

NEW WALLS ABOUT STABLE AND SHOP YARDS, PROSPECT PARK

CITY OF NEW YORK.

DEPARTMENT OF PARKS--BOROUGH OF BROOKLYN.

SUMMARY STATEMENT OF EXPENSES FOR THE YEAR 1916—COMPARED WITH 1915 AND 1914.

| | General Expenses. | | | Supervision and General Expense. | | | Care Roads, Paths and Driveways. | | | Care Trees, Shrubs, Flowers and Lawns. | | | Care Beaches, Lakes, Shore Lines and Skating. | | | Operation and Maintenance of Playgrounds and Athletic Fields. | | | Care General Park Improvements and Properties. | | | Care Bath Houses and Comfort Stations. | | | Care Other Buildings and Structures Not Classified. | | | Music and Celebrations. | | | Total for Year. | | |
|------------------------------------|-------------------|------------|------------|----------------------------------|-----------|-----------|----------------------------------|-----------|-----------|--|-------|-------|---|-------|-------|---|-------|-------|--|-------|-------|--|-------|-------|---|-------|-------|-------------------------|-------|-------|-----------------|--|--|
| | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | 1916. | 1915. | 1914. | | | |
| General Administration..... | \$8,004.76 | \$9,085.65 | \$7,840.63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Automobile Service..... | 6,811.30 | 11,051.06 | 7,506.23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parks and Playgrounds— | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bedford Park..... | | | | \$284.32 | \$226.49 | \$773.88 | \$683.99 | \$612.07 | \$502.63 | | | | | | | | | | | | | | | | | | | | | | | | |
| Bedford Park..... | | | | 275.08 | 262.17 | 1,288.09 | 1,263.31 | 1,274.46 | 1,268.83 | | | | | | | | | | | | | | | | | | | | | | | | |
| Bedford Park..... | | | | 253.71 | 288.32 | 685.05 | 576.14 | 530.75 | 1,311.16 | | | | | | | | | | | | | | | | | | | | | | | | |
| Bedford Park..... | | | | 187.79 | 224.82 | 759.93 | 759.93 | 752.74 | 1,311.16 | | | | | | | | | | | | | | | | | | | | | | | | |
| Borough Hall Park..... | | | | 235.51 | 235.51 | 752.74 | 752.74 | 752.74 | 1,311.16 | | | | | | | | | | | | | | | | | | | | | | | | |
| Bushwick Park..... | | | | 385.54 | 385.54 | 1,272.27 | 1,272.27 | 1,272.27 | 1,272.27 | | | | | | | | | | | | | | | | | | | | | | | | |
| Bushwick Park..... | | | | 314.89 | 229.41 | 1,072.71 | 1,072.71 | 1,072.71 | 1,072.71 | | | | | | | | | | | | | | | | | | | | | | | | |
| Bushwick Park..... | | | | 268.32 | 217.80 | 791.08 | 791.08 | 791.08 | 791.08 | | | | | | | | | | | | | | | | | | | | | | | | |
| Bushwick Park..... | | | | 234.32 | 234.32 | 791.08 | 791.08 | 791.08 | 791.08 | | | | | | | | | | | | | | | | | | | | | | | | |
| City Park..... | | | | 458.67 | 317.85 | 1,430.70 | 1,430.70 | 1,430.70 | 1,430.70 | | | | | | | | | | | | | | | | | | | | | | | | |
| City Park..... | | | | 458.67 | 317.85 | 1,430.70 | 1,430.70 | 1,430.70 | 1,430.70 | | | | | | | | | | | | | | | | | | | | | | | | |
| Cooper Park..... | | | | 446.17 | 215.50 | 1,187.80 | 1,187.80 | 1,187.80 | 1,187.80 | | | | | | | | | | | | | | | | | | | | | | | | |
| Dreamland Park..... | | | | 254.26 | 374.26 | 785.86 | 785.86 | 785.86 | 785.86 | | | | | | | | | | | | | | | | | | | | | | | | |
| Dyer Beach Park..... | | | | 775.37 | 654.97 | 1,596.30 | 1,596.30 | 1,596.30 | 1,596.30 | | | | | | | | | | | | | | | | | | | | | | | | |
| Fort Hamilton Park..... | | | | 275.23 | 275.23 | 775.37 | 775.37 | 775.37 | 775.37 | | | | | | | | | | | | | | | | | | | | | | | | |
| Fulton Park..... | | | | 275.23 | 275.23 | 775.37 | 775.37 | 775.37 | 775.37 | | | | | | | | | | | | | | | | | | | | | | | | |
| Highland Park..... | | | | 305.28 | 305.28 | 798.52 | 798.52 | 798.52 | 798.52 | | | | | | | | | | | | | | | | | | | | | | | | |
| Irving Square Park..... | | | | 273.64 | 273.64 | 1,040.14 | 1,040.14 | 1,040.14 | 1,040.14 | | | | | | | | | | | | | | | | | | | | | | | | |
| Lincoln Terrace Park..... | | | | 343.13 | 697.74 | 1,204.37 | 1,204.37 | 1,204.37 | 1,204.37 | | | | | | | | | | | | | | | | | | | | | | | | |
| Lincoln Terrace Park..... | | | | 343.13 | 697.74 | 1,204.37 | 1,204.37 | 1,204.37 | 1,204.37 | | | | | | | | | | | | | | | | | | | | | | | | |
| Lincoln Terrace Park..... | | | | 221.58 | 221.58 | 710.49 | 710.49 | 710.49 | 710.49 | | | | | | | | | | | | | | | | | | | | | | | | |
| McCarroll Park and Playground..... | | | | 1,149.22 | 2,385.93 | 2,630.81 | 1,762.40 | 1,762.40 | 1,762.40 | | | | | | | | | | | | | | | | | | | | | | | | |
| McCarroll Park and Playground..... | | | | 1,149.22 | 2,385.93 | 2,630.81 | 1,762.40 | 1,762.40 | 1,762.40 | | | | | | | | | | | | | | | | | | | | | | | | |
| McCarroll Park and Playground..... | | | | 300.95 | 313.96 | 1,034.07 | 332.26 | 261.88 | 1,034.07 | | | | | | | | | | | | | | | | | | | | | | | | |
| McKinley Park..... | | | | 1,310.81 | 1,310.81 | 1,218.57 | 1,144.54 | 534.13 | 1,310.81 | | | | | | | | | | | | | | | | | | | | | | | | |
| McKinley Park..... | | | | 1,310.81 | 1,310.81 | 1,218.57 | 1,144.54 | 534.13 | 1,310.81 | | | | | | | | | | | | | | | | | | | | | | | | |
| New York City Park..... | | | | 399.16 | 399.16 | 1,450.22 | 1,340.68 | 1,294.27 | 1,450.22 | | | | | | | | | | | | | | | | | | | | | | | | |
| New York City Park..... | | | | 399.16 | 399.16 | 1,450.22 | 1,340.68 | 1,294.27 | 1,450.22 | | | | | | | | | | | | | | | | | | | | | | | | |
| Parade Grounds..... | | | | 1,192.29 | 1,331.46 | 1,604.06 | 855.12 | 368.25 | 1,604.06 | | | | | | | | | | | | | | | | | | | | | | | | |
| Parade Grounds..... | | | | 1,192.29 | 1,331.46 | 1,604.06 | 855.12 | 368.25 | 1,604.06 | | | | | | | | | | | | | | | | | | | | | | | | |
| Prospect Park..... | | | | 14,920.04 | 15,438.08 | 26,546.03 | 59,266.77 | 41,910.82 | 36,910.98 | | | | | | | | | | | | | | | | | | | | | | | | |
| Prospect Park..... | | | | 14,920.04 | 15,438.08 | 26,546.03 | 59,266.77 | 41,910.82 | 36,910.98 | | | | | | | | | | | | | | | | | | | | | | | | |
| Red Hook Park..... | | | | 243.25 | 369.57 | 1,556.71 | 1,556.71 | 1,556.71 | 1,556.71 | | | | | | | | | | | | | | | | | | | | | | | | |
| Red Hook Park..... | | | | 243.25 | 369.57 | 1,556.71 | 1,556.71 | 1,556.71 | 1,556.71 | | | | | | | | | | | | | | | | | | | | | | | | |
| Red Hook Park..... | | | | 137.96 | 178.73 | 459.51 | 178.73 | 106.74 | 227.33 | | | | | | | | | | | | | | | | | | | | | | | | |
| Red Hook Park..... | | | | 137.96 | 178.73 | 459.51 | 178.73 | 106.74 | 227.33 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 920.85 | 1,801.21 | 1,952.07 | 2,720.08 | 1,952.07 | 2,720.08 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 920.85 | 1,801.21 | 1,952.07 | 2,720.08 | 1,952.07 | 2,720.08 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 301.43 | 596.84 | 1,708.91 | 3,433.94 | 3,203.95 | 2,581.28 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 301.43 | 596.84 | 1,708.91 | 3,433.94 | 3,203.95 | 2,581.28 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 143.58 | 88.71 | 1,134.00 | 2,080.41 | 1,922.11 | 1,922.11 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 143.58 | 88.71 | 1,134.00 | 2,080.41 | 1,922.11 | 1,922.11 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 594.45 | 444.86 | 1,996.94 | 2,215.44 | 2,178.82 | 1,996.94 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 594.45 | 444.86 | 1,996.94 | 2,215.44 | 2,178.82 | 1,996.94 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 136.50 | 185.49 | 625.24 | 920.27 | 1,036.90 | 944.52 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 136.50 | 185.49 | 625.24 | 920.27 | 1,036.90 | 944.52 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 1,008.33 | 901.25 | 1,563.35 | 5,956.70 | 5,956.70 | 5,956.70 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 1,008.33 | 901.25 | 1,563.35 | 5,956.70 | 5,956.70 | 5,956.70 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 377.54 | 1,114.37 | 1,727.84 | 4,186.72 | 4,186.72 | 4,186.72 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 377.54 | 1,114.37 | 1,727.84 | 4,186.72 | 4,186.72 | 4,186.72 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 34.83 | 2,659.88 | 7,800.55 | 12,710.47 | 12,710.47 | 12,710.47 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 34.83 | 2,659.88 | 7,800.55 | 12,710.47 | 12,710.47 | 12,710.47 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 221.95 | 376.04 | 1,291.58 | 4,469.37 | 3,584.85 | 5,000.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 221.95 | 376.04 | 1,291.58 | 4,469.37 | 3,584.85 | 5,000.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 2,798.77 | 2,712.02 | 3,542.55 | 38,677.83 | 24,707.89 | 26,463.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 2,798.77 | 2,712.02 | 3,542.55 | 38,677.83 | 24,707.89 | 26,463.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 401.33 | 340.47 | 1,767.02 | 3,493.80 | 3,460.76 | 14,959.90 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 401.33 | 340.47 | 1,767.02 | 3,493.80 | 3,460.76 | 14,959.90 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 35.07 | 101.79 | 55.11 | 1,272.11 | 2,237.30 | 7,822.88 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | 35.07 | 101.79 | 55.11 | 1,272.11 | 2,237.30 | 7,822.88 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seaside Park..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**PARKS, PLAYGROUNDS, PARKWAYS AND STREETS UNDER JURIS-
DICTION OF THE DEPARTMENT OF PARKS,
BOROUGH OF BROOKLYN.**

| Park | Location | Area in Acres | Length of Interior Walks in Miles | Appraised Valuation |
|---|---|------------------|--|------------------------|
| 1 Amersfort Park.. | Avenue J, E. 38th St., Avenue I and E. 39th St..... | 3.56 | 0.41 | \$64,500 |
| 2 Bedford Park.... | Kingston and Brooklyn Aves., Prospect and Park Places.. | 4.10 | 0.50 | 325,000 |
| 3 Bensonhurst Park. | Bay Parkway, Gravesend Bay, 21st and Cropsey Aves..... | 13.00 | 0.24 | 240,000 |
| 4 Borough Hall Park | Joralemon St., Court and Ful- ton Sts..... | 1.70 | .... | 3,314,000 |
| 5 Brooklyn Botanic Garden and Ar- boretum | Eastern Parkway, Washington and Flatbush Aves. and Malbone St..... | 59.40 | 2.46 | 9,775,000 |
| 6 Brooklyn Heights Parks | Columbia Heights, fronting on Furman St..... | 0.85 | .... | 131,500 |
| 7 Bushwick Park... | Knickerbocker and Irving Aves., Starr and Suydam Sts | 6.86 | 0.65 | 305,000 |
| 8 Canarsie Park.... | Skidmore, Sea View and Den- ton Aves., E. 88th St. and E. 93d St., Byrne Place and Jamaica Bay | 30.50 | 0.10 | 115,000 |
| 9 Carroll Park..... | President, Court, Carroll and Smith Sts. | 1.90 | 0.29 | 165,000 |
| 10 City Park..... | St. Edwards and Navy Sts., Park and Flushing Aves... | 7.50 | 0.42 | 491,000 |
| 11 Coney Island Con- course Lands (exclusive of Seaside Park)... | West 5th St., Sea Breeze Ave. and Atlantic Ocean..... | 59.70 | .... | 1,132,000 |
| 12 Cooper Park..... | Maspeth and Morgan Aves., Sharon and Olive Sts..... | 6.10 | 0.52 | 140,000 |
| 13 Cooper Gore..... | Junction of Metropolitan and Orient Aves..... | 0.15 | .... | 7,000 |
| 14 Cuyler Gore..... | Cumberland and Fulton Sts. and Greene Ave..... | 0.08 | .... | 25,000 |
| 15 Dreamland Park. | W. 5th St., W. 8th St., Surf Ave. and Atlantic Ocean... | 14.70 | .... | 839,500 |
| 16 Dyker Beach Park | 7th Ave., Bay 8th St., Cropsey Ave., 14th Ave., and Graves- end Bay | 139.80 | .... | 778,000 |
| 17 Fort Greene Park | DeKalb Ave., Washington Park, Willoughby and St. Edwards Sts. and Myrtle Ave. | 28.90 | 1.61 | 3,098,500 |
| 18 Fort Hamilton Park | 4th Ave., 101st St., Ft. Hamil- ton Ave. and Shore Road.. | 4.60 | 0.33 | 539,000 |
| 19 Fulton Park..... | Chauncey and Fulton Sts. and Stuyvesant Ave..... | 2.00 | 0.20 | 143,500 |
| 20 Highland Park... | Jamaica Ave., U. S. National Cemetery, Borough Line and Warwick St. Extension..... | 40.86 | 1.45 | 491,500 |

**Parks, Playgrounds, Parkways and Streets Under Jurisdiction of the Department
of Parks, Borough of Brooklyn—Continued.**

| Park | | Location | Area in Acres | Length of Interior Walks in Miles | Appraised Valuation |
|---------------------|-------------------------------|--|------------------|--|------------------------|
| 21 | Irving Square Park | Hamburg and Knickerbocker Aves., Weirfield and Halsey Sts. | 2.98 | 0.32 | 281,000 |
| 22 | Lincoln Terrace Park | Eastern Parkway, Buffalo and Rochester Aves. and Presi- dent St. | 7.60 | 0.61 | 151,200 |
| 23 | Linton Park..... | Bradford St., Blake, Dumont and Miller Aves. | 2.29 | 0.30 | 81,000 |
| 24 | McKinley Park... | Ft. Hamilton and 7th Aves. and 73d St. | 8.50 | .... | 201,210 |
| 25 | Prospect Park.... | Prospect Park West, Flatbush, Ocean, Parkside, Coney Island Aves. and 15th St. ... | 526.00 | 16.10 | 30,766,000 |
| 26 | Red Hook Park.. | Richards, Verona, Dwight and Pioneer Sts. | 5.28 | 0.69 | 182,000 |
| 27 | Saratoga Square.. | Saratoga and Howard Aves., Halsey and Macon Sts. | 3.20 | 0.36 | 223,600 |
| 28 | Seaside Park.... | Ocean Parkway, Concourse, W. 5th St. and Sea Breeze Ave. | 10.30 | 0.61 | 625,000 |
| 29 | Stuyvesant Gore.. | Stuyvesant and Vernon Aves. and Broadway..... | 0.08 | .... | 6,000 |
| 30 | Sunset Park..... | 41st and 44th Sts., 5th and 7th Aves. | 24.50 | 1.53 | 844,500 |
| 31 | Tompkins Park.. | Tompkins, Greene, Marcy and Lafayette Aves. | 7.80 | 0.66 | 460,000 |
| 32 | Underhill Gore... | Underhill and Washington Aves. and Pacific St. | 0.10 | .... | 6,500 |
| 33 | Vanderveer Park. | East New York and Pitkin Aves., Barret and Grafton Sts. | 0.21 | 0.08 | 15,000 |
| 34 | Winthrop Park... | Nassau and Driggs Aves., Russell and Monitor Sts. | 9.10 | 0.94 | 505,000 |
| 35 | Woodpoint Gore. | Bushwick, Metropolitan and Maspeth Aves. | 0.05 | .... | 1,000 |
| 36 | Unnamed Park "A" | Eastern Parkway, Washington and Classon Aves. | 1.36 | .... | 65,000 |
| 37 | Unnamed Park "B" | Roebling St., Division and Lee Aves. | 0.14 | .... | 14,500 |
| 38 | Unnamed Park "C" | 4th Ave., 5th Ave., 94th St. ... | 0.018 | .... | 1,000 |
| 39 | Unnamed Park "D" | Myrtle, Willoughby and Bush- Wick Aves. | 0.0033 | .... | 400 |
| 40 | Unnamed Park "E" | Chauncey and Fulton Sts. and Lewis Ave. | 0.01 | .... | 700 |
| 41 | Unnamed Park "F" | Engert and Meeker Aves. and Monitor St. | 0.005 | .... | 500 |
| Totals, Parks | | | 1,035.7963 | 31.38 | \$56,551,110 |

**Parks, Playgrounds, Parkways and Streets Under Jurisdiction of the Department
of Parks, Borough of Brooklyn—Continued.**

| Playground | Location | Area in Acres | Length of Interior Walks in Miles | Appraised Valuation |
|---|--|------------------|--|------------------------|
| 42 Betsy Head Memorial Playground | Livonia, Dumont, Hopkinson Aves., Douglass St., and Dumont, Blake, Hopkinson Aves. and Bristol St..... | 10.50 | 0.76 | 370,000 |
| 43 Bushwick Playground | Putnam Ave. between Knickerbocker and Irving Aves.... | 2.80 | 0.04 | 68,000 |
| 44 McCarren Park.. | Berry, Lorimer, Leonard, Bayard and N. 12th Sts., Nassau, Driggs, Manhattan and Union Aves..... | 38.42 | 1.35 | 1,321,000 |
| 45 McKibbin Playground | Seigel, White and McKibbin Sts. | 1.37 | .... | 70,000 |
| 46 McLoughlin Park | Bridge, Tillary and Jay Sts.. | 3.30 | 0.32 | 367,500 |
| 47 New Lots Playground | Sackman St., Riverdale, Newport and Christopher Aves.. | 2.29 | 0.07 | 73,000 |
| 48 Parade Ground... | Coney Island, Parkside and Caton Aves..... | 39.50 | 0.22 | 1,500,000 |
| 49 Red Hook Playground | Richards, King, Dwight and Pioneer Sts..... | 2.29 | .... | 52,000 |
| 50 Williamsburg Bridge Park..... | Bedford and Kent Aves., S. 5th and S. 6th Sts..... | 4.30 | 0.28 | 275,000 |
| Totals, Playgrounds | | 104.77 | 3.04 | \$4,096,500 |

NOTE.—All appraised valuations include buildings and other structures on the lands.

**Parks, Playgrounds, Parkways and Streets Under Jurisdiction of the Department
of Parks, Borough of Brooklyn—Continued.**

| Parkways and Streets | Location | Miles | Area in Acres Be- tween Property Lines | Appraised Valuation |
|--------------------------------------|---|-------|--|------------------------|
| 1 Bay Parkway.... | Ocean Parkway between Ave- nues I and J, to Benson- hurst Beach..... | 2.56 | 30.99 | \$1,000,000 |
| 2 Bay Ridge Park- way | Ft. Hamilton Ave. between 66th and 67th Sts., to 1st Ave. between 66th St. and Wakeman Place..... | 1.40 | 40.89 | 717,700 |
| 3 Buffalo Avenue.. | Eastern Parkway between Rochester and Ralph Aves. to East New York Ave. be- tween E. 96th and E. 98th Sts. | 0.12 | 1.98 | 31,000 |
| 4 Bushwick Avenue | Eastern Parkway between De- Sales Place and Stewart St. to Jamaica Ave. between Sheffield and New Jersey Aves. | 0.42 | 4.95 | 82,500 |
| 5 Eastern Parkway. | Prospect Park Plaza to Ralph Ave. between Union St. and Lincoln Place..... | 2.50 | 61.12 | 3,000,000 |
| 6 Eastern Parkway Extension | Ralph Ave. between Union St. and Lincoln Place to Bush- wick Ave., between DeSales Place and Stewart St..... | 1.39 | 18.55 | 1,300,000 |
| 7 Fort Hamilton Avenue | Ocean Parkway and Prospect Ave. to Fort Hamilton..... | 4.27 | 48.15 | 1,000,000 |
| 8 Highland Boule- vard | Bushwick Ave. between Dahlia and Gillen Places to High- land Park..... | 0.67 | 9.00 | 150,000 |
| 9 Lincoln Road.... | Ocean Ave. to Bedford Ave. between Lefferts Ave. and Maple St..... | 0.30 | 2.61 | 138,900 |
| 10 Ocean Parkway.. | Prospect Park Circle to Coney Island Concourse..... | 5.50 | 140.00 | 4,000,000 |
| 11 Parkside Avenue... | Prospect Park Circle to Flat- bush Avenue at Robinson St. | 0.68 | 8.15 | 433,800 |
| 12 Plaza Street..... | Prospect Park Plaza..... | 0.38 | 4.31 | 229,400 |
| 13 Pennsylvania Ave. | Jamaica Ave. between Shef- field and New Jersey Aves. to Jamaica Bay..... | 2.50 | 19.24 | 630,100 |
| 14 Rockaway Park- way | Buffalo Ave. at East New York Ave. to Canarsie Beach, between E. 96th St. and E. 98th St..... | 3.12 | 40.90 | 773,000 |
| 15 Shore Road..... | First Ave. between 66th St. and Wakeman Place to Fort Hamilton | 2.65 | 121.00 | 5,000,000 |
| Totals, Parkways and Streets..... | | 28.46 | 551.84 | \$18,486,400 |

SUMMARY.

| | Acres | Appraised Valuation |
|--------------------------------------|------------|------------------------|
| Total Area—Parks | 1,035.7963 | \$56,551,110 |
| Total Area—Playgrounds | 104.77 | 4,096,500 |
| Total Area—Parkways and Streets..... | 551.84 | 18,486,400 |
| Grand Totals | 1,692.4063 | \$79,134,010 |

DEPARTMENT OF PARKS.

Borough of Brooklyn.

