurisdiction of the Department of Parks.

Pay-roll and disbursements for the month of January	\$5,206 24
“ “ February	3,648 69
“ “ March	6,670 33
“ “ April	4,648 46
“ “ May	3,502 45
“ “ June	3,576 19
“ “ July	2,751 07
“ “ August	3,721 11
“ “ September	2,938 46
“ “ October	3,170 37
“ “ November	3,353 30
“ “ December	3,659 87

Respectfully submitted,

ROBERT T. BROWN, Secretary.

THE CHIEF CLERK'S REPORT.

BROOKLYN, January 1, 1901.

Hon. GEORGE V. BROWER, Commissioner, Department of Parks, Boroughs of Brooklyn and Queens :

DEAR SIR—I have the honor to submit herewith a statement of the weekly pay-rolls of the Department of Parks of the boroughs of Brooklyn and Queens for the year 1900 :

1900.

Jan. 5. Weekly Pay-roll No. 991	\$2,811 90
“ 12. “ 992	4,006 50
“ 19. “ 993	4,591 75
“ 26. “ 994	4,469 25
Feb. 2. “ 995	4,616 69
“ 9. “ 996	4,583 13
“ 16. “ 997	4,265 50
“ 23. “ 998	4,405 01
Mar. 2. “ 999	4,475 13
“ 9. “ 1000	4,818 00
“ 16. “ 1001	5,156 75

Mar. 23.	Weekly Pay-roll No. 1002.....	\$5,304 50
" 30.	" 1003.....	5,500 25
Apr. 6.	" 1004.....	5,768 00
" 13.	" 1005.....	5,721 98
" 20.	" 1006.....	6,101 70
" 27.	" 1007.....	6,408 56
May 4.	" 1008.....	6,876 00
" 11.	" 1009.....	6,962 02
" 18.	" 1010.....	6,905 40
" 25.	" 1011.....	5,997 66
June 1.	" 1012.....	6,749 65
" 8.	" 1013.....	7,125 66
" 15.	" 1014.....	7,118 90
" 22.	" 1015.....	7,083 15
" 29.	" 1016.....	7,326 03
July 6.	" 1017.....	6,411 35
" 13.	" 1018.....	6,843 00
" 20.	" 1019.....	6,874 68
" 27.	" 1020.....	6,469 71
Aug. 3.	" 1021.....	6,903 11
" 10.	" 1022.....	7,211 01
" 17.	" 1023.....	7,151 07
" 24.	" 1024.....	7,165 68
" 31.	" 1025.....	7,157 62
Sept. 7.	" 1026.....	6,601 39
" 14.	" 1027.....	7,190 56
" 21.	" 1028.....	7,039 57
" 28.	" 1029.....	7,185 43
Oct. 5.	" 1030.....	7,082 56
" 12.	" 1031.....	6,500 81
" 19.	" 1032.....	7,189 20
" 26.	" 1033.....	7,166 31
Nov. 2.	" 1034.....	7,032 38
" 9.	" 1035.....	6,289 38
" 16.	" 1036.....	6,981 38
" 23.	" 1037.....	4,831 98
" 30.	" 1038.....	4,069 55
Dec. 7.	" 1039.....	4,283 16
" 14.	" 1040.....	4,315 89
" 21.	" 1041.....	4,252 51
" 31.	" 1042.....	5,549 84

Supplementary Pay-Roll.

Supplementary pay-roll, ending July 27, 1900..... \$577 50

Respectfully submitted,

FRANCIS X. KERRIGAN, Chief Clerk.

New York City Public Parks and Parkways.

BOROUGH OF MANHATTAN.

IMPROVED PARKS WITH NAMES.