Table of Comparison of Population of Brooklyn to Acreage of Parks.

| Year | Popula- tion | Park Area | *Ratio of Park Area to Population | *Proper Park Acreage According to Population |
|-----------|-----------------|--------------|--------------------------------------|---|
| 1898..... | 1,197,100 | 1,045.95 | 1 acre to 1,144 pop. | 5,986 |
| 1899..... | 1,256,175 | 1,045.95 | 1 acre to 1,201 pop. | 6,281 |
| 1900..... | 1,266,582 | 1,045.95 | 1 acre to 1,211 pop. | 6,333 |
| 1901..... | 1,270,550 | 1,045.95 | 1 acre to 1,215 pop. | 6,353 |
| 1902..... | 1,313,095 | 1,045.95 | 1 acre to 1,255 pop. | 6,565 |
| 1903..... | 1,359,172 | 1,055.23 | 1 acre to 1,288 pop. | 6,796 |
| 1904..... | 1,387,351 | 1,055.23 | 1 acre to 1,315 pop. | 6,937 |
| 1905..... | 1,402,729 | 1,063.73 | 1 acre to 1,318 pop. | 7,014 |
| 1906..... | 1,426,166 | 1,063.73 | 1 acre to 1,340 pop. | 7,131 |
| 1907..... | 1,489,536 | 1,063.73 | 1 acre to 1,400 pop. | 7,448 |
| 1908..... | 1,492,970 | 1,063.73 | 1 acre to 1,403 pop. | 7,465 |
| 1909..... | 1,539,235 | 1,063.73 | 1 acre to 1,450 pop. | 7,696 |
| 1910..... | 1,634,351 | 1,126.30 | 1 acre to 1,452 pop. | 8,172 |
| 1911..... | 1,668,119 | 1,126.30 | 1 acre to 1,482 pop. | 8,340 |
| 1912..... | 1,701,887 | 1,141.11 | 1 acre to 1,492 pop. | 8,509 |
| 1913..... | 1,735,655 | 1,141.11 | 1 acre to 1,522 pop. | 8,678 |
| 1914..... | 1,769,423 | 1,141.25 | 1 acre to 1,551 pop. | 8,847 |
| 1915..... | 1,803,191 | 1,142.25 | 1 acre to 1,578 pop. | 9,015 |
| 1916..... | 1,843,635 | 1,140.57 | 1 acre to 1,617 pop. | 9,218 |

* The actual average provision for parks and public grounds for American cities is one (1) acre to every two hundred (200) of the population. The last column takes this average of 200 as a standard.

STATISTICAL CHART.

Parks, Combined Parks and Playgrounds, and Playgrounds, December 31, 1916.

| | |
|--|-----------------|
| Total Number | 50 |
| Total Acreage | 1,140.5663 |
| Acreage per 1,000 Inhabitants..... | 618 |
| Appraised Total Value..... | \$60,647,610.00 |
| Average Value Per Acre..... | 53,173.25 |
| Value Per Inhabitant..... | 32.89 |
| Total Mileage of Drives and Bridle Road..... | 11.91 |
| Total Mileage of Walks..... | 34.42 |

Parkways (Not Including Drives in Parks).

| | |
|------------------------------------|-----------------|
| Total Number | 15 |
| Total Mileage | 28.46 |
| Mileage per 1,000 Inhabitants..... | 0.016 |
| Total Acreage | 551.84 |
| Appraised Total Value | \$18,486,400.00 |
| Average Value Per Acre..... | 33,499.56 |
| Value Per Inhabitant..... | 10.03 |

March 31, 1917.

Hon. JOHN PURROY MITCHEL,
Mayor, City of New York,
City Hall, New York City.

Sir—I transmit to you herewith the Annual Report of the undertakings and accomplishments of this Department, for the year 1916.

Respectfully,

THOMAS W. WHITTLE,
Commissioner of Parks,
Borough of The Bronx.



BOY SCOUTS GATHER CROPS

ANNUAL REPORT OF THE DEPARTMENT OF PARKS OF THE CITY OF NEW YORK FOR THE YEAR 1916.

| | PAGE |
|--|------|
| Permits—Golf, Motion Pictures, General..... | 222 |
| Playgrounds, Golf Courses, Athletic Fields..... | 223 |
| Lawn Tennis | 223 |
| New York Botanical Garden..... | 227 |
| Rhododendron Banks and Lake Bridge, photo of..... | 224 |
| Bamboo Groups, photo of..... | 225 |
| Palm Groups, photo of..... | 226 |
| New York Zoological Society..... | 232 |
| South American Tree Toads, photo of..... | 233 |
| Snow Leopard, photo of..... | 234 |
| Bears, photo of..... | 235 |
| Crotona Park | 228 |
| Claremont Park—Copper Beaches, photo of..... | 229 |
| Devoe Park | 237 |
| Joseph Rodman Drake Park..... | 237 |
| Echo Park | 237 |
| Fulton Park | 238 |
| Macombs Dam Park..... | 238 |
| Melrose Park | 239 |
| Pelham Bay Park..... | 239 |
| Athletes Lodge, photo of..... | 240 |
| Poe Park | 243 |
| Rose Hill Park..... | 243 |
| St. James Park..... | 244 |
| Franz Sigel Park..... | 244 |
| St. Marys Park..... | 245 |
| St. Augustine Park..... | 246 |
| University Park | 246 |
| Van Cortlandt Park..... | 246 |
| No. 11 Green Van Cortlandt Golf Links, photo of..... | 247 |
| No. 7 Green Moshulu Golf Links, photo of..... | 248 |
| Old Rustic Stairs before removal, photo of..... | 250 |
| New Colonial Stairway, photo of..... | 251 |
| Wrought iron grille, Colonial Garden, photo of..... | 252 |
| Washington Bridge Park..... | 258 |
| Old Fort No. 4 Park..... | 258 |
| Triangles and Squares..... | 258 |
| Parkways | 259 |
| Street Trees | 261 |
| Christmas Tree | 262 |
| Chart A—Comparative statement of Personal Service for the years 1916 and 1917 | 263 |
| Chart B—Financial Statement for year ending December 31, 1916..... | 264 |
| Chart C—Statement of the Department's Revenues, 1916..... | 265 |
| Chart D—Distribution of Expenses for year ending December 31st, 1916, on basis of functions for each park..... | 266 |
| Chart E—Summary of Expenses for year ending December 31, 1916, on Basis of Budget Classifications and issue of special Revenue Bonds and Corporate Stock | 268 |
| Chart F—Summary of Expenses for year ending December 31, 1916, on Basis of Cost by functions—General Administration (Statement No. 1)..... | 270 |
| Chart G—Automobile Truck Service (Statement No. 2)..... | 271 |
| Chart H—Care of Land Improvement (Statement No. 3)..... | 272 |
| Chart I—Operation and Maintenance of Playgrounds and Athletic Field (State- ment No. 4)..... | 273 |
| Chart J—Maintenance of General Park improvement and properties (Statement No. 5)..... | 274 |
| Chart K—Care of Departmental Buildings and Structures (Statement No. 6)... | 275 |
| Chart L—Maintenance of General Equipment (Statement No. 7)..... | 276 |
| Chart M—Miscellaneous Expenses (Statement No. 8)..... | 277 |

DEPARTMENT OF PARKS

THE BRONX

1916

PERMITS.

Golf.—The Department has, during the past year, continued its policy of making a charge for golf permits. The charge for regular annual permits is \$1.00, the year beginning May 1st. This permit is issued only to residents of New York City and may be used upon either one or all of the three golf courses under the jurisdiction of the department; two in Van Cortlandt Park and one in Pelham Bay Park.

Provision was also made, as formerly, whereby non-residents and residents of the City, who had not procured regular annual permits, could, by the payment of 50 cents, procure a special daily permit allowing them to play for the day. The revenue received by the department for these two classes of golf permits for the year 1916 amounted to:

| | |
|-----------------------------|-------------------|
| Regular annual permits..... | \$8,340.00 |
| Special daily permits..... | 1,440.00 |
| Total | <u>\$9,780.50</u> |

Motion Picture Permits.—The Department also continued its policy of charging for the privilege of taking motion pictures in the parks, and during the year realized the sum of \$118 from the issuance of these permits.

General Permits.—During the year the Department issued 25,420 permits of all sorts, which is an increase of 1702 over the previous year. These permits were issued as follows:

| | |
|----------------------|---------------|
| Tennis | 11,500 |
| Outings | 829 |
| Football | 50 |
| Baseball | 618 |
| Camping | 312 |
| Cricket | 40 |
| Lockers (Golf) | 600 |
| Golf | 11,221 |
| Miscellaneous | 250 |
| | <u>25,420</u> |

Playgrounds.—The Department maintained and improved the eight playgrounds established during the year 1914, in six of which it employed Play Leaders to direct and control the play of the children and to safeguard them in their play. These playgrounds, which average one acre each, contain baby swings, large swings, shoot-the-chutes, see-saws, sand-boxes and basket ball courts, and are located as follows:

- 2 in Crotona Park
- 1 in St. Mary's Park.
- 1 in McComb's Dam Park.
- 1 in Claremont Park.
- 1 in Pelham Bay Park.
- 1 in Fulton Park.
- 1 in Echo Park.

Again the Parks and Playgrounds Association gave material aid to this department in the matter of playgrounds, not only by supplying six professional playground attendants and play leaders, but also through the active and frequent co-operation of Miss Madeline L. Stevens, Play Supervisor.

Golf Courses.—The Department maintains two full 18-hole golf courses in Van Cortlandt Park, one near the Van Cortlandt Lake, and known as the Van Cortlandt Links, the other being laid out in the easterly portion of the park near Jerome Avenue, and is known as the Mosholu Links. It also maintains a full 18-hole golf course in Pelham Bay Park.

Operation of Golf Courses.—Two classes of permits are issued to players. Residents of New York City may obtain annual permits upon payment of the sum of \$1.00, and all those residents of the City who have not procured regular annual permits may have the privilege of either of the courses for the day upon the payment of 50 cents.

Athletic Fields.—The Department maintains three athletic fields, each having a regulation running track, one in Pelham Bay Park, one in Crotona Park and one in McComb's Dam Park.

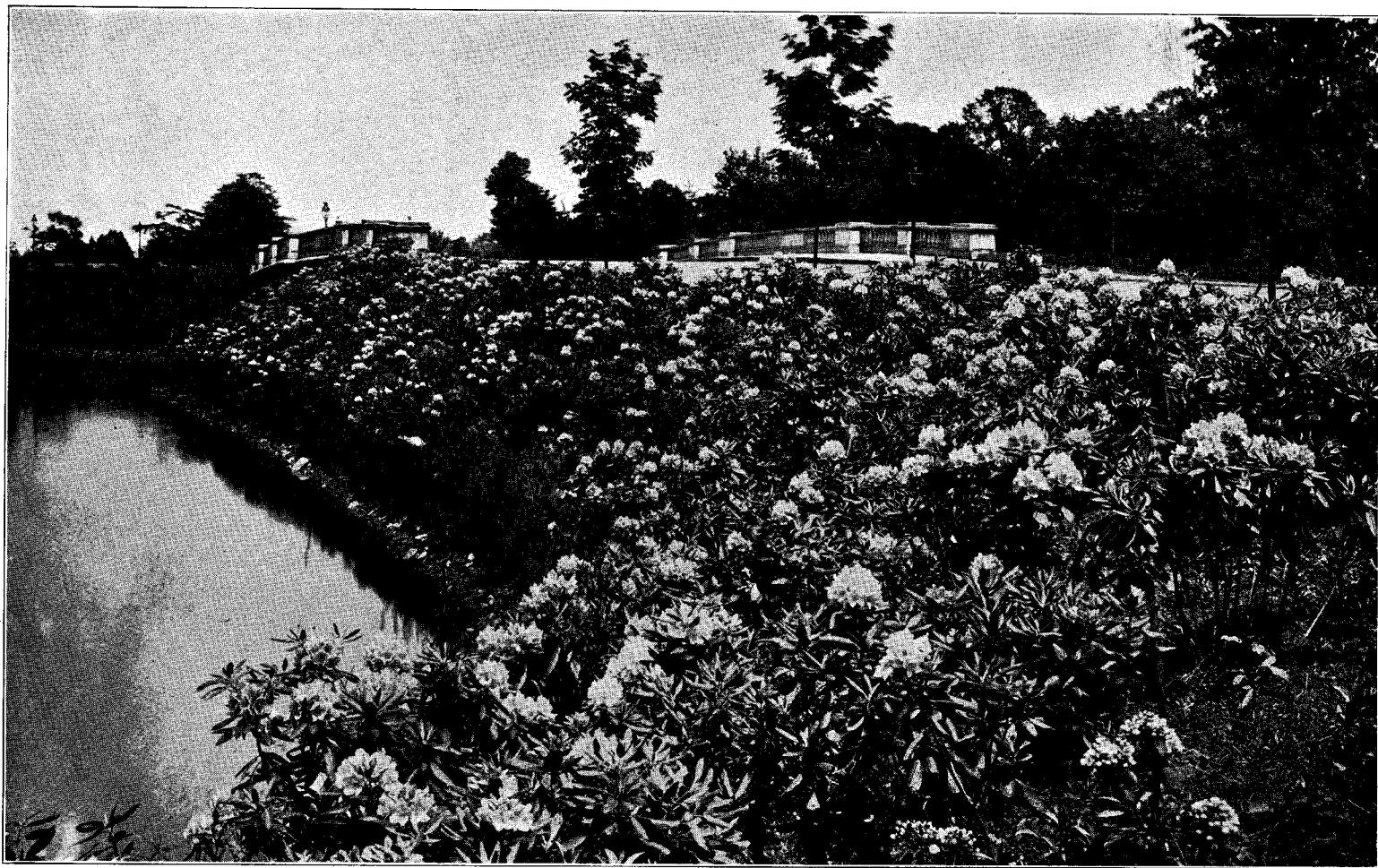
The athletic field in Pelham Bay Park is used largely by pupils of the public schools holding outings and field days in the park, and by Turn Verein societies, etc.

The athletic field in Crotona Park has a grand stand which cost \$40,000 and is used for the most part for field days, etc., by the pupils of the public schools of the entire city.

The athletic field in McCombs Dam Park has a regulation ¼-mile cinder track and every other requisite for a complete athletic field. It is not only used for field days by different organizations, but is used for training purposes by some of the greatest athletes in the world.

Tennis.—The Department now maintains 98 tennis courts in the various parks of the borough distributed as follows:

| | |
|-------------------------|----------|
| Bronx Park | 4 |
| Crotona Park | 36 |
| Claremont Park | 4 |
| McCombs Dam Park..... | 19 |
| Pelham Bay Park..... | 4 |
| St. James' Park..... | 11 |
| Franz Sigel Park..... | 2 |
| St. Mary's Park..... | 10 |
| Van Cortlandt Park..... | 8 |
| <hr/> Total | <hr/> 98 |



NEW YORK BOTANICAL GARDEN

Rhododendron Bank and Lake Bridge



NEW YORK BOTANICAL GARDEN

Bamboo Groups



NEW YORK BOTANICAL GARDEN

Palm Groups

NEW YORK BOTANICAL GARDEN.

Progress in the development of the Garden in all its departments has been made during the year and its educational work has been continued. In new construction and new planting, attention has been for the most part concentrated upon portions of the tract of about 140 acres added by the City to the Garden reservation in 1915, but minor work has been carried out in parts of the original area. All the older plantations have been maintained and all land previously improved has been cared for, although not as critically as was desirable, on account of limited funds for expenditure. The greenhouse collections of living plants have been maintained and augmented, and important additions have been made to the museum collections and to the herbarium and library.

A special fund aggregating \$8,400, subscribed by 108 members of the Garden, denominated the "Rose Garden and Garden Extension Fund," was expended in improving areas of the additional land, for the planting of a new rose garden, a garden for the use of the Society of American Florists and Ornamental Horticulturists during their convention meeting in New York in the summer of 1917, a large iris garden, and work was commenced in planting an extensive lilac garden. This development included the complete or partial construction of permanent stone paths aggregating 5,479 feet, or a little over a mile, in length, following the general plan approved by you on November 18, 1915; work on these paths is being continued during the winter. Other paths aggregating about 2,000 feet in length have been partly graded.

Other than the above, the most important item of ground improvement work consisted in the building of a concrete bottom under the entire Wild Fowl Pond for the purpose of rendering the place sanitary for the wild fowl and preventing a recurrence of intestinal coccidiosis, which previously had been very destructive to our wild ducks and geese.

One of the most important events of the year was the completion and occupancy of the new Animal Hospital, erected at a cost of \$17,833. Already this building has saved the life of a valuable chimpanzee which contracted pneumonia; and in the future it will undoubtedly reduce the annual death rate.

Throughout the school year the Society continued to furnish all the specimens for the zoological rooms at the Washington Irving High School.

The close of the year 1916 found the collections of the Zoological Park practically up to their highest standard. By dint of great effort, the bird collection showed no decrease over the census of the previous year, either in the number of specimens or in the number of species; and while the mammal collection showed a slight decrease, the greatly strengthened collection of reptiles compensated for that difference.

Thanks to the unjustifiable drafts on the Animal Fund, the buildings and other improvements of the Park were kept in proper repair for their preservation.

The universal campaign against rubbish-throwing in the Zoological Park that was begun in 1915, was renewed on May 1, 1916, and vigorously prosecuted throughout all of last year. The work of the Police Department, through officers in plain clothes as well as others, joined with the work of our Park force, and finally clinched by the City Magistrates, was thoroughly effective, and during 1916 the cleanliness of the Zoological Park was highly creditable to New York. Even the curse of peanut shells on the walks was abated.

But we have found that this warfare must be continuous. The moment it ceases, that moment the disorderly and mean and criminal element, variously estimated at from 10 to 50 per cent., goes back to its regular dirty and disgusting habits.

CROTONA PARK.

Area.

This park has an area of 154.60 acres.

Means of Access.

Harlem Division of New York Central Railroad; alight Claremont Park Station; walk east four blocks.

Third Avenue Elevated Railway; alight Claremont Parkway Station; walk one block east.

Special Features.

This park is located in a very populous district, and near several large schools. It is well wooded, containing several groves of fine old trees. Indian Lake, with an area of 3.25 acres, is used for boating in summer and skating in winter. It has a large fully-equipped athletic field; 4 baseball diamonds, 16 tennis courts, and 2 playgrounds. In the northwest portion of this park is Borough Hall.

Improvements.

One thousand four hundred feet of walks, 10 feet wide, were filled with stone obtained by the Department from a contractor, free of cost, which was spread six inches thick and covered with screenings.

There were 150 loads of steam ashes hauled by the department's teams and spread upon the playgrounds.

The new road through the section of the park called "The Glen," which is 785 feet long and 25 feet wide was resurfaced with 1½-inch stone obtained from the Jerome Park Reservoir, by the courtesy of the Department of Water Supply, Gas and Electricity, and the road well covered with tar and grits.

The same treatment was given the new road on the westerly side of the Lake, which is 1,300 feet in length and 22 feet wide.

The old roads of the park were resurfaced and covered with tar and grits to the extent of 3,675 linear feet.

A new path leading from the Glen to Charlotte Street, 785 feet in length, was constructed and covered with screenings and grits.

The Department obtained from a contractor, free of cost, 120,000 asphalt blocks, which were used, or will be used in repaving gutters and building new walks. Already the Department has with this material constructed 4,220 feet of new walks, 10 feet wide, the blocks being set on edge and covered with a light coating of clay, then with screenings to a depth of $\frac{3}{4}$ of an inch. Regulated, graded and made 24,000 square feet of new lawn, and planted 30 evergreen trees and 118 deciduous shrubs.

Athletic Field.

The grand stand in the athletic field was repaired and repainted.

Plans and specifications were prepared for laying the concrete sidewalk on the 177th Street side of Crotona Park from Third Avenue to Arthur Avenue. The bids for this work which were opened on September 28, 1916, were rejected and new bids asked for which were received on October 26, 1916, as a result of which a contract was awarded to C. J. Dougherty. Work was commenced on November 23, 1916, and suspended on December 18, 1916, on account of bad weather, but will be completed as soon as weather conditions permit.

Plans have been prepared for the construction of walks in the interior of the park, and this work will be done in the early part of 1917.

Otherwise general maintenance.

CLAREMONT PARK.

Area.

This park has an area of 38 acres.

Means of Access.

Harlem Division of the New York Central Railroad; alight Claremont Park Station; walk one block west.

Webster Avenue line of the Union Railway; alight Claremont Parkway.

Third Avenue Elevated Railway; alight Claremont Parkway Station; walk four blocks west.

Special Features.

The Zbrowski Mansion, now used as the administration building of the Bronx Park Department, is a stone building erected in 1859.

Recreational Facilities.

The park contains 1 baseball diamond, 4 tennis courts, and a well-equipped playground.



COPPER BEECHES (*Fagus Sylvatica Purpurea*)
Claremont Park

Improvements.

All the roadways were resurfaced with Tarvia B and grits.

New walks for a total length of 2,708 feet, 10 feet wide were filled with 6 inches of stone and covered with screenings.

A new entrance at the south side of the park was constructed, as was also a roadway leading from that entrance into the park 1,299 feet in length and 18 feet wide. This roadway was covered with 6 inches of 1½-inch stone and screenings and surfaced with Tarvia B.

The slopes on the Clay Avenue and College Avenue sides of the park were reggraded for a distance of 2,535 feet in length and an average width of 25 feet.

There were 982 bedding plants set out in the park.

General maintenance otherwise.

The kinds of living plants now represented in the collections aggregate approximately 14,106, this being the largest number of kinds as yet brought together by us; of these, about 9,250 kinds are under glass, and the remainder, nearly 5,000 kinds, are out-of-doors. The museums and herbarium were increased by over 40,000 specimens, mainly by exploration and by exchanges with other institutions. Additions to the library aggregate 415 volumes; this collection now contains 27,639 volumes.

The natural features of the reservation have been guarded against vandalism and fire and have suffered no appreciable damage. All portions of the woodlands through which the trails have been fenced with guard-rails in preceding years are more beautiful and interesting than before, the undergrowth and wild flowers in these areas being more luxurious and abundant; extension of guard-rails into other parts of the woodlands is most desirable, but funds for this purpose have not been available.

Saturday public lectures were given in the museum building from April 8 to November 11th, to audiences averaging 114 persons. The docentry system has been continued, docents for school children and for parties of adults having been available every week-day afternoon for visits to the grounds, buildings, and collections. Children from the public schools in large parties have been given nature study instruction by lectures and demonstrations. Advanced students and investigators from other institutions have had the privileges of the laboratories, experimental grounds, and green-houses. The library has been used to advantage by many visiting students and investigators. A great amount of information was given out by correspondence and this function of the institution is continually expanding and requiring more of the time of the staff. Botanical explorations resulting in important additions to the collections and to knowledge were carried out in northern Cuba and the Isle of Pines, and in southern Florida. Public exhibitions of plants and flowers have been continued in co-operation with the Horticultural Society of New York.

Publications of the Garden during 1916 include Volume 17 of the Journal, Nos. 33 and 34 of the Bulletin, Volume 8 of Mycologia, 5 parts of

North America Flora, Volume 6 of the Memoirs, 7 numbers of Contributions, and the first volume of the new journal Addisonia.

Additions to permanent funds include \$3,000 bequeathed by Emil C. Bondy, added to the principal of the Endowment Fund for Science and Education; the payment of 35 per cent. of the bequest of \$25,000 by Maria DeWitt Jesup, or \$8,750 (10 per cent. only of this bequest remains unpaid), added to the principal of the Maria DeWitt Jesup Fund; and students' fees aggregating \$261, added to the principal of the Students Research Fund. These payments total \$14,011, increasing the whole endowment to \$554,009.16. Much larger endowment is needed to enable us to take full advantage of the opportunity for usefulness offered by the development of the institution.

NEW YORK ZOOLOGICAL PARK.

Notwithstanding the handicap of an awful scourge of infantile paralysis, strikes on transportation lines, high prices and scarcity of animals, the Zoological Park has scored another successful year. The drop in attendance, of 123,257, was last year wholly due to infantile paralysis and strikes on street railways, and the only cause for surprise is the fact that the decrease in attendance was not three or four times greater than it really was.

The attendance for the year was 1,656,820.

The complete destruction of the European wild animal market by the war has rendered it necessary for the Zoological Society to establish entirely new lines of supply for replenishing the collections of mammals, birds and reptiles in the park. It is perfectly evident that the German dealers in wild animals will, at the close of the war, find many of their old hunting grounds closed to them, and for a long period; and it is more than probable that from this time henceforth English dealers will possess the animal trade with India and the far East, Africa and Australia, and Frenchmen will control the trade with the French colonies of Africa and elsewhere.

The New York Zoological Society initiated a movement to establish a direct animal trade with South Africa, and in the benefits of that undertaking the Zoological Society of Philadelphia and the National Zoological Park at Washington were invited to participate on a partnership basis. Both those institutions entered into the arrangement, and it is believed that this concerted effort will produce important results. A very competent agent was sent to South Africa, where he brought together a collection of South African mammals, birds and reptiles, and with which he landed in Boston on January 2, 1917.

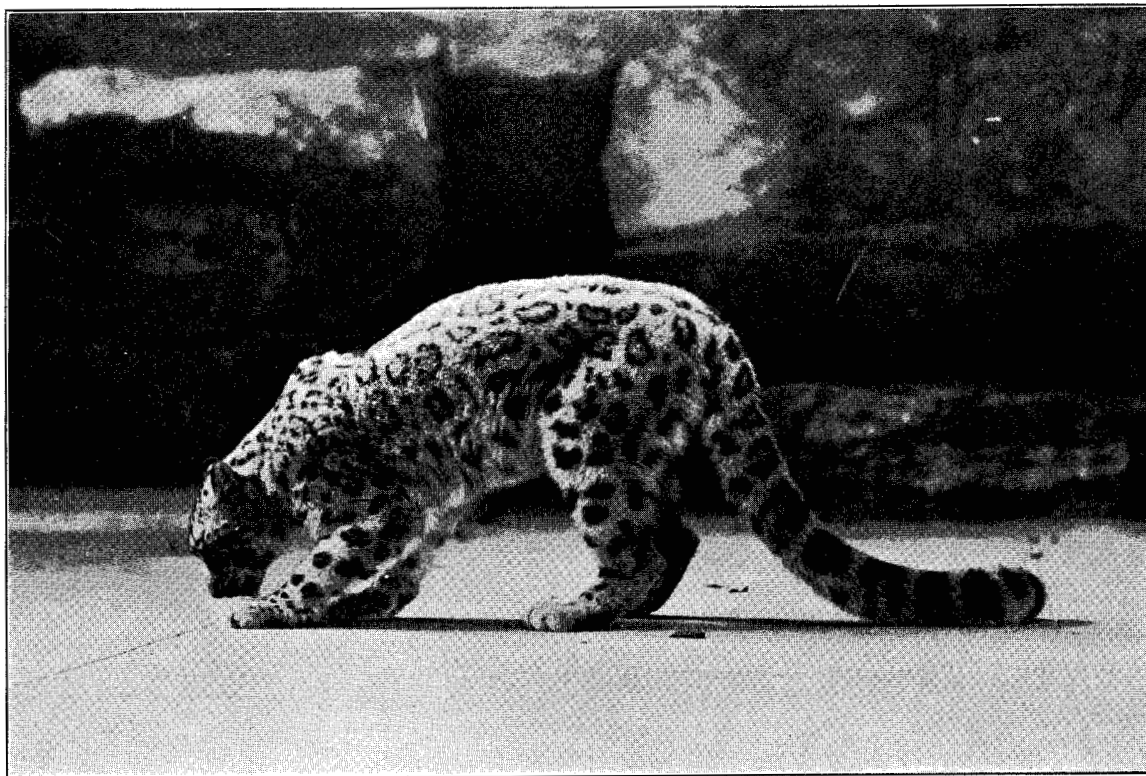
A large and scientifically important collection was received by direct importation from Australia, and the Zoological Society's Tropical Research Station in British Guiana contributed an important series of living things.

During the year 1916 the most important animals acquired were a female Senegal giraffe, 13 feet in height; 1 chimpanzee, 2 orang-utans, 1 Siamang

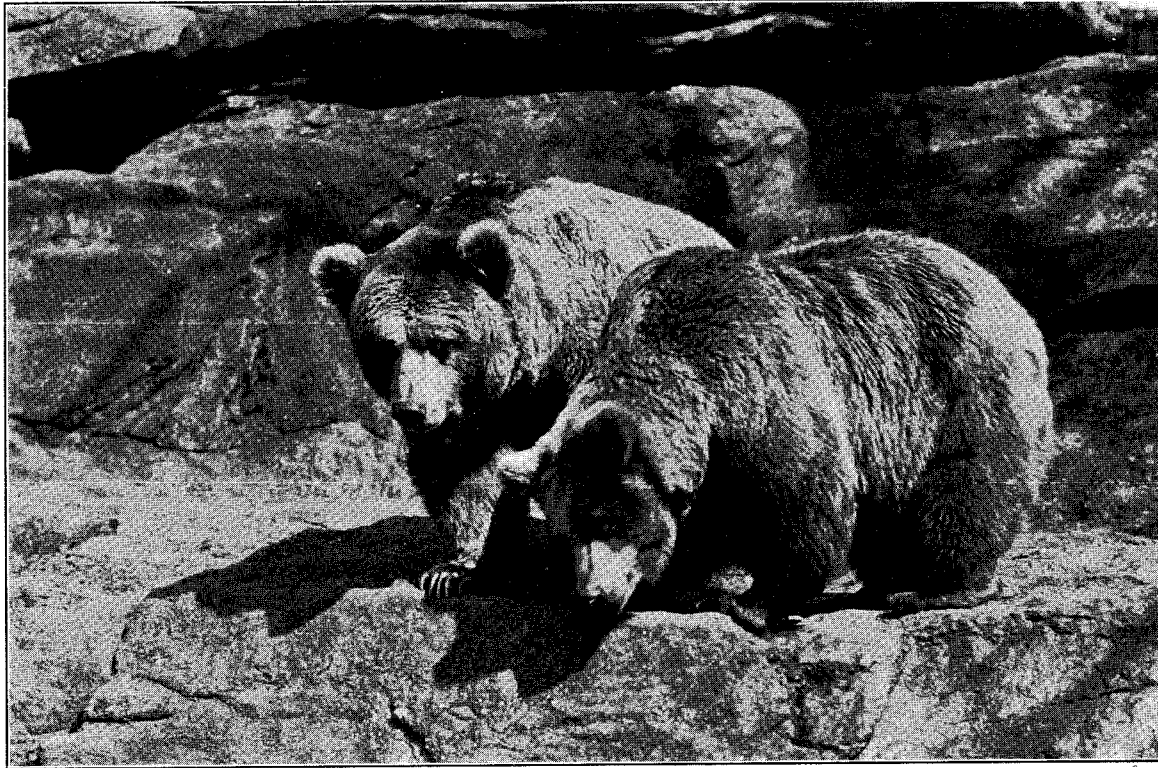


NEW YORK ZOOLOGICAL SOCIETY

South American Tree Toads



NEW YORK ZOOLOGICAL SOCIETY
Snow Leopard



NEW YORK ZOOLOGICAL SOCIETY
Bears

gibbon, 2 drills, 1 mandrill, 1 golden baboon, 1 black ape, 3 sea-lions, 16 kangaroos, 1 Tasmanian wolf and 3 wombats.

The accessions to the Zoological Park collections by birth included 4 American bison, 1 Mongolian horse, 5 American wapiti, 7 white-tailed deer, 3 Barasingha deer, 9 axis deer, 5 fallow deer, 1 yak, 7 Himalayan tahr, 4 soudad, 1 Persian ibex, 1 mouflon, 2 grizzly bears, 1 Russian-sloth bear, and 4 beaver.

The number of losses by death during the year 1916 was proportionately fewer and of less value than in previous years.

A summary of the collections on hand on December 31, 1916, is as follows:

| | Species | Specimens |
|------------------------------|---------|-----------|
| Mammals | 207 | 617 |
| Birds | 816 | 2,788 |
| Reptiles and amphibians..... | 98 | 782 |
| | 1,121 | 4,187 |

After fifteen years of caring for snakes of various types, and always with a large and representative series of the poisonous species, the first accident from a venomous serpent occurred in the Reptile House on the morning of January 27, of the past year. While cleaning one of the easterly cages, Keeper John Toomy was bitten on the right thumb by a large and particularly savage Texas diamond-back rattlesnake.

Our men are well versed in first-aid treatment for snake-bite, and Senior Keeper Snyder at once sucked the wounds. A ligature was immediately applied and the Society's physician, Dr. Gilbert Van der Smissen, quickly arrived and injected Dr. Calmette's anti-venomous serum. We were fortunate in soon after obtaining tubes of the specific rattlesnake serum, produced by Dr. Bitai Brazil, at the Institute Serum-Therapico, in Sao Paulo, Brazil. Keeper Toomy was removed to the German Hospital, where under the skillful treatment of Doctors Semken and Van der Smissen, he entirely recovered. He has now completely regained the use of his hand. A detailed account of the treatment of this case appears in the May number of the Society's *Bulletin*.

One of the most serious occurrences at the Zoological Park was the sequestration of the entire gate receipts, amounting to \$8,455, for expenditure in repairs to buildings, aviaries, dens and cages. This entire sum was virtually taken from the Animal Purchase Fund, and that action was rendered necessary by the fact that the repairs made were imperative, and the City had not provided any funds for that purpose. This sequestration of animal fund money must not occur again.

As usual, all the profits derived from the privilege business of the Park (which, during the past year, were not great), were deposited in the Animal Fund and expended in the purchase of additional specimens.

Another calamity to the Animal Fund, however, was the sequestration from it of about \$3,000 with which a new concrete dock was constructed at

the Boathouse. The old dock had reached such a state of disrepair that it was not only unsightly, but also dangerous to the public, and there being no City funds available for the building of a proper dock, the Animal Fund was robbed of the amount that was necessary to make the improvement.

DEVOE PARK.

Area.

This park has an area of 5.87 acres, and is bounded by Fordham Road, West 188th Street, Sedgwick Avenue and University Avenue.

Means of Access.

Third Avenue "L" to Fordham Station; thence via 207th Street cross-town surface car going west.

Broadway Subway at 207th Street Station; thence via crosstown car going east; car passes the park.

All walks in this park were resurfaced with screenings.

Flower beds were prepared and planted with 2,130 plants.

JOSEPH RODMAN DRAKE PARK.

Area.

This park contains 2.88 acres.

Means of Access.

The cars of the 161st Street crosstown line of the Union Railway (here running on Hunts Point Avenue) pass the park.

The cars of the 149th Street crosstown line of the Union Railway (here running on Randolph Avenue) pass within one block of this park. Visitors using latter should alight at Hunts Point Avenue.

Historical Associations.

This park was created in order to preserve from destruction the old burial ground of the Hunt family, containing the grave of the poet Joseph Rodman Drake, author of "The Culprit Fay," "Bronx" and "Ode to the American Flag." The little cemetery contains ancient gravestones of the earliest members of the Hunt family resident in this section.

Otherwise general maintenance.

ECHO PARK.

Area.

This park comprises 4 acres. The location is west of Webster Avenue and north of 177th Street.

Means of Access.

Third Avenue "L" to Tremont Station; walk four blocks west.

New York Central Railroad to Tremont Station; walk one block west.

Improvements.

Hauled soil to the rocks on the Burnside Avenue side and used it in filling the niches in the rocks, in which were then planted 1,000 climbing and trailing roses; also 2,400 summer flowering plants.

Plans and specifications were made for the construction of hexagonal asphalt tile walks in this park. The contract was awarded to the Hastings Pavement Company on June 29, 1916, and the work completed and final estimate made on September 12, 1916. This resulted in great improvement to one of the walks through the park, which is in fact a thoroughfare for many people in that section of the Borough.

General maintenance otherwise.

FULTON PARK.**Area.**

This park comprises 0.94 acres.

The location of this park is on the west side of Fulton Avenue, between 169th and 170th Streets, in the rear of Public School No. 2, which is connected with the park by means of a stairway.

The park is used largely by the children of the school during the hours of recess, and at other hours of the day by children in the immediate vicinity; also by mothers with infants.

General maintenance otherwise.

McCOMB'S DAM PARK.**Area.**

This park has an area of 27 acres.

Means of Access.

Sixth and Ninth Avenue elevated railways to 155th Street; then walk or take any trolley car across the viaduct and Macomb's Dam Bridge.

Broadway branch of Subway to 157th Street Station; walk south to 155th Street; take any surface car westward.

Third Avenue Railway to 161st Street Station; thence by surface car west through 161st Street to park.

The park can be reached from the East Bronx by any crosstown trolley of the Union Railway, transferring south on the Jerome Avenue line.

The park can also be reached by any Union Railway line, transferring west on the 161st Street line which goes direct to the park.

Special Features.

Three-fifths of this park is devoted to sports and recreation. There are 4 baseball diamonds; 17 tennis courts; and an athletic field, with a quarter-mile running track; and a comfort station containing dressing-rooms, lockers, shower baths, etc.

There is also a fully equipped playground.

The portion of the park lying along the Harlem River is nearly all used by rowing clubs.

Historical Associations.

The present Macomb's Dam Bridge is practically on the site of the old Macomb's Dam Bridge, near which was the old Macomb's Dam, making a pond out of the Harlem River, to turn the Macomb Hill at Kingsbridge. The dam was broken down by a delegation of citizens about 1840 and, being declared by the courts a public nuisance, was abandoned.

Improvements.

Plans and specifications for the removal of the rock and earth were prepared and bids asked for. These bids were opened on April 13, 1916, and the contract awarded to P. J. Duffy, 132d Street and St. Ann's Avenue, the lowest bidder. Work on this contract was completed and final estimate made on December 31, 1916.

The removal of an unsafe and unsightly knoll on the Jerome Avenue side of the park was accomplished through this contract, and this portion of the park made ready for seeding.

Various boat clubs using a portion of the water front in this park were given permission to fill and grade around the premises used by them, which resulted in a general improvement of that section of the park.

A screen plantation of 1,780 shrubs and 60 large trees was made along the 161st Street side to shut out the large apartment houses along this street.

General maintenance otherwise.

MELROSE PARK.

Area.

This park has an area of 0.83 acres, and is located east of the Melrose Station of the Harlem Division of the New York Central Railroad.

Improvements.

Plowed and remade 3,000 feet of lawn; hauled and spread 150 yards of top soil; planted 100 shrubs, 78 trees, and laid 1,000 feet of sod.

General maintenance otherwise.

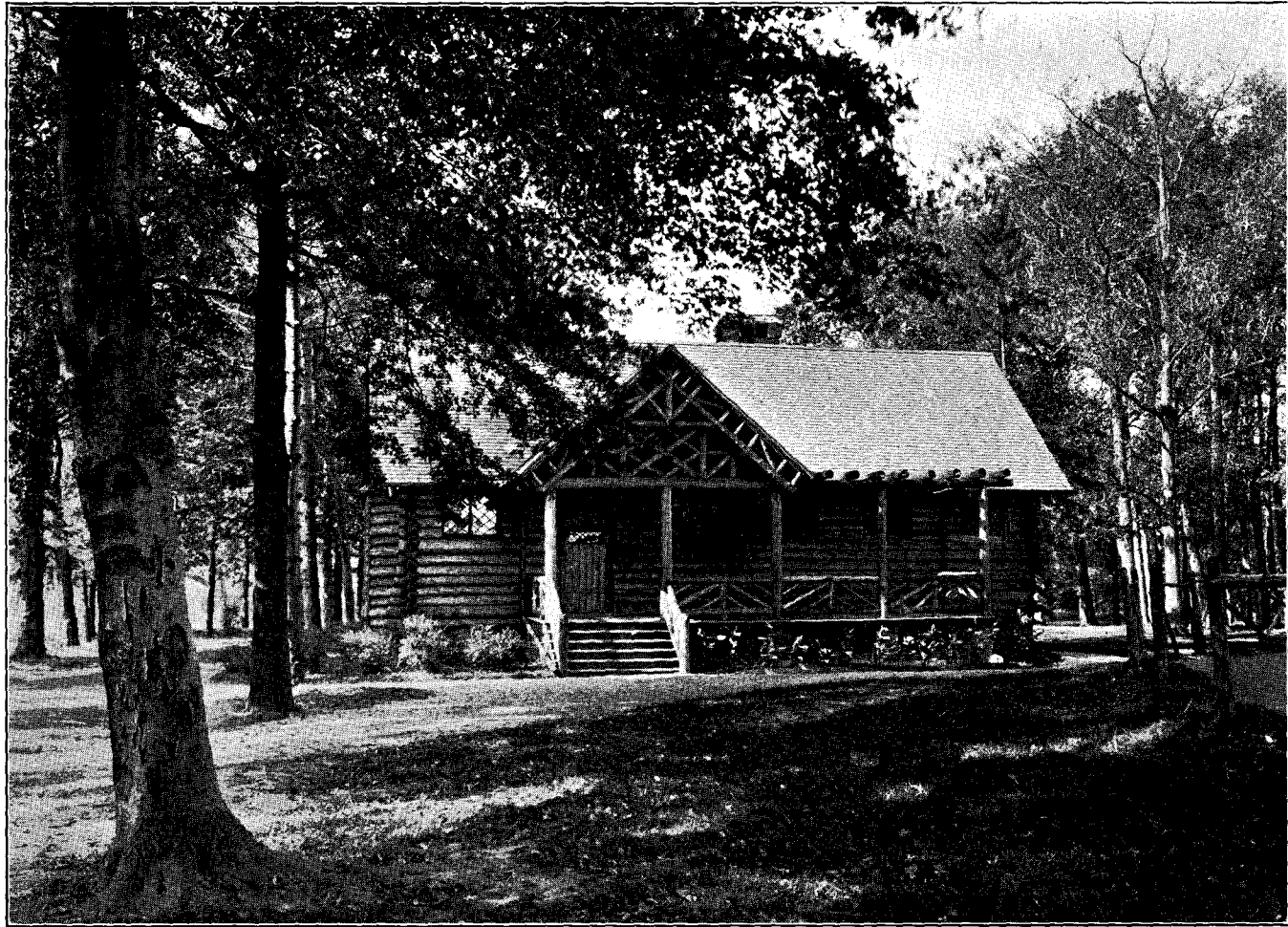
PELHAM BAY PARK.

Area.

This is the largest park in the City, including within its boundaries 1,756 acres, more than twice as many as Central Park.

Means of Access.

The most direct and convenient means of reaching Pelham Bay Park is by the Harlem River Branch of the New York, New Haven & Hartford



PELHAM BAY PARK
Rustic Lodge (Athletes' Locker House)

Railroad. The terminal of this road is at Willis Avenue, The Bronx, but a shuttle train runs from the 129th Street Station of the Second and Third Avenue Elevated Railroad systems. For the southerly section of the park, visitors should alight at the Baychester Station; for the northerly and more important sections, at Bartow Station, now known as City Island Station.

Trolley Lines.

The Westchester and Walker Avenue cars of the Union Railway running through Tremont Avenue, crossing Third Avenue, at 177th Street, go to the Eastern Boulevard entrance to the park. Visitors can also reach the park by the Union Railway cars running on Westchester Avenue and on West Farms Road.

Special Features.

In this park are to be found a remarkable combination of stretches of untouched woodland, great expanses of lawn and meadow, salt water bays and inlets, islands and miles and miles of shore front. It is an excellent park for a genuine rural picnic, or a seaside outing. There is space and seclusion, should that be desired for the basket party; the hotels within the park vary in their service, from the simple and inexpensive to the elaborate and costly.

During the year cleared the park of a considerable amount of dead wood by means of permits issued to various persons desiring to obtain dead wood to be used as firewood.

The building known as the Adee House was renovated both inside and out, and given two coats of paint. This building is now occupied by the Day Home and School for Crippled Children.

Near the athletic field two new baseball diamonds and two cricket fields were laid out.

Along Eastern Boulevard 650 holes varying in size from 12 inches square to 4 feet square were patched with road binder, and the whole covered with 5,000 gallons of Tarvia B one-eighth of a gallon to the yard and this covered lightly with sand.

Along Pelham Parkway 500 holes were patched with road binder and covered with Tarvia B and then covered lightly with sand.

At Orchard Beach approximately 500,000 people took advantage of the bathing facilities, about 400,000 of whom were accommodated in the bath houses maintained by the Department. Many hundreds of persons used the bathing beach each day, dressing and undressing in tents erected temporarily for the day under permits from the Department.

Camp Site.

The Department maintains a camp site at Orchard Beach for the exclusive use of families for the season beginning June 15th and ending with September 15th. This camp site is laid out regularly into streets and each

camp site is 30 by 60 feet in size. Croton water is supplied by the Department by means of pipes laid and taps erected, one for each four tents. During the summer of 1916 the Department issued 312 permits, which means that there were more than 1,500 persons residing at the camp city throughout the summer, thus deriving untold benefits from the facilities furnished by the Department for camping and bathing.

Men's Camp Site.

Some distance away from the regular family camp site the Department maintained a camp site for the exclusive use of young men under conditions similar to those existing at the family camp site. There were 25 permits of this sort.

Camping on Hunter Island.

There were so many demands for permits to camp on Hunter Island that the Department deemed it best to make the necessary arrangements with reference to fresh water supply and proper toilet facilities to meet the requirements of the Department of Health so that persons desiring to do so might be permitted to camp on Hunter Island. The consequence was that several hundred persons were enabled to camp on Hunter Island under permit from the Department.

The Boy Scouts of America maintained its usual camp on Hunter Island.

School Farm for Feeble-Minded Children.

Public School No. 74 of The Bronx maintained as previously a small farm comprising three acres for use by feeble-minded children of that school.

Comfort Station.

Plans and specifications were prepared for the construction of a new comfort station at the Athletic Field and for the plumbing and water supply system for same. Bids on both contracts were opened on August 10, 1916, but were found to exceed the appropriation in both cases. Additional funds have been applied for and will be available early in 1917.

The survey, plans and specifications for repaving the Eastern Boulevard from Split Rock Road to the northern boundary of Pelham Bay Park were completed and submitted to the Bureau of Contract Supervision for approval. The original intention of the department was to pave this road with asphaltic concrete, and the specifications and estimates of costs were based upon that type of pavement. The Bureau of Contract Supervision, however, changed the type of pavement to "heavy traffic" sheet asphalt road on concrete foundation, and on the steep grades to asphalt blocks on concrete foundation. Additional funds were voted by the Board of Estimate and Apportionment to cover the higher price of substituted

pavement, and new specifications were embodied in the contract. Bids on this contract will be advertised for early in 1917.

POE PARK.

Area.

This park has an area of 2.35 acres.

Means of Access.

This park can be reached by either the Third Avenue elevated railway or the Harlem Branch of the New York Central Railroad. Visitors using either of these lines should alight at Fordham Station. There is here a crosstown line of the Union Railway, running on Pelham Avenue at Fordham, and another line on the Kingsbridge Road, either of which will take the visitor to the park. It is but a short walk westward on Fordham Road, to the Grand Boulevard and Concourse, and thence one block north to the park.