NAME.	LOCATION.	AREA IN ACRES.	TAX VALUATION.
Abingdon Square.....	Eighth avenue and Hudson street.....	0.202	\$50,000 00
Battery Park.....	Foot of Broadway.....	21.199	12,000,000 00
Beach Street Park.....	Beach street and West Broadway.....	0.638	30,000 00
Bowling Green.....	Broadway and Whitehall street.....	0.517	750,000 00
Bryant Park.....	Sixth avenue and Forty-second street.....	4.775	5,400,000 00
Canal Street Park.....	Canal and West streets.....	0.318	75,000 00
Central Park.....	Fifth to Eighth avenue, Fifty-ninth to One Hundred and Tenth street.....	843.019	95,900,000 00
Christopher Street Park..	Christopher and West Fourth streets.....	0.139	25,000 00
City Hall Park.....	Broadway and Chambers street.....	8.239	25,000,000 00
Cooper Park.....	Third avenue and Seventh street.....	0.229	45,000 00
Corlears Hook Park.....	Corlears and South streets.....	8.300	400,000 00
Duane Street Park.....	Duane and Hudson streets.....	0.108	60,000 00
East River Park.....	Eighty-fourth to Eighty-ninth street, East river.....	12.546	800,000 00
Empire Park, South.....	Broadway and Sixty-third street.....	0.344	60,000 00
Empire Park, North.....	Broadway and Sixty-sixth street.....	0.069	20,000 00
Grand Street Park.....	Grand street and East Broadway.....	0.630	50,000 00
Greeley Square.....	Sixth avenue and Thirty-second street.....	0.144	150,000 00
Hamilton Fish Park.....	Houston and Willett streets.....	3.673	775,000 00
Hancock Square.....	St. Nicholas avenue and One Hundred and Twenty-third street.....	0.072	20,000 00
Harlem Lane Park.....	Seventh avenue and One Hundred and Fifty-third street..	1.270	90,000 00
Hudson Park.....	Hudson and Leroy streets.....	1.700	250,000 00
Jackson Square.....	Eighth avenue and Horatio street.....	0.227	55,000 00
Jeannette Park.....	Coenties slip and South street.....	0.728	360,000 00
Madison Square.....	Broadway and Twenty-third street.....	6.840	4,700,000 00
Manhattan Square.....	Central Park, West, Seventy-seventh to Eighty-first street.	17.582	5,250,000 00
Morningside Park.....	One Hundred and Tenth to One Hundred and Twenty-third street, between Columbus and Amsterdam avenues }	31.238	2,500,000 00
Mount Morris Park.....	Mt. Morris to Madison avenue, One Hundred and Twentieth to One Hundred and Twenty-fourth street..... }	20.174	2,000,000 00
Mulberry Bend Park.....	Mulberry and Bayard streets.....	2.750	1,000,000 00
Paradise Park.....	Mission place and Worth street.....	2.114	75,000 00

NAME.	LOCATION.	AREA IN ACRES.	TAX VALUATION.
Park Avenue Parks.....	Park avenue, Thirty-fourth to Fortieth street and Fifty-sixth to Ninety-sixth street.....	8.118	.....
Riverside Park.....	North river, Seventy-second to One Hundred and Twenty-ninth street.....	140.037	\$5,200,000 00
Rutgers Park.....	Rutgers slip and South street.....	0.478	40,000 00
Ryan Park.....	Second avenue and Forty-second street.....	0.180	.....
Sherman Square.....	Broadway and Seventieth street.....	0.001	25,000 00
Stuyvesant Park.....	Rutherford place and Sixteenth street.....	4.229	1,143,000 00
Tompkins Square.....	Avenue A and Seventh street.....	10.508	2,000,000 00
Union Square.....	Broadway and Fourteenth street.....	3.483	2,800,000 00
Washington Square.....	Fifth avenue and Waverly place.....	8.115	2,000,000 00
Total		1,162.333	\$17,098,000 00

UNIMPROVED PARKS, WITH NAMES.

Colonial Park.....	One Hundred and Forty-fifth to One Hundred and Fifty-fifth street, Bradhurst avenue, to Edgecombe avenue.	12.790	\$455,000 00
Fort Washington Park....	Fort Washington Point, Hudson river.....	40.810	200,000 00
Thomas Jefferson Park..	One Hundred and Eleventh street, First avenue, One Hundred and Fourteenth street and Harlem river....	15.409	669,000 00
High Bridge Park.....	One Hundred and Fifty-fifth street to Washington Bridge, west of Driveway.....	64.343	725,000 00
William H. Seward Park..	Canal and Jefferson streets.....	2.651	789,500 00
Total		136.003	\$2,838,500 00

IMPROVED UNNAMED PARKS.

.....	Triangle at Broadway and Seventy-third street.....	0.095	\$25,000 00
.....	Triangle at Manhattan avenue and One Hundred and Fourteenth street.....	0.018	12,000 00
.....	Triangle at Seventh avenue and One Hundred and Seventeenth street.....	0.074	20,000 00
.....	Triangle at Sixth avenue and Thirty-fifth street.....	0.042	75,000 00
Total .....		.229	\$132,000 00

UNIMPROVED UNNAMED PARKS.

.....	Triangle at Broadway and One Hundred and Sixth street..	0.072	\$12,000 00
.....	Triangle at St. Nicholas avenue and One Hundred and Thirty-seventh street.....	0.038	10,000 00
.....	Triangle at St. Nicholas avenue and One Hundred and One Hundred and Fiftieth street.....	0.024	.....
Total.....		.134	\$22,000 00

PARKS IN PROCESS OF CONDEMNATION.

NAME.	LOCATION.	AREA IN ACRES.	TAX VALUATION.
Alexander Hamilton Park	Ninth to Tenth avenue, Twenty-seventh to Twenty-eighth street	3.117	.....
DeWitt Clinton Park.....	Fifty-second to Fifty-fourth street, North river.....	7.377	.....
John Jay Park.....	Seventy-fourth to Seventy-sixth street, East river.....	3.004	.....
St. Nicholas Park.....	One Hundred and Thirtieth to One Hundred and Forty-first street, St. Nicholas and Tenth avenues.....	.....	.....
Park west of Harlem River driveway	From Washington Bridge to Dyckman street.....	22.817	.....
Riverside Park Extension	Seventy-second street to One Hundred and Twenty-ninth street, New York Central Railroad to bulkhead of Hudson river .....	.....	.....
Total		36.315	.....

PARKWAYS, STREETS, AVENUES, ETC.

Under the Jurisdiction of Department of Parks.

LOCATION.	LENGTH.	WIDTH.
Cathedral parkway (One Hundred and Tenth street, west of Seventh avenue)...	4,061 feet.	100 to 126 feet.
Circle at Eighth avenue and Fifty-ninth street.....		
Eighty-sixth street, west of Central Park, West.....	3,435 "	100 "
Fifth avenue, Fifty-ninth to One Hundred and Tenth street.....	13,661 "	100 "
Harlem River Driveway.....	11,562 "	100 to 150 "
Morningside avenue, West.....	3,538 "	90 "
Ninety-sixth street, west of West End avenue.....	202 "	100 "
One Hundred and Tenth street, Fifth to Seventh avenue.....	2,045 "	70 "
One Hundred and Twenty-second street, west of Tenth avenue.....	1,450 "	80 "
One Hundred and Twenty-third street, west of Morning side Park.....	819 "	60 "
Plaza at Fifty-ninth street and Fifth avenue.....		
Plaza at One Hundred and Tenth street and Fifth avenue.....		
Plaza at One Hundred and Tenth street and Eighth avenue.....		
Riverside Drive.....	17,000 "	90 to 168 "
Seventy-second street, west of Central Park, West.....	3,025 "	100 "
Total	61,398 feet.	.....

BOROUGH OF RICHMOND.