Jerome Avenue line of the Union Railway; alight at 193rd Street, walk three blocks west to park.

Webster Avenue line of the Union Railway, transferring at Fordham Road.

Historical Associations.

This park was acquired in 1902, and got its name from the little wooden cottage that stood on the easterly side of Kingsbridge Road, about opposite the center of the park. During the years 1846-49, the cottage was occupied by the poet Edgar Allan Poe. It was here that he wrote many of his poems, including "Annabel Lee" and "The Bells." Here, Virginia, his invalid wife, died and was buried from the Fordham Manor Dutch Reformed Church. To save this cottage from demolition it was moved in the year 1913 from its original site to the northerly end of the park. It was formally opened to the public on November 15, 1913.

Improvements.

All walks were resurfaced with screenings.

Planted 855 flowering plants.

General maintenance otherwise.

ROSE HILL PARK.

Area.

The area of this park is 0.72 acre, and it is bounded by Webster avenue, Fordham Road and the right-of-way of the Harlem Branch of the New York Central and Hudson River Railroad.

Improvements.

The asphalt walks in this park were in such condition that repairs could not very well be made, consequently they were entirely done away

with, and 12,360 square feet of concrete walks laid to take their place. At the same time permanent benches to accommodate at least 150 people were constructed.

Eight hundred flowering plants were placed in the flower beds in this park, and the edges of the walks re-sodded to the extent of 600 square feet of sod.

Otherwise usual maintenance.

ST. JAMES PARK.

Area.

This park has an area of 11.83 acres, and is bounded by Jerome Avenue, Creston Avenue, 193d Street and the property of the St. James Protestant Episcopal Church.

Means of Access.

The Sixth and Ninth Avenue "L" at 155th Street station, via Jerome Avenue car running north; car passes the park.

Third Avenue "L" at Fordham station; the Bronx and Van Cortlandt surface car to Kingsbridge Road; walk one block south on Jerome Avenue.

The park has six tennis courts.

The remainder of the area is in a high state of cultivation with lawns, shrubs and trees.

Improvements.

All walks were resurfaced with screenings.

A concrete sidewalk was laid along the Jerome Avenue side of the park, the full length of the park, under contract.

One thousand six hundred flowering plants were set out in the flower beds.

Otherwise the usual maintenance.

FRANZ SIGEL PARK.

Area.

This park has an area of 17.47 acres, and is located between East 153d Street and East 161st Street, Walton and Mott Avenues.

Means of Access.

The Sixth and Ninth Avenue "L" at 155th Street Station, via 161st Street crosstown surface car to Mott Avenue; walk one block south.

Third Avenue "L" at 161st Street, via 161st Street crosstown car, walk to Mott Avenue, walk one block south.

Bronx Park Subway at Mott Avenue; walk two blocks north.

The park is delightfully situated on an elevation well above the street, is highly cultivated, and contains a large shelter pavilion and comfort station.

Improvements.

The Department obtained through the Commissioners of the Sinking Fund a plot of ground bounded by East 158th Street, East 159th Street, Mott Avenue and Walton Avenue, immediately north and adjoining Franz Sigel Park, upon which stood a three-story frame building on a stone foundation, formerly known as the Allen Homestead. This building was entirely renovated inside and out, and the heating and plumbing system overhauled and repaired, after which it was turned over to the Boy Scouts of America for use as the Bronx Headquarters of that organization.

At the south end, and connecting with the playground, a walk 700 feet in length and 10 feet wide, was constructed. All of the old walks were resurfaced with screenings.

Regulated, graded and made 16,000 square feet of new lawn, and planted 645 bedding plants.

Otherwise usual maintenance.

ST. MARY'S PARK.**Area.**

This park has an area of 34.20 acres.

Means of Access.

Bronx Branch of the Subway to 149th Street and Third Avenue station; thence three blocks east on 149th Street.

The 149th Street crosstown line of the Union Railway passes the park, and it may also be reached via the 138th Street crosstown line, alighting at St. Ann's Avenue, and walking five blocks north.

Special Features.

This park contains one baseball diamond, two tennis courts, a playground and the "school farms." This latter is a plot of land on which school children are permitted to raise vegetables. Each child is assigned a plot 6 feet by 12 feet. There were originally 288 of these plots. The children furnish their own seed and utensils, and, of course, keep the produce. The Department plows the ground in the Spring. The "school farms" are under the supervision and direction of the park foreman, the same as the playgrounds. The school garden was enlarged to 488 plots in 1915.

Improvements.

There were hauled and spread upon the playgrounds 200 loads of steam ashes.

The eight tennis courts were resurfaced with Tarvia B.

Four thousand square feet of sod laid along the borders of the paths, and approximately five acres of lawn plowed and re-sodded.

The school garden, to which 70 additional plots were added, was put in condition for planting and laid out into plots.

Planted 22 large trees and more than eight hundred shrubs and 3,200 bedding plants were placed in the flower beds.

Otherwise the usual maintenance.

ST. AUGUSTINE PARK.

This park has an area of 0.25 acres, and is located at the junction of 166th Street, Fulton and Franklin Avenues.

At and near the granite steps at the south end of this park the ground was graded and 300 yards of top soil placed there. The banks on either side of the steps were improved by the planting of 3128 shrubs of various kinds.

On the side bounded by Franklin and Fulton Avenues 11 large trees were planted.

This park space has been thus greatly improved in appearance.

General maintenance otherwise.

UNIVERSITY PARK.

This park has an area of 2.75 acres, and is located on the Harlem River slope in front of the grounds of the New York University.

This being a small park and already brought up to as high a state of cultivation as conditions require, called only for general maintenance.

VAN CORTLANDT PARK.

Area.

Van Cortlandt Park has an area of 1,132.25 acres.

Means of Access.

Broadway branch of the Subway direct to the park.

Broadway surface line, which runs along the entire westerly boundary of the park, crossing the City line, and extending into Yonkers via South Broadway.

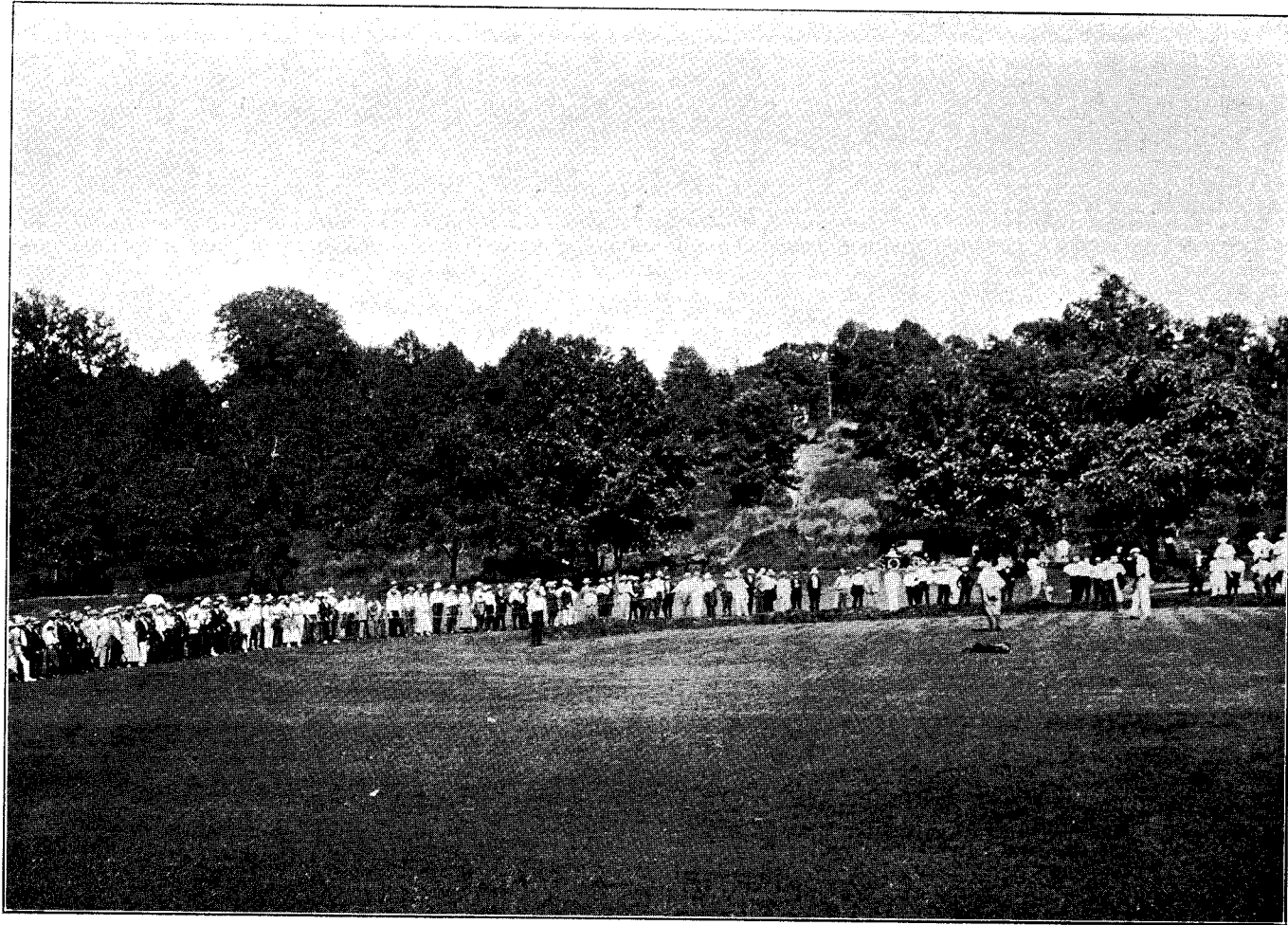
Jerome Avenue cars of the Union Railway, which cross Mosholu Parkway, skirt the southeasterly boundary of the park, cross the northeasterly portion and run into Yonkers via Central Avenue.

The crosstown cars of the Union Railway intersect the Jerome Avenue line at many points where transfers are given.

Putnam Division of the New York Central Railroad (terminal at 155th Street station of the Sixth and Ninth Avenue elevated railway, Manhattan) to Van Cortlandt Station in the park.

Special Features.

A big stretch of forest land that invites the rambler, a lake for the canoeist and the oarsman, extensive grounds that afford opportunity to enjoy as participant or spectator, all manner of outdoor sports, elaborate



VAN CORTLANDT GOLF LINKS
11th Green, Van Cortlandt Park



MOSHOLU GOLF LINKS
7th Green, Van Cortlandt Park

formal gardens, and historical buildings, relics and associations; all these are features that make Van Cortlandt Park a park of unique value.

Golf Courses.

During the year both the Van Cortlandt and the Mosholu golf courses were maintained as usual, and play upon them was unusually heavy.

Special Putting Greens.

During the spring of the year a miniature golf course, consisting of nine putting greens, varying in lengths from 10 to 30 feet, was constructed near the first tee, so that those waiting to play off might practice.

Golf House.—On the shore of the lake, and convenient to the first tee of the Van Cortlandt Course, the Department maintains a golf and locker house. In this building is a section containing 490 lockers for men, and two shower baths, and 32 polo lockers for the use of the members of the New York State National Guard, who play polo in this park; and a section containing 80 lockers and two shower baths for the use of women.

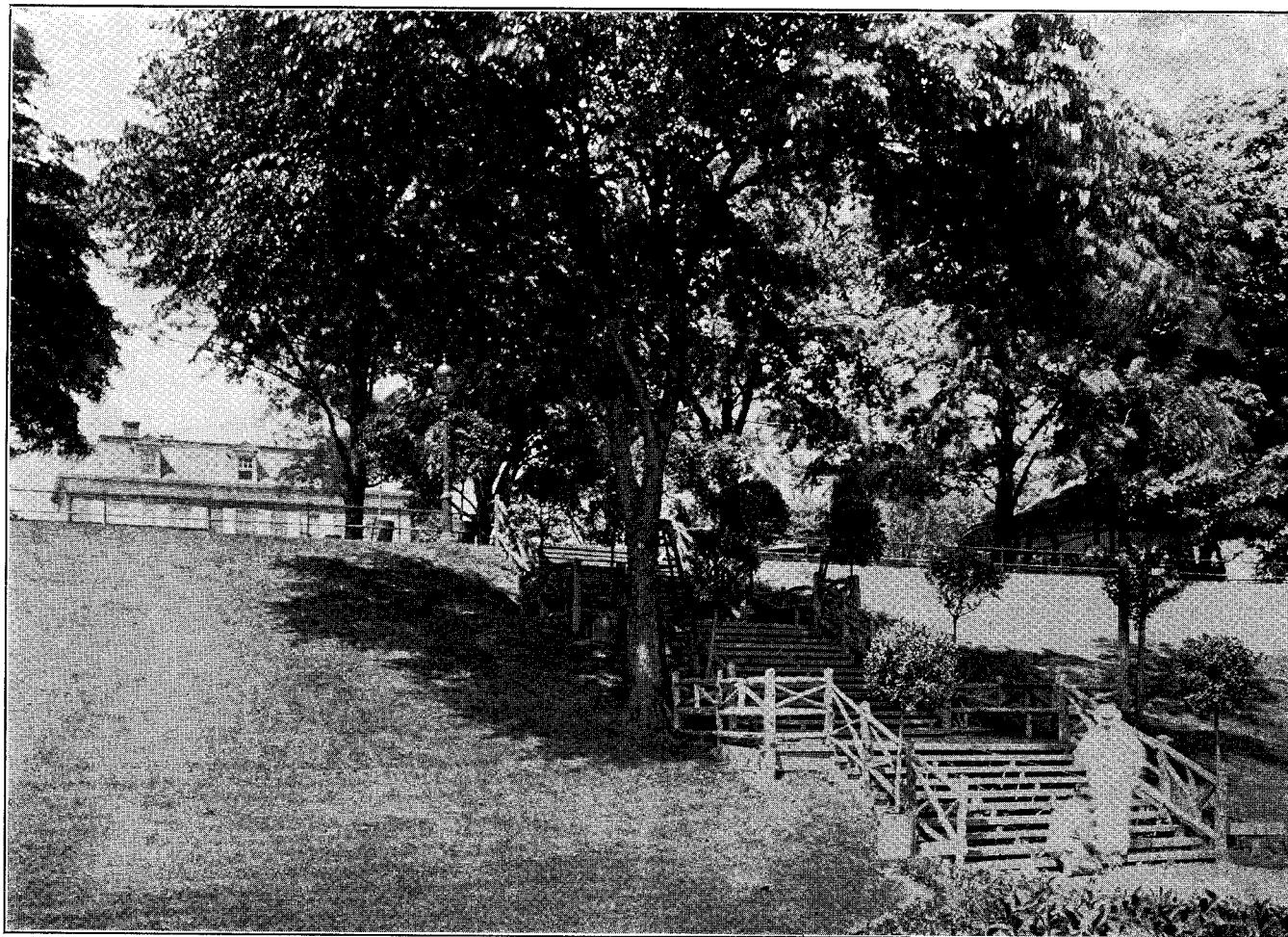
Water Sports.—There is a long narrow lake that covers some 16½ acres. There are boats and canoes for rent. In the winter it is used for skating, the golf house being used as a skate house. Curling matches are also engaged there.

Baseball and Other Sports.—There are twelve baseball fields. There are eight tennis courts—four on the Gun Hill Road, two on the parade field, and two on the new golf links. During the fall season the baseball fields are used for football. There is a 59-acre parade ground, a 32-acre polo field, a cricket field and a cross-country course, six miles in length, over which the Junior and Senior Individual and Team Cross Country championships of the Metropolitan Association of the A. A. U. were run.

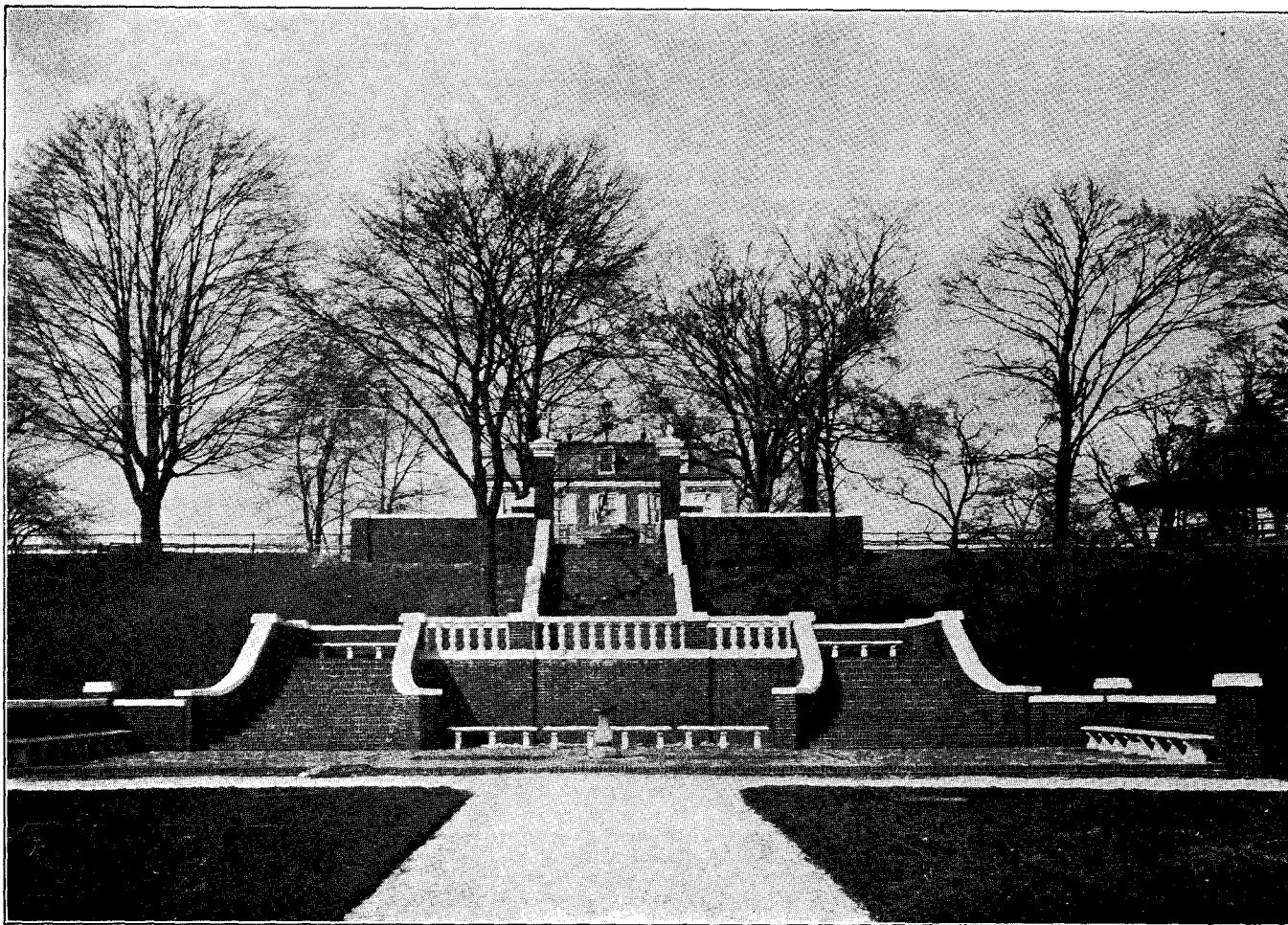
Colonial Garden.—A very beautiful feature of this park is the formal Colonial Garden in front of the Colonial Mansion, comprising about 3½ acres. In the center of it is a handsome marble fountain, surmounted by the coat-of-arms of the City of New York, and on the sides the coat-of-arms of the Thirteen Original States. This fountain was presented to the City of New York by Mrs. Frederic F. Thompson at a cost of \$14,000.

The spring showing of tulips was very fine, which, when through flowering, were taken up and replaced with 74,000 annual and summer flowering plants, which in turn were followed by a plantation of 100,000 tulip bulbs of various colors for the spring flowering of 1917.

Colonial Stairway.—To the south of the Van Cortlandt Mansion and as an approach to the Colonial Garden a beautiful stairway, of colonial design, has been constructed by funds donated by Mrs. Frederic F. Thompson, of New York City. The steps are constructed of tapestry brick in tread, risers and platform, with a coping of white Dover marble. At the head of the stairway is an elaborate wrought iron grille.



OLD RUSTIC STAIRS BEFORE REMOVAL
Colonial Garden, Van Cortlandt Park



NEW COLONIAL STAIRWAY (looking north)
Colonial Garden, Van Cortlandt Park



WROUGHT IRON GRILLE AT HEAD OF COLONIAL STAIRWAY

(Looking South)

Colonial Garden, Van Cortlandt Park

In connection with this stairway a plan for reconstructing and re-designing the road and path system around the Colonial Mansion and adjacent to the Colonial Garden is now being prepared, and will be carried out by the Department.

Van Cortlandt House and Other Historical Features.—The Van Cortlandt House is one of the old houses within the area of Greater New York. It is still in excellent condition. It is in the custody of the "Colonial Dames of the State of New York." This society has gathered a very interesting collection of Dutch and Colonial household furniture and utensils, arms and documents. It is open to the public every day in the week, including Sundays, and admission is free, excepting on Thursday, on which day twenty-five cents admission is charged, which includes a cup of tea served in the old kitchen.

Historical Associations.

The land comprising Van Cortlandt Park was originally included in a vast tract, having at first no particular bounds, under the control of the Dutch West India Company. This company acquired a formal title originally from the Indian proprietors, the tribe called the Manhattans, the Indian overlord or chief of which was Tackareek, whose campfire burned on the heights of Nevisans, the region now known as Navesink Highlands.

The first individual owner of the tract was Adrian Van der Donck, who acquired it from the resident governor of the Dutch West India Company, Governor Kieft, in 1646. Van der Donck was further required at this time to obtain the consent of the Indians to the formal transfer of the property to him. He planned to colonize it and erect there his "bouwerie."

While he evidently did succeed in cultivating his land to a small extent, his larger plans for its upbuilding were never carried out. He had a planting field, which for many years after was known as Van der Donck's planting field, on what is now the parade ground of Van Cortlandt Park. His first house was erected on the banks of the Neperham, now called Saw Mill River, in Yonkers, that name being derived from the sawmill which he operated there for some years.

The ancient cellar ruins recently uncovered in the park, near the Van Cortlandt House, could not have been those of a house erected by Van der Donck, as some have claimed; but were either the ruins of an ancient block-house, or, more probably, were those of the house of George Tippet, which he, describing it as his "home lott," sold to Jacobus Van Cortlandt in 1732. Whatever, if anything, Van der Donck built on this site, was at best nothing more than a farm hut, and was certainly destroyed in the Indian uprising of 1655; when they threatened to "wipe out the Dutch," and too well, indeed, did they keep their word.

He had obtained from the States General the authority to devise his property or Colony of Colen Donck; and upon his death left to his widow, who was the daughter of Francis Doughty, an English clergyman, who for

certain alleged heretical tenets had been driven out of the English Colony along the Connecticut, and who had been given safe harborage by the Dutch on Long Island, near Flushing. His widow transferred the Colony of Colen Donck to her brother, Elias Doughty, of Flushing.

Doughty disposed of it mainly in three parcels; the first parcel, comprising the southerly part of the Manor, and including part of the planting field, and that part of the park where the old Van Cortlandt house now stands, to William Betts and his brother-in-law, George Tippet, in the year 1668. This is the only one of Doughty's sales that need interest us, George Tippet's name being perpetuated in the stream that runs the entire length of the park.