NAME.	LOCATION.	AREA IN ACRES.	TAX VALUATION.
Washington square,.....	<i>Improved Park, with Name.</i> Bay, Water and Canal streets, Stapleton.....	1.46	\$50,000 00
.....	<i>Improved Unnamed Park.</i> Broadway, Bennett street, Herberton avenue and Vreeland street, Port Richmond.....	1 28	15,000 00
	Total.....	2.74	\$65,000 00

BOROUGH OF BROOKLYN.

IMPROVED PARKS, WITH NAMES.

NAME.	LOCATION.	AREA IN ACRES.	TAX VALUATION.
Bedford Park.....	Brooklyn and Kingston avenues, Park and Prospect places.	4	\$170,000 00
Bensonhurst Beach.....	Bay parkway, Gravesend Bay, Twenty-first and Cropsey avenues.....	8	88,000 00
Brooklyn Heights Park..	Columbia heights, fronting on Furman street.....	5	200,000 00
Bushwick Park.....	Knickerbocker and Irving avenues, Starr and Suydam streets.....	6	50,000 00
Canarsie Beach.....	Rockaway parkway and Jamaica Bay.....	40	43,650 00
Carroll Park.....	President, Court, Carroll and Smith streets.....	2	150,000 00
City Park.....	Canton and Navy streets, Park and Flushing avenues.....	7.500	250,000 00
City Hall Park.....	Junction of Court and Fulton streets.....	0.500	100,000 00
Concourse Park.....	Foot of Ocean parkway, Atlantic Ocean.....	70	1,025,000 00
Cooper Park.....	Maspeth and Morgan avenues, Sharon and Guilford streets	7	55,000 00
Cooper Gore Park.....	Junction of Metropolitan and Orient avenues.....	0.250	1,500 00
Cuyler Park.....	Junction of Fulton street and Greene avenue.....	0.250	75,000 00
Dyker Beach Park.....	Seventh avenue, Bay Eighth street, Cropsey and Fourteenth avenues and Gravesend Bay.....	144	300,000 00
Fort Greene Park.....	DeKalb avenue, Washington Park, Ashland place, Wileoughby and Canton streets and Myrtle avenue.....	30	1,910,000 00
Fort Hamilton Park.....	Fourth avenue, DeNyse street, Fort Hamilton avenue and New York Bay.....	7	2,100,000 00
Highland Park.....	Terminus of Eastern parkway extension, Sunnyside and Force Tube avenues.....	25	107,700 00
Institute Garden (East Side Lands).....	Washington avenue, Eastern parkway and Flatbush avenue	50	1,250,000 00
Irving square.....	Hamburg and Knickerbocker avenues, Halsey and Weirfield streets.....	3.500	30,000 00
Lincoln terrace.....	Eastern parkway, Buffalo avenue, President street and Rochester avenue.....	12	120,000 00
Linton Park.....	Bradford street, Blake, Dumont and Miller avenues.....	3	12,500 00
Municipal Park.....	Joralemon street, opposite City Hall.....	0.333	265,000 00
New Lots Playground..	Sackman street, Newport, Christopher and Riverdale avenues.....	3	62,000 00
Parade Ground.....	Coney Island, Caton and Fort Hamilton avenues and Parade place.....	40	} 27,912,000 00
Prospect Park.....	Ninth avenue, Fifteenth street, Coney Island, Fort Hamilton, Ocean and Flatbush avenues.....	516.167	
Red Hook Park.....	Richards, Dwight, Verona and Williams streets.....	6	156,000 00
Saratoga square.....	Saratoga and Howard avenues, Halsey and Macon streets.	4	121,000 00

NAME.	LOCATION.	AREA IN ACRES.	TAX VALUATION.
Stuyvesant Park.....	Junction of Stuyvesant avenue and Broadway.....	0.125	\$8,000 00
Sunset Park.....	Forty-first and Forty-third streets, Fifth and Seventh avenues.....	14.250	200,000 00
Tompkins Park.....	Tompkins, Greene, Lafayette and Marcy avenues.....	7.750	415,000 00
Underhill Park.....	Junction of Underhill and Washington avenues.....	0.250	10,000 00
Winthrop Park.....	Nassau and Driggs avenues, Russell and Monitor streets..	8.500	188,000 00
Woodpoint Park.....	Junction of Metropolitan avenue and Woodpoint road.....	0.250	4,500 00
Zindel Park.....	Junction of Broadway and Throop avenue.....	0.250	50,000 00
Total.....		1,026.875	\$37,429,850 00

PARKWAYS, STREETS, AVENUES, ETC.

Under jurisdiction of Department of Parks, Boroughs of Brooklyn and Queens.

NAME.	LOCATION.	LENGTH.	WIDTH.
Bay parkway (formerly Twenty-second avenue).....	From Ocean parkway to Bensonhurst Beach.....	15,840 feet.	100 feet.
Bay Ridge parkway (Shore road).....	From Fort Hamilton avenue to shore of New York Bay, and along shore of New York Bay to Fort Hamilton.....	15,840 "	320 to 900 "
Bushwick avenue.....	From Eastern parkway extension to Jamaica avenue.....	1,320 "	100 "
Buffalo avenue.....	From Eastern parkway to East New York avenue.	660 "	110 "
Dumont avenue.....	From New Lots to Fountain avenue.....	1,320 "	70 "
Eastern parkway.....	From Prospect Park to Ralph avenue.....	13,200 "	210 "
Eastern parkway extension.....	From Ralph avenue and Eastern parkway to Highland Park.....	11,884 "	110 "
Fourth avenue.....	From Flatbush avenue to the Shore road.....	23,760 "	120 "
Fort Hamilton parkway..	From Ocean parkway to Fort Hamilton.....	23,760 "	100 "
Glenmore avenue.....	From Stone avenue to Eldert lane.....	10,560 "	60 "
Miller avenue.....	From Eastern parkway extension to Jamaica avenue.....	528 "	60 "
New Lots avenue.....	From Riverdale to Dumont avenue.....	5,280 "	60 "
Ocean parkway.....	From Prospect Park to Coney Island.....	29,040 "	210 "
Ocean avenue.....	From Flatbush to Fort Hamilton avenue.....	2,640 "	100 "
Pennsylvania avenue....	From Jamaica avenue to Jamaica Bay.....	13,200 "	100 "
Pitkin avenue.....	From East New York to Stone avenue.....	2,680 "	80 "
Riverdale avenue.....	From Stone to New Lots avenue.....	7,920 "	70 "
Rockaway parkway.....	From Buffalo avenue to Canarsie Beach.....	26,400 "	100 "
Stone avenue.....	From Eastern parkway extension to Riverdale avenue.....	5,280 "	80 "
Seventy-fifth street.....	From Fort Hamilton parkway to Bay parkway (Twenty-second avenue).....	10,560 "	100 "
Union street.....	From Fourth avenue to Prospect Park.....	3,960 "	60 "
Shaw avenue.....	From Jamaica avenue to Forest Park, Borough of Queens.....	1,320 "	80 "
Total.....		226,952 feet.	.....

BOROUGH OF QUEEENS.
IMPROVED PARKS, WITH NAMES.

NAME.	LOCATION.	AREA IN ACRES.	TAX VALUATION.
Ashmead.....	Canal street, Park place and South street, Jamaica .....	.250	.....
Forest.....	Jamaica avenue, Union Turnpike, Flushing and Myrtle } avenues, Richmond Hill.....	536.000	\$1,503,000 00
Flushing.....	Main street and Broadway, Flushing.....	1.200	10,000 00
Kings	Fulton, Alsop, Ray streets and Shelton avenue, Jamaica. .	11.000	30,000 00
Monitor square.....	Junction of Jackson avenue and Third street, Long Island } City.....	.250	10 00
Poppenhausen.....	Junction of College avenue and Thirteenth street, College } Point.....	.243	100 00
Total		548.943	\$1,543,110 00

IMPROVED UNNAMED PARKS.