The Van Cortlandts first began to acquire the property in the year 1696, Jacobus Van Cortlandt in that year buying 320 acres. Having acquired various other parcels of land in the vicinity, largely from Tippet's and Bett's heirs, Jacobus Van Cortlandt planned to dam the brook called by the Indians Muskota, and by the white settlers Tippet's, forming a lake and erecting a sawmill and gristmill. This was in the year 1718. These mills, principally the gristmill, served the people of the community for more than a century and a half following. The community suffered a loss historically when the mills were destroyed by lightning and fire in the year 1901.

When Jacobus Van Cortlandt acquired the property on which the Van Cortlandt House now stands, which was in the year 1732, George Tippet, who sold it to him, stipulated that the burying ground included in the tract transferred, "which having originally been, and still is, for the use of a cemetery or burying place," should be held out and reserved for such use to him, his heirs and assigns. This is the little old burying ground on the shore of the lake, to the east of the Van Cortlandt House. There are a few old tombstones in it now, almost undecipherable, but some can yet be distinguished as those of Tippet's ancestors and descendants.

The present Van Cortlandt House was erected by Frederick Van Cortlandt in the year 1748. He also built a vault and family burying ground, located on what is now known as Vault Hill in the park. His will (probated in 1715) directs that his body should be buried there. This vault was used during the Revolution to hide away certain papers and documents and public records from the British, Augustus Van Cortlandt being at that time Clerk of the City of New York.

Practically every foot of land was fought over during the Revolutionary War. First occupied and ranged over by the American troops as they manoeuvred and fought for the passes at Kingsbridge, and afterwards occupied by the British, as they, by weight of numbers, gradually forced the American defenders back.

During one period of the Revolution the house was the headquarters for the Hessian Jaegers. In one of the rooms Captain Rowe, of the Pruic-bank Jaegers, expired in the arms of his bride-elect, having been mortally wounded in an engagement with the patriots in the Tippet Valley.

Close by the Van Cortlandt House to the east is to be seen an old window, taken from the "Sugar House," the old warehouse in Duane Street, which was built in 1763, and which was used during the Revolutionary War by the British as a prison for the American soldiers.

In the northeastern part of the park is Indian Field. An impressive cairn of stones and a tablet mark the spot where, on August 31, 1778, a British cavalry squad under Simcoe defeated a party of Stockbridge Indians who were fighting on behalf of the patriots. Eighteen of them, including their chief, Ninham, were buried almost where they fell.

In 1781, Washington built camp fires on Vault Hill to deceive the British, while he was withdrawing his troops to Yorktown. The Van Cortlandt House is credited with having harbored General Washington on two occasions. First, in the year 1781, when Washington was examining the ground about Kingsbridge, and directing its fortification and defense; and the second time, on the 12th of November, 1783, a far more auspicious occasion, as the next day he rode victorious across Kingsbridge on his way with his troops to repossess the city, from which he had been forced to retreat several years before.

Improvements.

Around different sections of the Colonial Garden 2,530 feet of wire fence with iron posts 2 feet high were erected.

A storage shed, 141 feet long and 30 feet wide, constructed of lumber cut and milled by the department's own force, was erected just east of the railroad station for storing the department's tools and equipments, etc., in that section of the park.

Around the new service yard a screen plantation of 55 California Privet, 12 feet high, and 20 large Philadelphus, ranging in height from 8 to 12 feet, were planted.

A picturesque shelter shed, 12 x 12 feet, was erected at the junction of 233d Street and Jerome Avenue as a shelter and waiting room, to be used by persons waiting for street cars.

Small houses were erected at the first tee at each of the golf links for use as a shelter for the starter and for players.

Filling in the Swamplands.

The swamplands in the southwesterly portion of the park were partially filled in under contract. The amount of material deposited in this section was sufficient to bring the ground surface above the old water level of the swamp. However, just about the time the work was completed, a new sewer system was installed by the Sewer Department of the Borough of The Bronx, which raised the level of the water in the swamp and necessitated additional filling. Thereupon this Department made application for additional funds for filling in the swamplands, plans for the necessary work were prepared and bids advertised for. On September 21, 1916, a contract for the necessary filling was let to a contractor who failed to qualify, where-

upon the contract was declared abandoned and new bids asked for, which were received on October 19, 1916, when it was found that the lowest bid submitted amounted to \$74,341.00, which exceeded the amount of the funds available for the purpose. Consequently the Department obtained the necessary additional sum to enable it to enter into contract for the filling in of these swamplands, and that work will be commenced as soon as physical conditions will permit.

Addition to Golf House.

Plans and specifications for the construction of an addition to the Golf House and for the installation of a heating system therein were prepared, and bids advertised for and received, but it was found that the bids submitted exceeded the amount of funds available for the purpose. However, application has been made for additional funds to enable the Department to go forward with the improvements, and there is every prospect that the required amount will be placed at the disposal of the Department in time to allow the work to be done in the spring of 1917.

Plans and specifications were prepared for the construction of an eight-inch sewer to carry sewage from the Golf House to a point approximately 20 feet west of the intake of the 8-foot brick drain. About half the length of the new sewer was laid on a concrete cradle in the bottom of the lake. The portion laid under water was constructed of 8-inch iron pipe.

The laying of this sewer does away with a condition which for years was the cause of constant complaint by the residents of the Kingsbridge section of The Bronx.

Shakespeare Garden.

Adjacent to the Colonial Garden and west thereof the Department constructed an additional garden known as "The Shakespeare Garden."

The Garden was enclosed with a tall hedge of California Privet and four beds of old-fashioned flowers of the Shakespearian time were planted and edged with boxwood edging. 27 large trees were planted to add to the landscape feature. Two beds of roses were planted surrounding where the bust of Shakespeare will be placed. Two rose arbors were built at the entrance to the garden, and walks made throughout. 14,000 tulip bulbs were planted.

Van Cortlandt Stadium.

Tentative designs for a great stadium and athletic field on the present site of the swamplands in the southwesterly portion of the park have been prepared.

The plans cover the following:

A quarter-mile cinder running track, 24 feet wide, with a 220-yard straight-away course, which is to be constructed in conformity with the rules and regulations of the Amateur Athletic Union of the United States, thus

making it eligible for use for all sorts of athletic events, since records made upon the track would be officially recognized and accepted.

Space would be allotted in the inner field for running, high and running broad jumps; pole vaulting; throwing the hammer; putting the shot and discus. There would also be space for a regulation football field.

A Grand Stand, on the westerly, or Broadway side of the Running Track, constructed of reinforced concrete on classic lines, with a seating capacity for 12,000 persons, and constructed in such a way as to allow for additions as required. This Grand Stand would contain Men and Women's Lavatories; Dressing and Locker Rooms, and, to the rear of the Grand Stand, would be Hand Ball Courts.

North of the Grand Stand, 3 Lawn Tennis Courts and a Men's and Boys, Gymnasium, 100 feet by 120 feet, containing parallel Bars, Horizontal Ladders, Flying Rings, Traveling Rings, Vaulting Horse and Bucks, etc.

South of the Grand Stand, 5 Lawn Tennis Courts, and a Girls' Gymnasium, 80 feet by 110 feet, containing Horizontal Ladders, Flying Rings, Traveling Rings, etc.

Also, south of the Grand Stand would be a Shelter House with Lavatories and Shower Baths, as well as Dressing and Locker Rooms.

To the North of the Running Track a Recreation Field and Building containing a Library, Rest Rooms, Lecture Hall, Lavatories and a Lunch Room.

To the South of the Running Track, a Natatorium or Swimming Pool, 75 feet by 225 feet, constructed of reinforced concrete and lined with white enamel brick, a pool varying in depth from 3 feet to 9 feet. At intervals around the pool would be constructed four spring boards. This structure would contain 350 dressing booths and 24 shower baths.

At the northeast corner of the field, at the junction of Spuyten Duyvil Parkway and the Putnam Division of the New York Central Railroad Company, would be a Shelter and Resting Pavilion which would contain covered sand courts, dressing rooms, and a pool for wading and for the sailing of small boats. This pool would be 240 feet long with an average width of 200 feet. In the winter time it could be used for curling.

Also, within the area would be a large playfield covering about 6 acres, which would be provided with playground equipment of various kinds, such as basket ball courts, jump pit, swings, revolving parallels, teeter ladders, giant strides, slides, see-saws, tether balls, etc.

At each end of this playfield would be a shaded grove properly and artistically set out. This playfield would be separated from the athletic field by a promenade provided with benches, and along which would be planted an avenue of Norway maples.

Council Lodge.

In the northerly section of the park the Department constructed an octagonal structure of materials obtained in the parks and milled by the

Department's force. This building is used by the Inkowa Club, the Fireside Club, The Boy Scouts of America and other organizations, for meetings, councils, etc.

WASHINGTON BRIDGE PARK.

Area.

This park has an area of 8.45 acres and is located at the Bronx approach of Washington Bridge, which spans the Harlem River to West 181st Street, Manhattan.

The greater area is on the slope leading to the Harlem River and is in a fine state of cultivation.

OLD FORT NUMBER FOUR PARK.

Area.

This park has an area of 6.71 acres.

Means of Access.

Jerome Avenue line of the Union Railway to Kingsbridge Road; thence walk west to Sedgwick Avenue or transfer to west-bound trolley.

Historical Associations.

This park is a rocky bluff by the roadside, located southwesterly from and adjacent to the Reservoir, at the intersection of Reservoir and Sedgwick Avenues. It is the site of the outer defenses which Washington built during the Revolution, to protect the American army when it was encamped on the Heights of Harlem. A flag staff marks the site of the old fort. The round earthen mound of the redoubt is clearly marked.

When first cleared of brambles, at the center were uncovered an old brick fireplace, and part of a stone flooring, and nearby were found buttons, buckles, coins and pieces of crockery.

A bronze tablet has been erected on the rocky face of the bluff by the Daughters of the Revolution of the State of New York.

General Maintenance.

TRIANGLES AND SQUARES.

The following plots under the jurisdiction of the Department, located at various points throughout the Borough, were put in a high state of cultivation, and presented a vastly improved appearance, beautifying the plazas in which they are located, 15,000 plants being used:

| | | Areas in Acres |
|---|--|-------------------|
| A | Third Avenue and 137th Street..... | 0.04 |
| B | Hall Place and 165th Street..... | 0.38 |
| C | Hunts Point Road and Faile Street..... | 0.07 |
| D | Hunts Point Road and Randall Avenue..... | 0.12 |
| E | Washington Avenue and 163d Street..... | 0.26 |
| F | Washington Avenue and 161st Street..... | 0.26 |
| G | Brook Avenue and 161st Street..... | 0.36 |

| | | Areas in Acres |
|------------|--|-------------------|
| H | Morris Avenue and 142d Street..... | 0.06 |
| I | Aqueduct Avenue and Boscobel Street..... | 0.62 |
| J | Waldo Avenue, Fieldstone Road and 242d Street..... | 4.31 |
| K | Boston Road and Third Avenue..... | 0.06 |
| L | Webster Avenue, Claremont Parkway, Clay Avenue..... | 0.28 |
| M | Jerome Avenue and 170th Street..... | 0.50 |
| N | Willis Avenue and Southern Boulevard..... | 0.60 |
| O | Spyten Duyvil Parkway and Broadway..... | 0.20 |
| P | Fordham Road and Southern Boulevard..... | 0.54 |
| Q | Quarry Road and 183d Street..... | 0.05 |
| R | Morris Avenue and 144th Street..... | 0.06 |
| S | Pelham, Crotona Avenue and Southern Boulevard..... | 0.60 |
| T | Mosholu Avenue and Broadway..... | 0.06 |
| U | Washington Avenue and 188th Street..... | 0.15 |
| V | Hunts Point Avenue, Whitlock Avenue and 163d Street..... | 0.32 |
| W | Third Avenue, Quarry Road and 181st Street..... | 0.05 |
| X | Waldo Avenue and 242d Street..... | 0.31 |
| Y | Boston Avenue and 169th Street..... | 0.16 |
| Z | Franklin Avenue and 169th Street..... | 0.15 |
| AA | Austin Place and 149th Street..... | 0.04 |
| BB | Shakespeare Avenue and 168th Street..... | 0.06 |
| Total..... | | 10.47 |

PARKWAYS.

| Index | Name | Actual Length Linear Feet | Width in Feet | Square Feet | Acres |
|---------------|---|------------------------------------|------------------|----------------|--------|
| DD } | Bronx and Pelham..... | 11,861 | 400 | 4,744,400 | 108.90 |
| EE } | | | | | |
| FF | Crotona | 3,815 | 140 | 534,100 | 12.30 |
| GG | Mosholu | 6,035 | 600 | 3,621,000 | 83.12 |
| Average Width | | | | | |
| HH | Spuyten Duyvil (varies from 60 to 180 feet)..... | 11,500 | 106.438 | 11,224,037 | 28.10 |
| Total..... | | 33,211 | ..... | 20,123,537 | 232.44 |

BRONX AND PELHAM PARKWAY.

Improvements.

Along the Eastern Boulevard opposite the Hunter Island Inn a masonry wall 798 feet in length and 18 inches in width was constructed, and in this wall were inserted "T" iron posts 6 feet apart, along which were run two 1½-inch rails.

The bridge connecting Hunter Island with the mainland was newly planked.

At the Baychester bathing beach the retaining wall, which had been washed away during the winter, was replaced, being relaid in cement for a distance of 90 feet in length and a height of 4 feet.

Low sections of the camp site at Orchard Beach were filed in and drained.

Cared for herbaceous and bulb beds, and cleaned and cared for evergreen and rhododendron plantations along the Parkway; also shaped and pruned the various hedges. Uncovered and cared for tulip beds and evergreen plantations. Renovated the lawns, trees and shrubs generally.

Planted 40,000 annuals and summer flowering plants.

Cultivated and cared for flower beds.

In the fall cleared and covered herbaceous beds, removed bedding plants, plowed and remade the beds and planted 40,000 tulip bulbs.

Approximately 3 miles of sidewalks were edged and straightened and 400 yards of screenings placed thereon.

It was found necessary to take up and relay to grade on a sand cushion 2,000 running feet of the brick gutter along the Parkway.

Plans and specifications were made for repaving the center roadway of Bronx and Pelham Parkway from Butler Street to the Old White Plains Road. Contract was awarded October 11, 1916, to the Barber Asphalt Paving Company. Work was completed and final estimate will be made early in 1917. The repavement of this road was very badly needed and the type of pavement laid—asphaltic concrete—has been in use on City Island Road since June, 1915, and although subject to all kinds of traffic, shows no signs of deterioration.

General maintenance otherwise.

CROTONA PARKWAY.

The entire parkway was resurfaced with Tarvia B and grits.

Regulated and graded 16,200 square feet of new lawn; planted 4,000 plants in flower beds.

General maintenance otherwise.

MOSHOLU PARKWAY.

Erected 400 feet of three-rail pipe fence and painted same.

The entire roadway was resurfaced with Tarvia B and grits.

Graded and made 3,500 square feet of new lawn; planted 500 evergreen plants, 15 large evergreen trees and 69 shrubs.

On Mosholu Parkway north planted 26 Norway Maples; cultivated and cared for the trees and shrubs along the Parkway.

General maintenance otherwise.

SPUYTEN DUYVIL PARKWAY.

All of the roads were resurfaced with Tarvia B and grits.

Otherwise general maintenance.

STREET TREES.

Pruned 12,395 trees; sprayed 23,852.

Along the Grand Boulevard and Concourse cultivated 2,173 trees and repaired 2,173 tree guards.

Repaired, scraped and painted 585 tree guards along the various streets of the borough.

Throughout the year cut away roots of trees and reset flagging raised by the roots along various streets, and straightened and replaced 24 trees destroyed along the Concourse by automobiles.

Supervised the cutting down and removal of some 860 dead and dangerous trees in the different parks of the borough.

Marked and supervised the removal of 350 trees for the Highway Department of the Borough of The Bronx for use at its asphalt plant.

SMALL SQUARE AND PARK SPACES.

Washington Avenue and 161st Street.

Regulated and graded new lawns; laid out 4 flower beds; put in 1,500 feet of sod and planted 173 trees and shrubs.

Used 6,000 asphalt blocks resurfacing the walks; also 240 linear feet of stationary benches were erected in this square, furnishing a seating capacity for approximately 200 people.

A retaining wall was built just back of the County Court House to allow lawns to be regraded. The shrubbery was transferred from the south side to the north side of the Square.

Heine Monument.

Prepared and made new flower beds 24 feet in diameter, and planted beds with 3,000 tulip bulbs.

Dyer Square, 189th Street and Third Avenue.

Regraded this square with 275 yards of top soil and planted 50 deciduous shrubs.

167th Street and Westchester Avenue.

Hauled top soil and regraded this square and planted 69 assorted evergreens.

Bailey and Sedgwick Avenues.

This square has been entirely renovated, the underbrush cut out, the banks graded, and a plantation of evergreens made to the extent of 205 shrubs.

Fordham and Kingsbridge Roads.

Relaid 100 square feet of sod; spread 5 yards of top soil; planted 31 trees, 35 evergreens and 1,236 tulip bulbs.

A concrete sidewalk on the Fordham Road side 6 feet wide the entire length of the square was laid by departmental labor.

Franklin and Third Avenues.

Hauled and spread 22 yards of top soil; planted a privet hedge around the entire plot, and planted the area with honeysuckle and myrtle vines, which, on account of the under surface of solid rock, were the only plants which could be made to thrive.

Hall Place.

This place has been greatly improved, but not finished. 300 square yards of top soil have been spread, a path cut through, and a fence built around the steps.

Permanent seats for 150 people were erected.

Christmas Trees.

The Department erected two Christmas trees, one in the small park space at 161st Street and Washington and Brook Avenues, just in front of the new Y. M. C. A. building, and the other in the small park space at Tremont and Webster Avenues. Both trees were mounted upon stands and illuminated by electric lights of various colors.

ANNUAL REPORT.

CHART A.

Comparative Statement of Personal Service for the Years 1916 and 1917.

| | Changes for 1917 | | Decrease | Increase |
|-------------------------------|-----------------------------|-----------------------------|----------|------------|
| | 1916 | 1917 | | |
| General Office | 5 Employees \$6,720.00 | 5 Employees \$7,020.00 | ..... | \$300.00 |
| Bureau of Audit and Accounts | 4 Employees \$5,820.00 | 4 Employees \$5,730.00 | \$90.00 | ..... |
| Bureau of Superintendence... | 5 Employees \$9,820.00 | 5 Employees \$10,060.00 | ..... | 240.00 |
| Bureau of Engineering..... | 3 Employees \$5,550.00 | 4 Employees \$6,240.00 | ..... | 690.00 |
| Storeroom | 1 Employee \$900.00 | 2 Employees \$1,800.00 | ..... | 900.00 |
| Skilled and Unskilled Labor.. | 85 Employees \$81,158.00 | 85 Employees \$83,449.25 | ..... | 2,291.25 |
| Skilled and Unskilled Labor.. | 79,332 Days \$209,639.50 | 79,633 Days \$209,925.45 | ..... | 285.95 |
| Total | \$319,607.50 | \$324,224.70 | \$90.00 | \$4,707.20 |
| 1917 Budget Allowance..... | \$324,224.70 | ..... | ..... | ..... |
| 1916 Budget Allowance..... | 319,607.50 | ..... | ..... | ..... |
| Net Increase | \$4,617.20 | ..... | ..... | ..... |

DEPARTMENT OF PARKS—BOROUGH OF THE BRONX.

CHART B.

Financial Statement for Year Ended December 31, 1916.

| Expenditures | Amount | Total | Percent- age of Total |
|---|-------------|--------------|-----------------------------|
| Administration, General | \$29,850.45 | ..... | .07 |
| Automobile Service | 4,701.63 | ..... | .01 |
| Care of Land and Improvements..... | 228,353.99 | ..... | .52 |
| Operation and Maintenance of Playgrounds and Athletic Fields | 54,394.04 | ..... | .12 |
| Maintenance of General Park Improvements and Property | 17,093.43 | ..... | .04 |
| Care of Departmental Buildings and Structures.. | 37,043.91 | ..... | .09 |
| Miscellaneous Expenses | 50,459.61 | ..... | .12 |
| Maintenance of General Park Equipment..... | 13,145.06 | ..... | .03 |
| Total Operating Expenditures..... | ..... | \$435,042.12 | 100% |
| Receipts | | | |
| Rents | \$709.00 | ..... | .0183 |
| Privileges and Concessions..... | 21,897.75 | ..... | .566 |
| Fees for Lockers..... | 3,570.63 | ..... | .0923 |
| Fees for Golf Privileges (Annual and Daily Golf Permits) | 9,780.50 | ..... | .253 |
| Fees for Motion Pictures..... | 118.00 | ..... | .003 |
| Fees for Camp Sites..... | 2,184.00 | ..... | .0565 |
| Planting Trees in City Streets..... | 415.00 | ..... | .0107 |
| Sundry Receipts | 7.80 | ..... | .0002 |
| Total Receipts ..... | ..... | \$38,682.68 | 100% |
| Net Operating Expenditures..... | ..... | \$396,359.77 | ..... |

ANNUAL REPORT

CHART C.

STATEMENT OF THE DEPARTMENT'S REVENUES.

| | |
|---|-------------|
| During the year 1915, the Department received the sum of..... | \$38,945.45 |
| During the year 1916, the Department received the sum of..... | 38,682.68 |
| Covering revenues from all sources. | |
| This shows a slight decrease, amounting to..... | 262.77 |

PARK CONCERTS.

A list of the concerts given in the Bronx Parks during 1916 is shown herein:

The funds appropriated for music have been small in comparison to the large area and extensive use of most of the parks. The large attendance, a large part of which comes from other boroughs, would appreciate more concerts, and the City would do well to set aside gradually increasing amounts from year to year for this class of entertainment.

BAND CONCERTS GIVEN IN THE PARKS IN 1916.

| Name of Park | Number of Concerts | Amount Paid | Attendance |
|---------------------|-----------------------|----------------|------------|
| Van Cortlandt | 7 | \$610.00 | 50,000 |
| St. Mary's..... | 9 | 790.00 | 36,000 |
| Crotona | *11 | 1,025.00 | 13,000 |
| McComb's Dam | 9 | 790.00 | 10,200 |
| Claremont | 9 | 790.00 | 24,300 |
| Bronx | 9 | 785.00 | 10,800 |
| St. James' | 9 | 790.00 | 14,400 |
| Pelham Bay | †4 | 340.00 | 70,000 |
| Franz Sigel | 1 | 85.00 | 1,500 |
| Total | 68 | \$6,005.00 | 230,200 |

*1 vocal, at \$150.

†Few concerts, caused by car strike.

DEPARTMENT'S REVENUES FOR THE YEARS 1913 TO 1916, INCLUSIVE.

| | |
|------------|-------------|
| 1913 | \$21,308.80 |
| 1914 | 31,911.07 |
| 1915 | 38,945.45 |
| 1916 | 38,682.68 |

This shows an increase for 1916 over 1913 (which was the year prior to the coming into office of the present administration) amounting to \$17,373.88, or an increase of 816 per cent.

CHART

DEPARTMENT OF PARKS

Distribution of Expenses for Year Ended December

| | General Expenses | Super- vision and General Expenses | Care of Roads, Paths, and Drive- ways | Care of Trees, Shrubs, Flowers and Lawns | Care of Beaches, Lakes and Shore Lines |
|--|---------------------|--|---|--|--|
| GENERAL ADMINISTRATION | \$29,850.45 | ..... | ..... | ..... | ..... |
| Automobile Service | 4,701.63 | ..... | ..... | ..... | ..... |
| PARKS AND PLAYGROUNDS— | | | | | |
| Bronx Park ..... | ..... | ..... | \$6,130.80 | \$1,787.50 | ..... |
| Claremont Park ..... | ..... | \$2,439.73 | 5,870.25 | 4,055.63 | ..... |
| Crotona Park ..... | ..... | 5,238.07 | 26,799.14 | 11,401.13 | ..... |
| DeVoe Park ..... | ..... | 165.75 | 408.75 | 1,745.75 | ..... |
| Echo Park ..... | ..... | 597.50 | 863.87 | 830.74 | ..... |
| McComb's Dam Park ..... | ..... | 1,568.25 | 2,401.53 | 3,473.34 | ..... |
| Melrose Park ..... | ..... | ..... | 153.47 | 791.62 | ..... |
| Pelham Bay Park ..... | ..... | 4,877.97 | 5,214.28 | 7,897.64 | \$703.63 |
| Poe Park ..... | ..... | 153.00 | 318.90 | 995.12 | ..... |
| St. James' Park ..... | ..... | 1,302.82 | 1,233.00 | 1,532.15 | ..... |
| St. Mary's Park ..... | ..... | 2,425.02 | 4,068.90 | 4,433.01 | ..... |
| Franz Sigel Park ..... | ..... | 1,190.75 | 1,523.21 | 1,710.83 | ..... |
| University Park ..... | ..... | 153.04 | 242.50 | 1,328.75 | ..... |
| Van Cortlandt Park ..... | ..... | 5,543.21 | 11,324.34 | 12,614.65 | ..... |
| Washington Bridge Park ..... | ..... | ..... | 133.50 | 750.50 | ..... |
| Small Parks, Squares and Triangles.... | ..... | 153.21 | 2,916.97 | 5,324.26 | ..... |
| PARKWAYS— | | | | | |
| Bronx and Pelham Parkways..... | ..... | 2,216.50 | 9,998.23 | 3,612.85 | ..... |
| Crotona Parkway ..... | ..... | ..... | 1,925.23 | 828.81 | ..... |
| Moshulu Parkway ..... | ..... | 862.50 | 3,523.47 | 2,734.74 | ..... |
| Roads in New York Botanical Garden.. | ..... | ..... | 15,768.30 | ..... | ..... |
| Spuyten Duyvil Parkway..... | ..... | 427.50 | 1,556.48 | 1,095.68 | ..... |
| UNDISTRIBUTED ..... | ..... | 5,620.92 | ..... | 1,920.00 | ..... |
| CITY STREETS— | | | | | |
| Care of Trees ..... | ..... | ..... | ..... | 19,564.70 | ..... |
| MISCELLANEOUS EXPENSES— | | | | | |
| General Park Equipment | 13,145.06 | ..... | ..... | ..... | ..... |
| Greenhouse and Nursery ..... | ..... | ..... | ..... | 24,060.58 | ..... |
| Stables | 9,315.10 | ..... | ..... | ..... | ..... |
| Shops (overhead) | 7,579.06 | ..... | ..... | ..... | ..... |
| New Store Room (Improvement)..... | 362.68 | ..... | ..... | ..... | ..... |
| Miscellaneous | 2,433.58 | ..... | ..... | ..... | ..... |
| Garage ..... | ..... | ..... | ..... | ..... | ..... |
| Total..... | \$67,387.56 | \$34,845.84 | \$102,375.12 | \$114,489.98 | \$703.63 |

D

—BOROUGH OF THE BRONX.

31, 1916, on Basis of Functions for Each Park.

| Operation and Maintenance of Playgrounds and Athletic Fields | Care of General Park Improvements and Properties | Care of Bath Houses and Comfort Stations | Care of Buildings and Other Structures Not Classified | Music and Celebrations | Total for 1916 | Increase as Compared with 1915 | Decrease as Compared with 1915 |
|--|--|--|---|------------------------|----------------|--------------------------------|--------------------------------|
| ..... | ..... | ..... | ..... | ..... | \$29,850.45 | ..... | \$3,117.90 |
| ..... | ..... | ..... | ..... | ..... | 4,701.63 | ..... | 5,477.43 |
| \$643.95 | \$272.27 | ..... | ..... | \$790.00 | 9,624.52 | \$5,888.30 | ..... |
| 1,424.54 | 176.31 | \$1,234.53 | \$1,819.69 | 826.59 | 17,847.27 | 4,074.13 | ..... |
| 8,967.80 | 2,240.13 | 2,469.03 | 230.13 | 1,131.37 | 58,476.80 | 8,585.27 | ..... |
| ..... | 157.51 | ..... | ..... | ..... | 2,320.25 | 519.59 | ..... |
| 5,368.02 | 430.32 | 1,239.61 | 172.16 | 839.91 | 15,493.14 | 779.08 | ..... |
| ..... | 70.53 | ..... | ..... | ..... | 1,015.62 | 595.23 | ..... |
| 8,382.13 | 2,748.60 | 5,756.52 | 2,361.08 | 361.36 | 38,303.21 | ..... | 7,731.31 |
| ..... | 15.81 | ..... | 327.69 | ..... | 1,810.52 | 425.27 | ..... |
| 657.35 | 8.61 | 683.21 | ..... | 838.25 | 6,255.39 | ..... | 475.08 |
| 4,053.09 | 352.19 | 857.21 | ..... | 849.39 | 17,038.81 | 192.31 | ..... |
| 1,614.73 | 309.07 | 843.97 | 3,973.77 | 85.00 | 11,251.33 | 8,489.47 | ..... |
| ..... | ..... | ..... | ..... | ..... | 1,724.29 | 165.17 | ..... |
| 21,634.63 | 1,568.02 | 1,771.51 | 13,303.80 | 610.00 | 68,370.26 | ..... | 36,156.18 |
| ..... | 94.96 | ..... | ..... | ..... | 978.96 | ..... | 1,043.59 |
| 1,589.95 | 2,048.06 | ..... | ..... | 376.74 | 12,409.19 | 8,106.49 | ..... |
| ..... | 720.88 | ..... | ..... | ..... | 16,458.46 | 4,203.84 | ..... |
| ..... | 149.42 | ..... | ..... | ..... | 2,903.46 | ..... | 12,430.27 |
| 57.85 | 899.18 | ..... | ..... | ..... | 8,077.74 | ..... | 3,176.73 |
| ..... | ..... | ..... | ..... | ..... | 15,768.30 | 11,154.29 | ..... |
| ..... | 80.62 | ..... | ..... | ..... | 3,160.28 | ..... | 527.05 |
| ..... | 4,750.94 | ..... | ..... | ..... | 12,291.86 | 2,000.83 | ..... |
| ..... | ..... | ..... | ..... | ..... | 19,564.70 | 918.08 | ..... |
| ..... | ..... | ..... | ..... | ..... | 13,145.06 | ..... | 70.53 |
| ..... | ..... | ..... | ..... | ..... | 24,060.58 | ..... | 2,894.56 |
| ..... | ..... | ..... | ..... | ..... | 9,315.10 | ..... | 4,192.09 |
| ..... | ..... | ..... | ..... | ..... | 7,579.06 | ..... | 7,691.15 |
| ..... | ..... | ..... | ..... | ..... | 362.68 | 362.68 | ..... |
| ..... | ..... | ..... | ..... | ..... | 2,433.58 | 200.64 | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 3,922.55 |
| \$54,394.04 | 17,093.43 | \$14,855.59 | \$22,188.32 | \$6,708.61 | \$435,042.12 | \$53,660.67 | \$89,107.27 |
| Net Decrease | | | | | | | \$35,446.60 |

CHART

DEPARTMENT OF PARKS

Summary of Expenses for Year Ended December 31, 1916, on Basis of Budget

| | General Adminis- tration | Park Super- vision and General Expenses | Roads, Paths and Drive- ways | Trees Shrubs, Flowers and Lawns, Benches, Etc. | Trees in City Streets |
|--|-----------------------------|---|---------------------------------------|---|-----------------------------|
| PERSONAL SERVICE | \$31,456.79 | \$34,417.06 | \$49,660.93 | \$59,295.27 | \$15,425.11 |
| SUPPLIES— | | | | | |
| Forage and Veterinary | | \$20.17 | | | |
| Fuel | | | \$560.14 | \$41.69 | \$35.28 |
| Office | \$766.77 | | | | |
| Medical and Surgical Supplies | | | | | |
| Cleaning and Disinfecting | .48 | | | | |
| Educational and Recreational | | | | | |
| Botanical and Agricultural | | | | 908.81 | 707.13 |
| Motor Vehicles | 689.96 | | | | |
| General Plant | 2.63 | | 66.39 | 38.55 | 15.99 |
| Total | \$1,459.84 | \$20.17 | \$626.53 | \$988.35 | \$758.40 |
| PURCHASE OF EQUIPMENT— | | | | | |
| Office | \$84.22 | | | | |
| Live Stock | | | | | |
| Motorless Vehicles and Equipment | | | | | |
| Motor Vehicles and Equipment | 348.36 | | | | |
| Wearing Apparel | | | | | |
| Educational and Recreational | | | | | |
| General Plant | 109.64 | | | | |
| Total | \$542.22 | | | | |
| MATERIALS— | | | | | |
| Highway | | | \$25,116.17 | | |
| Sewer | | | | | |
| Building | \$30.46 | | | | |
| General Plant | 297.79 | | | | \$46.59 |
| Total | \$328.25 | | \$25,116.17 | | \$46.59 |
| CONTRACT OR OPEN ORDER SERVICE— | | | | | |
| General Repairs | \$59.90 | | \$4,869.13 | \$676.37 | |
| Hire of Horses and Vehicles with Drivers | | \$311.75 | 11,048.24 | 10,608.34 | \$3,303.75 |
| Shoeing and Boarding Service Including Veterinary Services | | | | | |
| Carfare | 51.95 | 8.45 | | | 30.85 |
| Expressage and Deliveries | | | | | |
| Telephone Service | 264.73 | 88.41 | | | |
| General Plant Service | 385.09 | | | | |
| Motor Vehicle Repairs | | | | | |
| Traveling Expenses | 3.31 | | | | |
| Total | \$764.98 | \$408.61 | \$15,917.37 | \$11,284.71 | \$3,334.60 |
| Total Budget Classifications | \$34,552.08 | \$34,845.84 | \$91,321.00 | \$71,568.33 | \$19,564.70 |
| Special Revenue Bonds, 1916 | | | \$11,054.12 | | |
| Corporate Stock Distribution, 1916 | | | 10,644.72 | \$5,815.78 | \$2,857.72 |
| Grand Total | \$34,552.08 | \$34,845.84 | \$113,019.84 | \$77,384.11 | \$22,422.42 |

E

—BOROUGH OF THE BRONX.

Classifications and Issues of Special Revenue Bonds and Corporate Stock.

| Play-grounds and Athletic Fields | General Park Improvements and Properties | Bath Houses and Comfort Stations | Buildings and Other Structures (Not Classified) | General Park Equipment | Music and Celebrations | Educational and Operational Activities | Total for Year |
|----------------------------------|--|----------------------------------|---|------------------------|------------------------|--|----------------|
| \$42,690.56 | \$12,434.06 | \$13,589.00 | \$16,959.10 | \$6,570.21 | \$583.68 | \$33,860.10 | \$316,941.87 |
| \$479.65 | | \$294.49 | \$1,343.68 | | | \$1,567.31 | \$1,587.48 |
| | | 17.15 | 2.85 | | | 2,295.36 | 5,050.29 |
| | | 41.03 | 23.69 | | | 766.77 | 766.77 |
| | | | | | | 17.41 | 37.41 |
| 218.03 | | | | | | | 65.20 |
| 282.90 | | | | | | 1,490.70 | 3,323.97 |
| | | 129.38 | 102.91 | | | 92.01 | 689.96 |
| | | | | | | | 730.76 |
| \$980.58 | | \$482.05 | \$1,473.13 | | | \$5,462.79 | \$12,251.84 |
| | | | | | | | \$84.22 |
| | | | | | | | |
| | | | | | | | 348.36 |
| \$93.89 | | | | | | | 93.89 |
| | | \$259.43 | \$234.56 | \$2,919.23 | | \$1,275.24 | \$4,798.10 |
| \$93.89 | | \$259.43 | \$234.56 | \$2,919.23 | | \$1,275.24 | \$5,324.57 |
| | | | | | | | \$25,116.17 |
| \$692.53 | \$385.58 | | | | | | 385.58 |
| 1,681.80 | 3,836.79 | \$513.11 | \$3,378.57 | | \$101.18 | \$809.28 | 5,325.13 |
| | | | | \$2,300.82 | | 256.73 | 8,420.52 |
| \$2,374.33 | \$4,222.37 | \$513.11 | \$3,378.57 | \$2,300.82 | \$101.18 | \$1,066.01 | \$39,447.40 |
| | \$162.00 | | \$118.96 | \$1,354.80 | | \$461.34 | \$7,702.50 |
| \$8,254.68 | 275.00 | \$12.00 | 24.00 | | \$18.75 | 1,472.50 | 35,329.01 |
| | | | | | | 32.60 | 123.85 |
| | | | | | | 120.42 | 473.56 |
| | | | | | 6,005.00 | | 6,390.09 |
| | | | | | | | 3.31 |
| \$8,254.68 | \$437.00 | \$12.00 | \$142.96 | \$1,354.80 | \$6,023.75 | \$2,086.86 | \$50,022.32 |
| \$54,394.04 | \$17,093.43 | \$14,855.59 | \$22,188.32 | \$13,145.06 | \$6,708.61 | \$43,751.00 | \$423,988.00 |
| \$6,757.54 | \$489.00 | | \$39.88 | | | | \$11,054.12 |
| | | | | | | | 26,604.64 |
| \$61,151.58 | \$17,582.43 | \$14,855.59 | \$22,228.20 | \$13,145.06 | \$6,708.61 | \$43,751.00 | \$461,646.76 |

GENERAL ADMINISTRATION.
(Statement No. 1.)

| OPERATION | Office of the Commissioner | Office of the Superintendent | Office of the Engineer | Audit and Accounts | Purchase and Storage of Supplies | Total for 1916 | Increase as Compared with 1915 | Decrease as Compared with 1915 |
|---|----------------------------|------------------------------|------------------------|--------------------|----------------------------------|--------------------|--------------------------------|--------------------------------|
| Personal Service— | | | | | | | | |
| Secretarial | \$3,000.00 | | | | | \$3,000.00 | | |
| Superintendence | | \$4,000.00 | | | | 4,000.00 | | |
| Engineering | | | \$5,550.00 | | | 5,550.00 | | \$2,500.00 |
| Audit and Accounts | | | | \$5,662.50 | | 5,662.50 | | 847.50 |
| Stenographic and Typewriting | 2,100.00 | | | | | 2,100.00 | | 1,050.00 |
| Operating Telephone | 720.00 | | | | | 720.00 | | |
| Others Not Classified | 1,382.50 | 929.91 | 813.75 | 708.75 | \$3,032.82 | 6,867.73 | \$1,429.98 | |
| Total Personal Service | \$7,202.50 | \$4,929.91 | \$6,363.75 | \$6,371.25 | \$3,032.82 | \$27,900.23 | \$1,429.98 | \$4,397.50 |
| Other Than Personal Service— | | | | | | | | |
| Supplies— | | | | | | | | |
| Office | \$713.45 | | \$46.42 | \$6.90 | | \$766.77 | \$34.53 | |
| General Plant | | | | | \$2.63 | 2.63 | | \$10.10 |
| Communication— | | | | | | | | |
| Telephone Service | 127.73 | \$61.64 | 24.02 | 24.40 | 26.94 | 264.73 | | 65.05 |
| Telegraph Service | | | | | | | | |
| Transportation— | | | | | | | | |
| Carfare | 34.50 | .70 | 16.75 | | | 51.95 | 12.15 | |
| Traveling Expenses | | | 3.31 | | | 3.31 | 3.31 | |
| Express and Deliveries | | | | | | | | |
| General Plant Service | 302.97 | 13.25 | 30.12 | 38.75 | | 385.09 | 24.92 | |
| Contingencies | | | | | | | | |
| Total Other Than Personal Service | \$1,178.65 | \$75.59 | \$120.62 | \$70.05 | \$29.57 | \$1,474.48 | \$74.91 | \$75.43 |
| Total Operation | \$8,381.15 | \$5,005.50 | \$6,484.37 | \$6,441.30 | \$3,062.39 | \$29,374.71 | \$1,504.89 | \$4,472.93 |
| MAINTENANCE. | | | | | | | | |
| Office Equipment— | | | | | | | | |
| Replacements | \$62.10 | \$4.89 | \$17.23 | | | \$84.22 | | \$49.00 |
| Repairs—Departmental | 57.60 | | 59.62 | | \$82.71 | 199.93 | | 233.11 |
| Contract or Open Order Service | 12.35 | | | | | 12.35 | | 18.91 |
| General Plant Equipment— | | 4.50 | | | 105.14 | 109.64 | \$104.83 | |
| Replacements | | | | | | | | |
| Repairs—Departmental | | | | | 69.60 | 69.60 | 46.33 | |
| Contract or Open Order Service | | | | | | | | |
| Total Maintenance | \$132.05 | \$9.39 | \$76.85 | | \$257.45 | \$475.74 | \$151.16 | \$301.02 |
| Grand Total | \$8,513.20 | \$5,014.89 | \$6,561.22 | \$6,441.30 | \$3,319.84 | \$29,850.45 | \$1,656.05 | \$4,773.93 |
| | | | | | | Net Decrease | | \$3,117.90 |

DEPARTMENT OF PARKS—BOROUGH OF THE BRONX.
Summary of Expenses for Year Ended December 31, 1916, on Basis of Cost by Functions.

CHART G.

General Administration—Automobile Truck Service.

(Statement No. 2.)

| | Total for 1916 | Increase as Compared With 1915 | Decrease as Compared With 1915 |
|--|-------------------|--------------------------------------|--------------------------------------|
| Operation— | | | |
| Personal Service | \$1,980.75 | ..... | \$1,483.25 |
| Supplies— | | | |
| Cleaning | .48 | ..... | 3 66 |
| Gasolene | 594.39 | ..... | 270.66 |
| Lubricants and Others..... | 95.57 | ..... | 72.53 |
| Contract or Open Order Service— | | | |
| Storage and Cleaning..... | ..... | ..... | ..... |
| Hire ..... | ..... | ..... | ..... |
| Total | \$2,671.19 | ..... | \$1,830.10 |
| Maintenance— | | | |
| Automobiles—Purchase of ..... | ..... | ..... | \$2,204.00 |
| Tires and Inner Tubes— | | | |
| Raplacements | \$348.06 | ..... | 895.44 |
| Repairs—Departmental | 26.42 | \$1.94 | ..... |
| Contract or Open Order Service... | ..... | ..... | 15.37 |
| Body and Top— | | | |
| Replacements ..... | ..... | ..... | ..... |
| Repairs—Departmental | 162.62 | ..... | 539.49 |
| Contract or Open Order Service... | ..... | ..... | 36.50 |
| Chassis and Engine— | | | |
| Replacements ..... | ..... | ..... | ..... |
| Repairs—Departmental | 1,435.74 | 446.23 | ..... |
| Contract or Open Order Service... | 47.55 | ..... | 220.43 |
| Appurtenances— | | | |
| Replacements | .30 | ..... | 109.83 |
| Repairs—Departmental | 9.75 | ..... | 64.19 |
| Contract or Open Order Service... | ..... | ..... | 10.25 |
| Total | \$2,030.44 | \$448.17 | \$4,095.50 |
| Grand Total | \$4,701.63 | \$448.17 | \$5,925.60 |
| Net Decrease ..... | ..... | ..... | \$5,477.43 |

DEPARTMENT OF PARKS—BOROUGH OF THE BRONX.

Summary of Expenses for Year Ended December 31, 1916, on Basis of Cost by Functions.

CHART H.

Care of Land and Improvements.

(Statement No. 3.)

| | Total for 1916 | Increase as Compared With 1915 | Decrease as Compared With 1915 |
|--|-------------------|--------------------------------------|--------------------------------------|
| Supervision and General Expenses— | | | |
| Personal Service | \$34,417.06 | ..... | \$1,305.87 |
| Transportation—Carfare | 8.45 | \$6.55 | ..... |
| Hire of Horses and Vehicles with Drivers.. | 311.75 | 129.62 | ..... |
| General Plant and Equipment Supplies..... | 20.17 | 14.83 | ..... |
| Communication | 88.41 | 4.04 | ..... |
| Total | \$34,845.84 | \$155.04 | \$1,305.87 |
| Care of Roads, Paths and Driveways— | | | |
| Cleaning, Oiling and General Care..... | \$14,460.59 | \$1,636.56 | ..... |
| Snow Removal | 15,080.66 | 10,450.46 | ..... |
| Repairs to Roads and Driveways..... | 57,026.86 | ..... | \$15,034.43 |
| Repairs to Paths and Walks..... | 15,807.01 | 7,158.09 | ..... |
| Total | \$102,375.12 | \$19,245.11 | \$15,034.43 |
| Care of Trees, Shrubs, Flowers and Lawns— | | | |
| Undistributed—Head Gardener, etc..... | \$1,920.00 | \$120.00 | ..... |
| Care of Trees and Shrubs..... | 7,098.56 | ..... | \$1,106.48 |
| Care of Flowers and Plants..... | 6,490.69 | 1,764.63 | ..... |
| Care of Lawns..... | 55,355.45 | 9,325.72 | ..... |
| Total | \$70,864.70 | \$11,210.35 | \$1,106.48 |
| Care of Beaches, Lakes and Shore Lines— | | | |
| Labor, Supplies and Materials..... | \$550.63 | ..... | \$625.79 |
| Hire of Horses and Vehicles with Drivers... | 153.00 | ..... | 351.75 |
| Educational and Recreational Equipment— | | | |
| Replacements ..... | ..... | ..... | 37.53 |
| Repairs—Departmental ..... | ..... | ..... | 52.87 |
| Contract or Open Order Service... | ..... | ..... | ..... |
| Total | \$703.63 | ..... | \$1,067.94 |
| Care of Trees in City Streets— | | | |
| Spraying, Pruning and General Care: | | | |
| Personal Service | \$15,425.11 | \$222.87 | ..... |
| Supplies and Materials..... | 804.99 | 209.11 | ..... |
| Hire of Horses and Vehicles with Drivers... | 3,303.75 | 504.25 | ..... |
| Carfare | 30.85 | ..... | \$18.15 |
| Total | \$19,564.70 | \$936.23 | \$18.15 |
| Grand Total | \$228,353.99 | \$31,546.73 | \$18,532.87 |
| Net Increase ..... | ..... | \$13,013.86 | ..... |

DEPARTMENT OF PARKS—BOROUGH OF THE BRONX.
Summary of Expenses for Year Ended December 31, 1916, on Basis of Cost by Functions.

CHART I.

Operation and Maintenance of Playgrounds and Athletic Fields.