LOCATION.	AREA IN ACRES.	TAX VALUATION.
Junction of Martel avenue and Thirteenth street, College Point.....	0.060	.....
Fourteenth, Fifteenth and Louisa streets, and Fifth avenue, College Point.....	1.100	\$5,000 00
Junction of Jackson avenue and Eleventh street, Long Island City.....	0.020	.....
Vernon and Nott avenues and Hancock street, Ravenswood.....	0.250	.....
Junction of Jackson avenue and Twelfth street, Long Island City	0.060	.....
Junction of Jackson avenue and Sixth street, Long Island City.....	0.060	10 00
Junction of Jackson avenue and Ninth street, Long Island City.....	0.100	7,500 00
Junction of East New York and Pitkin avenues, Brooklyn.....	0.250	.....
Total	1.900	\$12,510 00

BOROUGH OF THE BRONX.
IMPROVED PARKS WITH NAMES.

NAME.	LOCATION.	AREA IN ACRES.	TAX VALUATION.
Bronx Park.....	One Hundred and Eighty-second street, Southern Boulevard, St. John's College property, New York Central and Hudson River Railroad and White Plains road...	661.60	\$5,756,700 00
Cedar Park.....	Walton avenue, One Hundred and Fifty-eighth street and Mott avenue	17.47	304,000 00
Crotona Park.....	Fulton avenue, Third avenue and Arthur avenue.....	154.60	3,228,000 00
Claremont Park.....	Teller avenue, Belmont street, Clay avenue and One Hundred and Seventieth street.....	38.00	991,500 00
Fordham Park.....	Fordham road, Sedgwick avenue and One Hundred and Eighty-eighth street.....	5.87	100,000 00
Macomb's Dam Park.....	Jerome avenue, One Hundred and Sixty-second street, Cromwell's avenue and Harlem river.....	27.00	470,000 00
Pelham Bay Park	Northeast end of New York City.....	1,756.00	7,638,500 00
Poe Park.....	East One Hundred and Ninety-second street and Kingsbridge road.....	2.33	40,000 00
St. James' Park	Jerome avenue, Creston avenue and East One Hundred and Ninety-first street.....	11.83	205,000 00
St. Mary's Park	St. Ann's avenue, One Hundred and Forty-ninth street and Robbins avenue.....	28.70	750,000 00
University Park.....	Cedar avenue, One Hundred and Eighty-first street and Sedgwick avenue.....	2.75	48,000 00
Van Cortlandt Park....	Northern boundary line of City, Broadway, Van Cortlandt avenue, Jerome avenue and Mount Vernon avenue.....	1,132.35	9,851,000 00
Washington Bridge Park..	Sedgwick avenue, Harlem river, Washington Bridge.....	8.45	59,200 00
Total .....		.....	\$29,441,900 00

IMPROVED UNNAMED PARKS.

LOCATION.	AREA IN ACRES.	TAX VALUATION.
Boston road and One Hundred and Sixty-fourth street.....	0.06	\$1,500 00
Boston road and One Hundred and Sixty-ninth street.....	0.16	4,500 00
Franklin avenue and One Hundred and Sixty-ninth street.....	0.15	3,000 00
Fulton avenue and One Hundred Sixty-seventh street.....	0.20	5,250 00
Fulton avenue and One Hundred and Seventieth street.....	0.95	34,800 00
Throgg's Neck, Fort Schuyler road, Eastern Boulevard.....	0.45	2,550 00
Washington avenue, Brook avenue and One Hundred and Sixty-third street.....	0.06	1,500 00
Washington avenue, Third avenue and One Hundred and Eighty-eighth street	0.15	6,000 00
Total .....	.....	\$59,100 00

PARKWAYS.

LOCATION.	LENGTH.	WIDTH.
Crotona parkway	3,815 feet	200 feet
Spuyten Duyvil parkway	11,500 "	60 to 180 "
Mosholu parkway	6,035 "	600 "
Bronx and Pelham parkway	11,861 "	400 "
Total	33,211 feet	

Recapitulation of Park Areas.

	ACRES.	TAX VALUATION.
Borough of Manhattan	1,335.014	\$174,090,500 00
Borough of Richmond	2.740	65,000.00
Borough of Brooklyn	1,026.875	37,429,850 00
Borough of Queens	548.843	1,555,620 00
Borough of The Bronx	3,849.130	29,501,000 00
Total	6,762.602	\$242,641,970 00

Recapitulation of Parkways, Streets, Avenues, etc.

	LENGTH.
Borough of Manhattan	61,398 feet.
Borough of Richmond .....	.....
Borough of Brooklyn	226,952 feet.
Borough of Queens	
Borough of The Bronx	33,211 "
Total	321,561 feet.

Comparative Statement of Park Areas and Values.

(From United States Government Reports.)

CITIES.	AREA.	VALUATION.			EXPENDITURES, ETC., PARKS AND GARDENS.
	Acreage Owned by City.	Land and Buildings.	Apparatus.	Total.	
New York, N. Y.....	6,902.00	\$296,235,525 00	\$636,266 00	\$296,871,791 00	\$1,408,830 00
Chicago, Ill.....	2,151.49	61,514,900 00	1,500,000 00	63,014,900 00	442,110 00
Philadelphia, Pa.....	4,044.09	(b)	(b)	22,788,344 00	418,202 00
St Louis, Mo.....	2,176.59	8,149,310 00	6,497 00	8,155,807 00	133,122 00
Boston, Mass.....	2,618.06	(b)	(b)	53,023,400 00	233,444 00
Baltimore, Md.	1,136.01	(b)	(b)	(b)	302,168 00
Cleveland, Ohio.....	1,326.19	6,908,246 00	15,000 00	6,923,246 00	71,975 00
Buffalo, N. Y.....	1,025.50	3,637,255 00	12,000 00	3,649,255 00	173,751 00
San Francisco, Cal.....	1,192.67	(b)	(b)	12,000,000 00	208,361 00
Cincinnati, Ohio.....	539.00	1,499,000 00	1,000 00	1,500,000 00	43,996 00
Pittsburg, Pa.....	880.00	3,319,959 00	25,000 00	3,344,959 00	.....
New Orleans, La.....	552.66	5,000,000 00	50,000 00	5,050,000 00	9,655 00
Detroit, Mich.....	1,055.61	(b)	(b)	6,255,000 00	91,900 00
Milwaukee, Wis.....	435.03	(b)	(b)	2,493,776 00	82,992 00
Washington, D. C.....	(a) .98	300,000 00	.....	300,000 00	22,050 00
Newark, N. J.....	19.18	500,000 00	.....	500,000 00	4,601 00
Jersey City, N. J.....	18.00	483,500 00	2,000 00	485,500 00	3,550 00
Louisville, Ky.....	1,350.00	1,000,000 00	15,000 00	1,015,000 00	56,752 00
Minneapolis, Minn.....	1,553.26	4,564,340 00	(b)	4,564,340 00	99,450 00
Providence, R. I.....	543.68	1,146,439 00	48,933 00	1,195,372 00	47,885 00
New Haven, Conn.....	1,100.00	451,000 00	20,000 00	471,000 00	21,504 00
Los Angeles, Cal.....	3,720.04	597,175 00	2,500 00	599,675 00	53,819 00
Lynn, Mass.....	2,463.75	(b)	(b)	393,825 00	6,139 00

(a) Washington, D. C. : 3,594.27 acres owned by United States Government.

(b) Not given.