(Statement No. 4.)

| | Total for 1916 | Increase as Compared With 1915 | Decrease as Compared With 1915 |
|--|-------------------|--------------------------------------|--------------------------------------|
| Attendance and Special Expenses— | | | |
| Personal Service | \$6,066.56 | ..... | \$280.23 |
| Carfare ..... | ..... | ..... | ..... |
| Telephone Service ..... | ..... | ..... | ..... |
| Supplies—Office ..... | ..... | ..... | ..... |
| Medical and Surgical..... | ..... | ..... | 4.75 |
| Educational and Recreational..... | ..... | ..... | ..... |
| Educational and Recreational Equipment— | | | |
| Replacements—Department Labor and Mate- rials | 93.89 | ..... | 3,133.38 |
| Repairs—Departmental | 4,070.10 | \$3,064.68 | ..... |
| Contract or Open Order Service... | ..... | ..... | 17.25 |
| Total | \$10,230.55 | \$3,064.68 | \$3,435.61 |
| Care of Lawns—Golf Links— | | | |
| Labor, Supplies, etc..... | \$23,839.87 | ..... | \$6,406.68 |
| Total | \$23,839.87 | ..... | \$6,406.68 |
| Care of Special Grounds— | | | |
| Cleaning and General Care..... | \$6,886.74 | \$4,121.19 | ..... |
| Repairs | 8,437.93 | 2,962.36 | ..... |
| Total..... | \$15,324.67 | \$7,083.55 | ..... |
| Care of Lakes—Skating..... | \$4,998.95 | \$3,226.92 | ..... |
| Grand Total | \$54,394.04 | \$13,375.15 | \$9,842.29 |
| Net Increase ..... | ..... | \$3,532.86 | ..... |

DEPARTMENT OF PARKS—BOROUGH OF THE BRONX.
Summary of Expenses for Year Ended December 31, 1916, on Basis of Cost by Functions.

CHART J.

Maintenance of General Park Improvements and Properties.

(Statement No. 5.)

| | Total for 1916 | Increase as Compared With 1915 | Decrease as Compared With 1915 |
|--|-------------------|--------------------------------------|--------------------------------------|
| Monuments—Restoring and General Care— | | | |
| Labor, Supplies and Materials..... | | | |
| Contract or Open Order Service..... | | | |
| Total | | | |

CHART J—Continued.

| | Total for 1916 | Increase as Compared With 1915 | Decrease as Compared With 1915 |
|------------------------------------|-------------------|--------------------------------------|--------------------------------------|
| Bridges and Tunnels— | | | |
| Repairing—Departmental | \$1,355.13 | \$594.23 | ..... |
| Contract or Open Order Service.. | ..... | ..... | ..... |
| Total | \$1,355.13 | \$594.23 | ..... |
| Railings, Fences and Walls— | | | |
| Replacements ..... | ..... | ..... | ..... |
| Repairs—Departmental | \$6,776.50 | ..... | \$1,820.04 |
| Contract or Open Order Service... | 137.25 | \$36.50 | ..... |
| Total | \$6,913.75 | \$36.50 | \$1,820.04 |
| Display Fountains— | | | |
| Repairs—Departmental ..... | ..... | ..... | ..... |
| Contract or Open Order Service... | ..... | ..... | ..... |
| Total ..... | ..... | ..... | ..... |
| Drinking Fountains— | | | |
| Replacements ..... | ..... | ..... | ..... |
| Repairs—Departmental | \$1,067.43 | ..... | \$55.71 |
| Contract or Open Order Service... | 70.50 | \$70.50 | ..... |
| Total..... | \$1,137.93 | \$70.50 | \$55.71 |
| Basins and Sewers— | | | |
| Cleaning | \$1,024.05 | ..... | \$419.46 |
| Replacements ..... | ..... | ..... | ..... |
| Repairs—Departmental | 1,659.22 | \$505.18 | ..... |
| Contract or Open Order Service... | 33.50 | 33.50 | ..... |
| Total..... | \$2,716.77 | \$538.68 | \$419.46 |
| Chairs and Settees— | | | |
| Replacements ..... | ..... | ..... | ..... |
| Repairs—Departmental | \$2,158.95 | \$271.57 | ..... |
| Contract or Open Order Service... | 32.50 | 32.50 | ..... |
| Total..... | \$2,191.45 | \$304.07 | ..... |
| Signs— | | | |
| Replacements ..... | ..... | ..... | ..... |
| Repairs—Departmental | \$2,641.37 | ..... | \$376.18 |
| Contract or Open Order Service... | ..... | ..... | ..... |
| Total..... | \$2,641.37 | ..... | \$376.18 |
| Other Park Properties— | | | |
| Replacements ..... | ..... | ..... | ..... |
| Repairs—Departmental | \$45.53 | ..... | \$1,362.10 |
| Contract or Open Order Service... | 91.50 | \$9.50 | ..... |
| Total..... | \$137.03 | \$9.50 | \$1,362.10 |
| Grand Total | \$17,093.43 | \$1,553.48 | \$4,033.49 |
| Net Decrease ..... | ..... | ..... | \$2,480.01 |

DEPARTMENT OF PARKS—BOROUGH OF THE BRONX.
Summary of Expenses for Year Ended December 31, 1916, on Basis of Cost by Functions.

CHART K.

Care of Departmental Buildings and Structures.

(Statement No. 6.)

| | Total for 1916 | Increase as Compared With 1915 | Decrease as Compared With 1915 |
|--|-------------------|--------------------------------------|--------------------------------------|
| Bath Houses and Comfort Stations— | | | |
| Operation: | | | |
| Personal Service | \$10,915.52 | | \$295.36 |
| Supplies—Fuel | 294.49 | \$3.74 | |
| Cleaning and Disinfecting | 41.03 | | 19.25 |
| Medical and Surgical | 17.15 | | 117.96 |
| General Plant | 129.38 | 129.38 | |
| Total Operation | \$11,397.57 | \$133.12 | \$432.57 |
| Maintenance: | | | |
| General Plant Equipment: | | | |
| Replacements | \$259.43 | \$66.30 | |
| Repairs—Departmental | | | |
| Contract or Open Order Service | | | |
| Plumbing Repairs: | | | |
| Departmental | 1,397.66 | 444.27 | |
| Contract or Open Order Service | | | |
| Other Repairs and Charges: | | | |
| Departmental | 1,800.93 | | \$1,166.51 |
| Contract or Open Order Service | | | |
| Total Maintenance | \$3,458.02 | \$510.57 | \$1,166.51 |
| Total Bath Houses and Comfort Stations | \$14,855.59 | \$643.69 | \$1,599.08 |
| Buildings and Structures Not Otherwise Classi- fied— | | | |
| Operation: | | | |
| Personal Service | \$7,245.24 | \$1,019.42 | |
| Supplies: | | | |
| Fuel | 1,343.68 | 69.77 | |
| Cleaning and Disinfecting | 23.69 | | \$3.93 |
| General Plant | 105.76 | 28.41 | |
| Telephone Service | | | |
| Total Operation | \$8,718.37 | \$1,117.60 | \$3.93 |
| Maintenance: | | | |
| General Plant Equipment: | | | |
| Replacements | \$234.56 | \$42.39 | |
| Repairs—Departmental | | | |
| Contract or Open Order Service | | | |
| Plumbing Repairs: | | | |
| Departmental | 1,385.26 | 374.81 | |
| Contract or Open Order Service | | | |
| Other Building Repairs: | | | |
| Departmental | 11,731.17 | 5,546.85 | |
| Contract or Open Order Service | 118.96 | | \$2,182.46 |
| Total Maintenance | \$13,469.95 | \$5,964.05 | \$2,182.46 |
| Total Buildings and Structures not Otherwise Classified | \$22,188.32 | \$7,081.65 | \$2,186.39 |
| Grand Total | \$37,043.91 | \$7,725.34 | \$3,785.47 |
| Net Increase | | \$3,939.87 | |

DEPARTMENT OF PARKS—BOROUGH OF THE BRONX.
Summary of Expenses for Year Ended December 31, 1916, on Basis of Cost by Functions.

CHART L.
Maintenance of General Park Equipment.
(Statement No. 7.)

| | Total for 1916 | Increase as Compared With 1915 | Decrease as Compared With 1915 |
|--|-------------------|--------------------------------------|--------------------------------------|
| Highway Equipment— | | | |
| Water, Oil and Asphalt Wagons: | | | |
| Replacements | | | |
| Repairs—Departmental | \$496.36 | \$354.67 | |
| Contract or Open Order Service. | | | |
| Road Rollers and Road Harrows: | | | |
| Replacements | 97.50 | 37.50 | |
| Repairs—Departmental | 1,801.12 | | \$293.00 |
| Contract or Open Order Service. | 25.00 | | 27.00 |
| Snow Plows: | | | |
| Replacements | 431.50 | | 43.75 |
| Repairs—Departmental | 443.39 | 238.37 | |
| Contract or Open Order Service. | | | |
| Other Highway Equipment: | | | |
| Replacements | 1,280.03 | 1,116.87 | |
| Repairs—Departmental | 425.41 | 375.72 | |
| Contract or Open Order Service. | | | |
| Total..... | \$5,000.31 | \$2,123.13 | \$363.75 |
| Botanical and Agricultural Equipment— | | | |
| Garden Tools and Implements: | | | |
| Replacements | \$373.35 | \$189.16 | |
| Repairs—Departmental | 252.07 | 25.84 | |
| Contract or Open Order Service. | 1.50 | 1.50 | |
| Lawn Mowers and Grass Cutters: | | | |
| Replacements | 363.50 | | \$2,459.28 |
| Repairs—Departmental | 2,560.99 | 2,284.66 | |
| Contract or Open Order Service. | 1,313.60 | | 937.90 |
| Spraying Equipment: | | | |
| Replacements | | | 20.50 |
| Repairs—Departmental | 359.60 | 241.04 | |
| Contract or Open Order Service. | | | |
| Pruning Equipment: | | | |
| Replacements | 27.45 | | 2.02 |
| Repairs—Departmental | 630.38 | | 73.62 |
| Contract or Open Order Service. | | | |
| Total..... | \$5,882.44 | \$2,742.20 | \$3,493.32 |
| General Equipment— | | | |
| Wheelbarrows and Handcarts: | | | |
| Replacements | \$24.00 | \$18.66 | |
| Repairs—Departmental | 400.52 | 266.77 | |
| Contract or Open Order Service. | | | |
| Other General Equipment: | | | |
| Replacements | 321.90 | | \$602.17 |
| Repairs—Departmental | 1,501.19 | | 764.00 |
| Contract or Open Order Service. | 14.70 | 1.95 | |
| Total..... | \$2,262.31 | \$287.38 | \$1,366.17 |
| Grand Total | \$13,145.06 | \$5,152.71 | \$5,223.24 |
| Net Decrease | | | \$70.53 |

DEPARTMENT OF PARKS—BOROUGH OF THE BRONX.
Summary of Expenses for Year Ended December 31, 1916, on Basis of Cost by
Functions.
CHART M.
Miscellaneous Expenses.
(Statement No. 8.)

| | Total for 1916 | Increase as Compared With 1915 | Decrease as Compared With 1915 |
|---|-------------------|--------------------------------------|--------------------------------------|
| Music and Celebrations— | | | |
| Personal Service | \$85.93 | \$38.37 | ..... |
| Hire of Horses and Vehicles with Drivers... | 18.75 | 13.75 | ..... |
| General Plant Service: | | | |
| Music | 6,005.00 | ..... | \$85.00 |
| Lighting ..... | ..... | ..... | 35.00 |
| Construction and Removal of Stands: | | | |
| Departmental | 417.64 | 122.66 | ..... |
| Contract or Open Order Service..... | ..... | ..... | ..... |
| Repairs to Stands: | | | |
| Departmental | 181.29 | 164.78 | ..... |
| Contract or Open Order Service..... | ..... | ..... | ..... |
| Total..... | \$6,708.61 | \$339.56 | \$120.00 |
| Educational and Operative Activities— | | | |
| Greenhouse, Nursery, Stables and | | | |
| Shops (Overhead)— | | | |
| Operation: | | | |
| Personal Service | \$27,858.07 | ..... | \$3,397.80 |
| Supplies: | | | |
| Fuel | 2,275.00 | ..... | 65.40 |
| Cleaning and Disinfecting..... | 17.41 | ..... | 21.42 |
| Forage | 1,560.01 | ..... | 1,540.43 |
| Botanical and Agricultural..... | 1,490.70 | ..... | 772.66 |
| Veterinary | 7.30 | 4.80 | ..... |
| Medical and Surgical..... | ..... | ..... | 9.80 |
| General Plant | 92.01 | ..... | 95.09 |
| Veterinary Service ..... | ..... | ..... | 25.50 |
| Carfare | 32.60 | ..... | 18.69 |
| Telephone Service | 120.42 | ..... | 21.86 |
| Shoeing: | | | |
| Departmental ..... | ..... | ..... | ..... |
| Contract or Open Order Service..... | 408.25 | ..... | 36.35 |
| Hire of Horses and Vehicles with Drivers.. | 1,417.50 | ..... | 343.75 |
| Total Operation | \$35,279.27 | \$4.80 | \$6,348.75 |
| Maintenance: | | | |
| Purchase of Live Stock..... | ..... | ..... | ..... |
| Carriages and Buggies: | | | |
| New | \$3.00 | ..... | \$79.07 |
| Repairs—Departmental ..... | ..... | ..... | ..... |
| Contract or Open Order Service..... | ..... | ..... | 400.00 |
| Carts and Wagons: | | | |
| New | 782.11 | ..... | 1,580.84 |
| Repairs—Departmental ..... | ..... | ..... | 20.75 |
| Contract or Open Order Service..... | 1,275.24 | ..... | 611.07 |
| General Plant Equipment: | | | |
| New | 996.25 | ..... | 1,629.84 |
| Repairs—Departmental | 45.74 | \$13.14 | ..... |
| Contract or Open Order Service..... | 2,928.46 | ..... | 706.98 |
| Building Repairs: | | | |
| Departmental | 7.35 | ..... | 397.65 |
| Contract or Open Order Service..... | ..... | ..... | ..... |
| Total Maintenance | \$6,038.15 | \$13.14 | \$5,426.20 |
| Total Educational and Operative Expenses | \$41,317.42 | \$17.94 | \$11,774.95 |
| Other Miscellaneous Expenses..... | \$2,433.58 | \$200.64 | ..... |
| Grand Total | \$50,459.61 | \$558.14 | \$11,894.95 |
| Net Decrease ..... | ..... | ..... | \$11,336.81 |



WADING POOL
Kissena Lake Park

February 15, 1917.

HONORABLE JOHN PURROY MITCHEL,
Mayor,
City Hall, New York City.

Sir:

There is herewith submitted the Annual Report of the Department of Parks, Borough of Queens, for the year ending December 31, 1916.

In comparison with other years, your Commissioner feels that the figures will speak for themselves. This, also, in view of the fact that 1916 was a year of excessive prices, necessary materials in many cases having advanced from fifty to a hundred per cent. over the cost of previous years.

In the report of 1915, the economies effected in the year, as compared with 1914, were pointed out, and it was stated that the year of 1916 would see additional economies in administrative cost. This has been done. Two positions were eliminated in the budget for the year of 1916. A superintendent at \$4,000 and an assistant superintendent at \$2,400 were dropped. At present, the work performed by these two men is taken care of by the Secretary and the Forester. At some future time, when the park system of Queens is more fully developed and the maintenance is of sufficient magnitude to call for this heavy cost of supervision, it may be necessary to restore one or both positions to the administrative force, but not at present.

The expenditure for overhead in the department has been as follows:

| | |
|--|------|
| The percentage of overhead in 1914 was | .16 |
| The percentage of overhead in 1915 was | .145 |
| The percentage of overhead in 1916 was | .12 |

showing a decrease of 1915 over 1914 of \$4,142.70, and of 1916 over 1915, making a total reduction in overhead of \$4,420.75.

| | |
|--|------|
| The percentage of overhead in 1914 was | .16 |
| The percentage of overhead in 1915 was | .145 |
| The percentage of overhead in 1916 was | .12 |

There was allowed for supplies, etc.:

| | |
|------------|-------------|
| 1914 | \$56,536.79 |
| 1915..... | 31,518.27 |
| 1916..... | 33,692.60 |

The percentage of supplies in the budgetary allowance for these three years was as follows:

| | |
|-----------|------|
| 1914..... | .314 |
| 1915..... | .18 |
| 1916..... | .192 |

The revenues of the department, 1914 to 1916, inclusive, were as follows:

| | |
|-----------|------------|
| 1914..... | \$1,348.50 |
| 1915..... | 9,016.25 |
| 1916..... | 10,124.90 |

While on the subject of supplies, revenues, etc., it may be well to state that, because of its coal bunkers and coal trestle, this department was in no difficulty as to coal during the year of 1916, but believes that it would be wise in this matter to have a sufficient appropriation available in April to buy coal to last until April of 1918. If legislation is necessary to make appropriations in one year to cover a part of the next, it should be obtained. Going into the market for coal from November to April is a costly proceeding. It may be necessary where there is no storage capacity, but in the parks of Queens provision has been made for storage of the larger part of its needs for a year, as has been pointed out in a previous report, and is again referred to in the engineer's report of 1916.

The past year has seen the completion of the four new holes of the golf course in Forest Park. There remains a slight amount of work, which will be completed before the golfing season of 1917 opens. The completion of these four holes releases for playground purposes some twenty acres along Ashland Avenue, in the Woodhaven-Richmond Hill section of the park. There has been much agitation the past year among the residents of the Richmond Hill section for playgrounds in that immediate section. In order to provide these, forest land would have to be cleared and plans adopted by the landscape architect changed, so the policy, as agreed upon, of having one large playground of twenty acres for the children of all sections, will be followed out. The children of Richmond Hill have only a short distance to walk to this general playground.

The rapid growth of Queens Borough, due to increased transit facilities, has caused additional demands to be made upon the Park Department for recreational centers. With its very limited appropriation, the department has done its best to meet this situation. The epidemic of poliomyelitis and the fact that ninety per cent of the victims were children, caused a large falling off in attendance at the playgrounds, ball fields, tennis courts, etc. None of these centres were closed in the Queens parks. The department kept in constant touch with the Health Department; play leaders familiarized themselves with the children who visited the grounds and every child was instructed to report at once any case of illness in its neighborhood. Suspicious cases were investigated and children from blocks where there was even a suspicion of a case were not permitted on the grounds. While, unquestionably, good fortune had much to do with the result, the fact remains that not one child known to be a regular visitor at Ashmead Park, Ashmead Shelter, Rainey Park Playground, Kissena Park Playground or Forest Park Playground was stricken during the epidemic.

There is great need of playground apparatus the coming season of 1917 to equip the playground along Ashmead Avenue and a request will be made for revenue bonds for that purpose early in the year.

With the number of visitors to the parks increasing yearly, the question of comfort stations is one that can no longer be denied. Corporate stock requests have been made for money to erect these stations. Built for

all time, they should not be too cheaply constructed, or of a character that will be out of harmony with the surrounding landscape or the plans for the future development of the parks. It has been suggested that a plan of a comfort station be adopted that will make these uniform throughout the park system. This may have its advantage as to cost reduction, but in recommending structures for parks we are building for the future and must remember that the statement, "a weed is but a flower misplaced," applies to architecture as well as to plant life.

In the matter of a municipal nursery the department feels justly proud of the progress it has made. Neglected nursery stock has been cared for, until now there are more than 12,000 trees, Sycamores, Oriental Planes, Norway Maples and Oaks. The Interborough Parkway alone, if properly beautified, can use the greater part or all of these trees, the city thus being able to make a saving of thousands of dollars. These trees have been carefully attended to, root pruned and transplanted, and can be transplanted again without injury, whenever needed, within a reasonable length of time, at little cost. The trees in the nursery, laid out on the old police training ground, have the commendation of the park superintendents, foresters and arboriculturists who have visited and inspected them.

A pleasurable fact is the increasing public interest in trees. Queens contains more varieties, better trees, and more of them than any of the other boroughs. It was in Queens that the first nursery in America was established in what is now Flushing. Its mark has been left there and reflected throughout the borough. No less an authority than Dr. Britton, of the Botanical Gardens in the Bronx, has said that Queens contains the nucleus of an arboretum. The past year the Park Department has placed name plates on two dozen each of twenty-five varieties of trees in Flushing. Through co-operation with the tree loving public, the department has brought home to contractors and others developing property that, while it takes only a few minutes to change the grade of a street, it takes fifty years to grow a tree.

A strict enforcement of the law that gives to the Department jurisdiction of trees in city streets has resulted in preserving them against the contractors who, in the past, ruthlessly hacked off roots or chopped down trees to avoid the few dollars' expense necessary to safeguard the roots or the trunks.

The work, as well as some of the needs of various parks, will be treated separately, as well as the work of the different bureaus of the department.

FOREST PARK.

A much needed start was made the past year in the building of walks in Forest Park. Five thousand dollars were available for this work, which is now under way. The walk will extend from Forest Parkway to Woodhaven Avenue. It will be eight feet wide and about 4,500 feet long, and will

do much to relieve a dangerous situation, as pedestrians are forced to walk in the automobile road or along its edges.

Twenty-two thousand dollars have been appropriated and are available for continuing this walk to Metropolitan Avenue and along that thoroughfare. Plans are being prepared, in conjunction with the landscape architect, for this path, which is to follow the general trend of the automobile road, at the same time having it conform to the topography.

Eight thousand dollars have been appropriated and plans are being made for a comfort station at Woodhaven Avenue, near the main drive. This location was selected after careful consideration of all the interests involved. It will be centrally situated, taking care of the pedestrians in the park, the crowds on the ball fields, and the children in the playground at Woodhaven Avenue, near the greenhouses. It will also be close to the band stand, where concerts are given on Sunday afternoons.

A great improvement in Forest Park, the past year, was the surfacing of the dirt portion of the main drive. For two years the part that was surfaced was a dirt road. This improvement gives one well-constructed automobile road from Forest Parkway to Union Turnpike.

The need of a water supply in this park has been pointed out before. The past year has seen the extension of the system, so that there are now a few places in the park where the public may obtain drinking water along the main drive. There is, however, only one place in the easterly half of the park and the need is urgent for more.

The greenhouses have been altered and improved and the heating plant overhauled and reinforced the past year. This improvement has been beneficial to both the employees and the public, giving to the former class a sanitary place wherein to work and to the latter named a better, more attractive place to visit. As three exhibitions are held here yearly, this is appreciated by the public.

One of the three bridges in the park, two of which are over the Long Island Railroad tracks and one over the B. R. T. tracks, has been redecked and new beams placed in it and made safe for a number of years to come. The other two have been repaired to the extent of money available. These bridges have been in bad shape for years.

Lights have been placed all through Forest Park along the main drive. The installation of lights began in the year of 1914, and so far as the two and a half miles of drive is concerned, it is now as well lighted as that of any park in the city. In 1914, kerosene lanterns were in use in the stables, greenhouses, shops and garage in the park. Electric lights have replaced these and, with the increase in light, there has been a decrease of the chance of fire.

The need of service buildings in Forest Park is imperative. Plans have been made and money requested for this group, connecting with the trestle which the Department has built into the park. While the motorization of park equipment in this and other boroughs will continue, there is no

belief that the time will ever come when it will be impossible to get along without five or six teams of horses.

At present, the stables of the park are sheds put up six years ago as temporary structures near Ashland and Freedom Avenues. The ground outside the park at that time was not built up. Facing the park are now many pretty homes. The stables are kept as sanitary as it is possible to make them. A storage yard for broken equipment is near by. Naturally, the residents whose homes face the park wish this storage yard and stable removed. The argument that the houses were built up facing an unsightly lot of temporary sheds and that the property owners must wait until the City has the money to build elsewhere, is not, in the opinion of the property owners, a valid excuse for the sheds remaining there. Neither does the fact that the Commissioner has requested an appropriation to relocate the stables in a group of service buildings answer their plea for relief from what they term an eyesore and a nuisance. It is mentioned here because millions of dollars must be spent upon Forest Park before it can be brought to the state of perfection of Prospect Park or Central Park, even preserving the forest feature, and a proper service building is one of the working tools of that development which must come sooner or later and be continued for all time for maintenance. That reason, it seems to your Commissioner, is sufficient to urge the appropriation of sufficient funds for a service building at the earliest time the financial condition of the City will warrant the improvement.

During the past year there was spent in Forest Park \$37,855.55.

HIGHLAND PARK.

In the report of last year attention was called to conditions existing in Highland Park about the old comfort station. In August of last year this condition became acute. Examination showed that the cesspool and a pond some forty feet away had formed a union, so that water was being siphoned from one to the other. In order to stop this, it became necessary to build a concrete dam about the cesspool and to raise it several feet. The pond was then pumped dry and blind drains built to take care of surface water finding its way into it.

The use of this cesspool was abandoned but, as was pointed out in 1915, any plan that does not provide for the connection of the Highland Park Comfort Station with a sewer is but temporizing with the situation that has existed for years and has tried the ingenuity of those responsible for the sanitation of the park. There is now a request before the Board of Estimate for sufficient money to build a new comfort station at some other point in the park, upon ground sufficiently high to connect with a sewer.

The question of the boundary of Highland Park, which is the south-westerly boundary of Queens, is again a matter of legislative consideration. When it is finally settled, the Commissioner will urge the tearing down of

the old reservoir site referred to in last year's report and the use of this fill for the places in the other parts of the park where it is needed.

There was expended in Highland Park during the past year \$8,598.21.

KISSENA LAKE PARK.

The development of this park has been continued along the lines followed the past two years. Fill has been obtained, wherever possible, for the cost of hauling it. Additional rustic work has been completed. A large section of swamp has been drained; the Department co-operating with the sanitary engineers of the Department of Health to eliminate the breeding places of mosquitoes. The stone bridge across the lake has been completed. Fill has been obtained and grading done for tennis courts, to supplement the eight now there. A wading pool for children has been constructed, the overflow from the lake, which made a brook, having been utilized for this purpose. Lights have been placed through the park.

In 1913 this park was visited by few persons and was a lake surrounded by swamp and brush, but it is taking shape. It is now the resort of thousands on Sundays and Saturday afternoons. The tennis courts are filled and its rustic pergolas crowded. In the winter it is the mecca for skaters. It is the recreational centre for Flushing. Three Saturdays in the summer fishing is allowed under permit. Thirty thousand fingerlings have been placed in the lake the past few years. Some of these have grown to a size under which their catching is permitted by the game laws. They are there, even though the fishermen do not always get them.

The cost of development and maintenance in Kissena Park for 1916 amounted to \$11,928.32.

LEAVITT PARK.

Leavitt Park in 1914 was an area of seven acres with an open sewer running through and its grade was from four to seven feet below that of the surrounding streets in Flushing. Some fill had been dumped into it when the new Flushing High School was being built.

To-day it has a baseball diamond and a cinder running track and the ground is ready for the building of six tennis courts in the spring of 1917, weather and the price of labor and material permitting.

In 1916 the expenses of this park totalled \$4,367.45.

KING PARK.

King Park, in Jamaica, is finished save for certain drainage problems that will be handled as they come up, but the park as a whole is a model neighborhood park of more than ten acres. The past year has seen the repair and painting of the King Mansion in the park, and the painting of the iron fence. In addition, lights have been installed in the northern half of the park and trees planted.

The expenditure for King Park during this year amounted to \$5,744.90.



Part of New Golf Links, Forest Park



Playground, Kissena Lake Park, Flushing

UPLAND PARK.

Upland Park, Jamaica, was improved the past year by a walk along Highland Avenue and the installation of additional lights.

There was spent on this park in 1916 the sum of \$1,530.83.

BAISELEY'S LAKE PARK.

Baiseley's Lake Park, in South Jamaica, has been developed as much as the few days of maintenance allowed will permit. Slowly, such of the acreage about the water as is fitted for park purposes without being filled in is being cleared of underbrush and converted into lawn. The lake, which contains practically seventy-five per cent. of the park area and is the largest in Queens, is a great skating place when this sport is possible.

In connection with the skating at this park there was invented last winter a life saving device by the Foreman of Mechanics, George J. Hanlon.

This apparatus, consisting of a sectional ladder on a sleigh which could be easily and quickly moved to any part of the ice in case of accident, was placed on the lake in the park in 1916.

Later on similar apparatus was placed at Upland Park and at Kissena Lake Park.

The upkeep and development of this park during the past year have amounted to \$2,423.67.

ASTORIA PARK.

Astoria, or East River Park, presents a problem for consideration in development. At present little has been done other than to obtain fill, where possible, to even up the surface. What trees were left in the property when the city acquired it have been cared for. A baseball diamond has been built, a back stop erected, and rustic benches placed about the place. To properly develop this park and make of it all that it should be, in order that the public may get the best there is out of it in the way of facilities for recreation, and at the same time beautifying the property, will cost probably a couple of million dollars. But when it is done it will be a wonderful park on the river front. Its popularity as a playground for the people of Manhattan, as well as of Long Island City and Astoria, is evidenced by the fact that on Sundays as many as 10,000 persons have flocked to it, because it was a breathing place along the water front and was accessible. Any appropriation for Astoria Park is an appropriation not for the people of Queens alone, but for Manhattan as well. With the elevated railroad now running but a short distance from it, and a five-cent fare from crowded Manhattan, its popularity will increase greatly.

The cost of development and maintenance of Astoria Park for 1916 amounted to \$1,678.91.

RAINEY PARK.

Rainey Park, in the Ravenswood section of Long Island City, will be added to in the year of 1917 by the acquisition of the old Sanford property lying north of it, along the water front. In the report of last year there

was a reference to the effort then being made by your commissioner to obtain this property to add to Rainey Park, either by purchase or trade. The trade has practically been made, whereby a piece of property in Long Island City will be exchanged for this parcel on the river front.

The property is in a congested section. Its playground caters to thousands of children. The slope that extends down to the sea wall on a warm evening is the resting place for hundreds of families seeking a cool spot from the heat of the tenements. The additional three acres added to the five that now comprise its area will be of immense benefit for all time to come.

The upkeep of this park during the past year amounted to \$2,230.90.

JACOB RIIS PARK.

Work of constructing additional jetties to protect the beach at Jacob Riis Park is under way. The jetties that have been constructed appear to have stood the test of storms and the beach is making rapidly. When the work under way is done there will have been protected about 3,000 of the 4,900 feet of ocean front.

The past year has witnessed the growth and popularity of Jacob Riis Park. Many hundreds of permits have been issued for camping at the seashore during the daylight hours. Only one permit has been issued for campers to remain over night, and that to the Turn Verein Vorwarts, of Brooklyn.

This organization, having complied with all the rules and regulations of the Department of Health and the Department of Parks, received a permit to erect a temporary camp on the Bay side of the park at the extreme easterly end.

At times as many as three hundred children were in camp under the training of the Turn Verein.

OTHER PARKS AND PARKING SPACES.

At Rockaway Park, the past year, no repairs to the boardwalk were necessary, and other parks have also been merely a matter of maintenance.

PLAYGROUNDS.

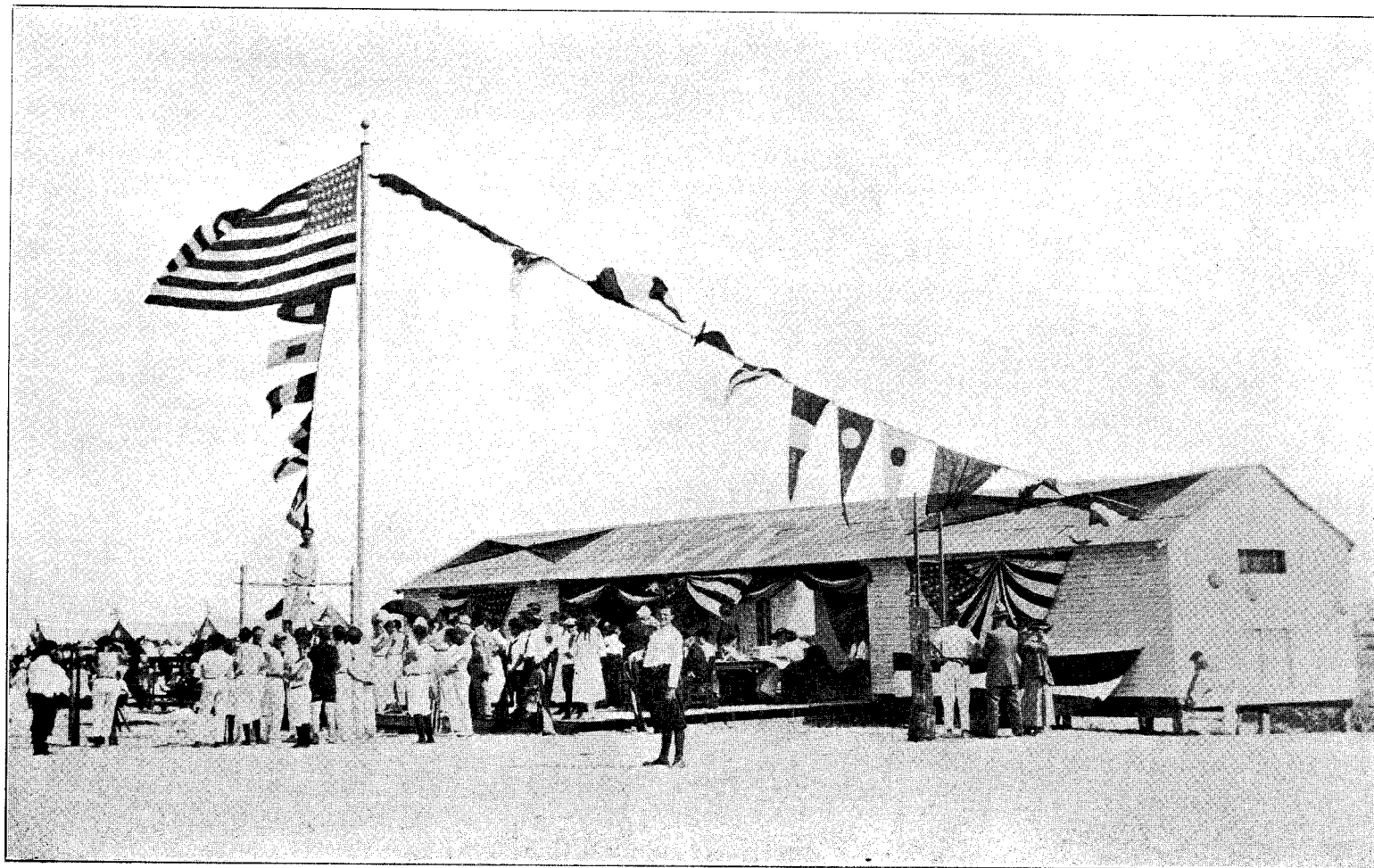
In view of the epidemic which prevailed in the city last summer, when numbers of playgrounds in other boroughs were closed, there was no extension of playground work in Queens, the department believing it was fortunate in being able to keep open the four playgrounds it maintains, along with Ashmead Shelter, without having a single case of poliomyelitis in any of its play centres.

The report of the engineering bureau follows:

Respectfully submitted,

JOHN E. WEIER,

*Commissioner of Parks,
Borough of Queens.*



Vorwarts' Turn Verein Camp, Jacob Riis Park, Rockaway

The Engineering Bureau for the year of 1916 was engaged in the preparation of plans, specifications, estimates of cost, the construction of various park structures and developments, and on general improvements and maintenance.

The construction of coal bunkers in Forest Park was completed in the spring of the year. These consist of three bins having a total capacity of 300 tons. They are built so that coal cars dump directly into them. The construction of the bunkers makes available a central storage depot for coal, accessible to freight cars, and effects a material saving in the cost of handling.

The contract for installing track and overhead wiring on top of the freight siding was completed by the T. H. Reynolds Contracting Company on May 1, 1916. This was within the contract time of twenty-five working days.

The contract called for the construction of the following:

- 1 left hand branch off
- 640 lin. ft. of tangent track
- 160 lin. ft. of curved track
- All overhead wiring

The Park Department furnished practically all the ties and tangent track.

The completion of this work of the freight siding makes available the delivery of sand, broken stone, etc., as well as coal, at a material saving. Cost, \$3,450.

The Golf Course.

On March 6, 1916, the Board of Estimate and Apportionment authorized the expenditure of \$7,350 for finishing up the very necessary clearing, grading and seeding of four new golf holes in Forest Park. In connection with this work the following schedule was prepared and approved on the same date by the Board of Estimate and Apportionment, and work was started.

Working Schedule.

| | |
|---|------------|
| Foreman, 100 days at \$3.50..... | \$350.00 |
| Laborers, 1,100 days at \$2.50..... | 2,750.00 |
| Climbers and Pruners, 800 days at \$2.50..... | 2,000.00 |
| Gardeners, 300 days at \$2.50..... | 750.00 |
| Teams, 300 days at \$5.00..... | 1,500.00 |
| | <hr/> |
| | \$7,350.00 |

This force has been kept busy developing the new courses. About 6,500 tree stumps and roots have been burned or removed; necessary ploughing, harrowing, grading and seeding completed; and four new greens constructed. The links will be ready for play when the season of 1917 starts. The new links will consist of eighteen holes and will be 5,473 yards long. The topography of the ground where the new course is located is ideal for golf.

Surfacing Auto Road.

A contract was advertised and bids opened on February 17, 1916, for surfacing the dirt automobile road in the vicinity of the Golf House. The work was awarded to the lowest bidder, the Borough Asphalt Company, for \$11,539.50.

The plans provided for surfacing approximately 2,000 lin. ft. of dirt road with a 2½-inch asphaltic concrete surfacing on a 6-inch Portland cement concrete foundation, an adequate drainage system, a gravel walk, and a parking space bordering the roadway. The finished road is thirty feet wide.

The contractors started work on April 24, 1916, and completed same in the contract time of fifty working days.

This improvement gives automobiles a continuous roadway through the park from Union Turnpike to Forest Parkway.

Final estimate, \$11,802.65.

Road Maintenance and Repairs.

During the course of the year the main roadway in Forest Park was repaired and resurfaced where the asphalt surface had lifted, due to frost and other causes. About 12,000 square yards were resurfaced.

A contract was let to the Standard Oil Company for delivering and spreading 7,000 gallons of asphaltic road oil No. 6. This material was spread from auto tank cars on the road surface prepared for it by Park labor. As soon as the road oil was spread, it was immediately covered over with Cow Bay sand and white quartz grit. The resulting surface was smooth and hard and has given satisfaction.

The following materials were used on this work:

| | |
|--|----------|
| 7,000 gals. asphaltic road oil at \$.0675..... | \$472.50 |
| 200 cu. yds. Cow Bay sand at \$1.357..... | 271.37 |
| 200 cu. yds. white quartz grit in stock..... | ..... |
| | <hr/> |
| | \$743.87 |

To complete the necessary surfacing and repair, it is intended in 1917 to resurface approximately 8,000 square yards of asphalt roadway with asphalt binder and Cow Bay sand, and 3,000 square yards of macadam roadway with Tarvia B and screenings mixed with sand.

Piping System for New Golf Links.

Plans, specifications and estimates of cost were prepared, a contract let and work completed for extending the watering system from the tank at the Golf House to the four new greens under construction.

This contract provided for furnishing and installing approximately 4,400 lin. ft. of galvanized wrought iron water pipe, with fittings, branches, etc., necessary hose connections at each green, and one concrete drinking fountain.

The work was let on Aug. 10, 1916, to Samuel Gallucci for \$1,577, and was completed in the contract time of thirty working days. This improvement provides water for the new greens and fairways and completes the water supply system for the new Forest Park Golf Links.

| | |
|----------------------|-------------------|
| Final Estimate | \$1,597.76 |
| Extras | 60.00 |
| Total..... | <u>\$1,657.56</u> |

Alterations and Additions to Greenhouses.

Plans, specifications and estimates of cost were prepared for constructing a new hot and cold pit, altering and repairing Greenhouses Nos. 1 and 2, and installing new units for the heating system.

The construction work included tearing down the old pit and constructing a new one; reconstructing the east wall and rear of Greenhouse No. 1 and the west wall of Greenhouse No. 2.

The heating work included tearing down and removing two useless old boilers; furnishing and installing one new ten-section boiler and six additional sections for the four-section Hudson boiler; approximately 1,100 linear feet of 2-inch W. I. pipe for the new pit, with necessary sundries; and connecting same up complete.

On June 14, 1916, an appropriation of \$3,250 in special revenue bonds was made available for this work.

The following work and materials schedules were approved by the Board of Estimate and Apportionment and work was started:

Working Schedule.

| | | |
|-------------------------------|-------------------|------------|
| 500 days Labor at \$2.50..... | \$1,250.00 | |
| 20 days Teams at \$5.00..... | 100.00 | |
| | <u> </u> | \$1,350.00 |

Material Schedule.

| | | |
|---|-------------------|-------------------|
| Materials for roof of pit..... | \$623.88 | |
| Heating pipe for pit | 210.00 | |
| Labor for installing same..... | 100.00 | |
| New furnaces in cellar..... | 566.00 | |
| Labor and materials for installing same with valves, pipe, etc. | 400.00 | |
| | <u> </u> | 1,899.88 |
| Total..... | | <u>\$3,249.88</u> |

The Park Department did all construction work with department labor. All heating pipe, boilers, connections, etc., were purchased in the open market. The work of installing and connecting up same was let out by contract.

The improvement was completed in the early part of October. It has made available a modern pit with ample light, heat and room for hot or cold plants; strengthened and improved Greenhouses Nos. 1 and 2; and given a much needed increase in the capacity of the heating plant.



Condition of Ground for Golf Links, January, 1916

Repairs to Highway Bridges.

As the result of a careful inspection made of the physical condition of three timber and steel highway bridges in Forest Park, extensive repairs were made, in order to insure the safety of the public, at a cost of \$1,200.

Construction of Foot Walks.

Plans, specifications and estimates of cost were prepared for the construction of a foot path along the automobile road in Forest Park.

The walk is to be approximately 4,500 feet long and 8 feet wide and will extend from Forest Parkway to Woodhaven Avenue. It will consist of a 5-inch layer of broken stone spread in two layers and a wearing surface of Tarvia screenings and sand.

An appropriation of \$5,000 was authorized by the Board of Estimate and Apportionment for this work on December 7, 1915.

The following work and material schedules were submitted to the Board of Estimate and Apportionment for approval on September 8, 1916:

Working Schedule.

| | | |
|--|------------|------------|
| 1,000 days Labor at \$2.50 | \$2,500.00 | |
| 100 days Teams at \$5.00 | 500.00 | |
| 15 days Hire of 5-ton steam roller at \$12.00..... | 180.00 | |
| | | \$3,180.00 |

Material Schedule.

| | | |
|--|----------|------------|
| 560 cu. yds. Broken Stone (160 cu. yds. in stock, 400 cu. yds. to buy, at \$2.25)..... | \$900.00 | |
| 100 cu. yds. 3/8-inch Screenings at \$2.25..... | 225.00 | |
| 150 cu. yds. Sand | 185.00 | |
| 6,000 gals. Tarvia X at \$0.085..... | 510.00 | |
| | | 1,820.00 |
| Total..... | | \$5,000.00 |

Work was started in December on that portion of the walk extending from Forest Parkway to the Golf House. A concrete curb was constructed, excavations to subgrade completed, and the foundation course of broken stone laid. Work was then stopped for the winter, to be completed in the spring of 1917. This work is preliminary to a general path system to be constructed throughout the entire park.

Electric Pumping Plant.

Plans, specifications and estimate of cost were prepared for furnishing and installing an electric-driven automatic-controlled pumping plant at the pump house.

An appropriation of \$1,000 in revenue bonds was authorized for this improvement.

The electric equipment was purchased in the open market. The work of installing the plant will be done by contract.

The electric plant will do away with the elaborate and costly steam pump now in use and save the department approximately \$2,000 per year in maintenance charges.

Forestry Map.

Forest Park consists of 536 acres. Of this area approximately 300 acres are undeveloped woodland.

Surveys were made during the year to determine the location and extent of all forest land, developed and undeveloped areas of the park, and all existing improvements. From this data a very comprehensive map has been prepared on a scale of 400' to 1", showing these features.

KISSENA PARK.

General Improvements.

During the year considerable filling in and grading have been accomplished. At the south end of the lake about 2,000 cu. yds. of fill have been deposited over a low swampy area and levelled off and a rustic pergola is under construction. When this improvement is completed a considerable area of mosquito breeding swamp will have been eliminated and a desirable playground on the shores of the lake will take its place.

The work of the Japanese stone bridge has been completed.

The departmental force co-operated with the sanitary engineers of the Department of Health in cleaning out water courses and digging ditches for draining the swamp. This work has eliminated stagnant water and drained swamp land to a considerable extent. However, it is only the beginning of this kind of work, which must go on from year to year.

In addition, the water supply system was extended down to the wading pool for supplying fountains and flower beds.

A comprehensive lighting plan has been completed for the entire park. This provides adequate light for the paths, bridges, drives and around the lake, and calls for approximately eighty lamps. Of this number thirty-one have been set.

The eight tennis courts at this park have been maintained in first-class condition throughout the year.

Fill to the amount of 800 cu. yds. has been deposited south of the courts. It is planned during 1917 to construct four new courts thereon, in order to satisfy the popular demand. A macadam roadway about 300 feet long has been constructed from the main road west along this filled-in ground for the use of automobiles.

KINGS PARK.

A comprehensive lighting plan was prepared for the park. In conformity with this plan, nine lamps were installed around the walk at the north end of the park, thereby completing the lighting system for the entire park.

Painting King Mansion.

A contract was let for painting the outside of the Mansion. Two coats of paint were applied over an area of 10,000 square feet. The work was completed in the contract time of twenty working days, at a cost of \$350.

The work of repairing and painting the wrought iron fence around the park has been begun. Approximately 75% of this work has been completed, at a cost of \$300.

LEAVITT PARK.

Filling in and grading continued throughout the year. It is estimated that about 20,000 cubic yards of material were obtained from excavations in the town. Work on the baseball diamond was completed. A regulation cinder running track suitable for sprinting purposes was completed and has been in use.

Sufficient ground has been filled in for the construction of six tennis courts. The courts will be completed and suitable fences erected, it is hoped, in the spring of 1917.

LINDEN PARK.

Electric Lighting Plan.

A lighting plan has been prepared for the entire park. This provides adequate light for the walks and around the lake.

During the year incandescent electric lamps have been installed around the lake. These provide ample light for skating.

RAINEY PARK.

A topographical survey was completed of Rainey Park, including the proposed addition. All existing improvements, trees, rock outcrops, elevations, etc., were located. From this data a comprehensive topographical map is being prepared to be used in making a design for park development.

Plans were prepared for the construction of a stone wall along the Vernon Avenue side of the park. The estimated cost takes into consideration the fact that the department has on hand, in one of the nearby parks, sufficient cut stone and bluestone coping to construct the wall at a considerable saving.

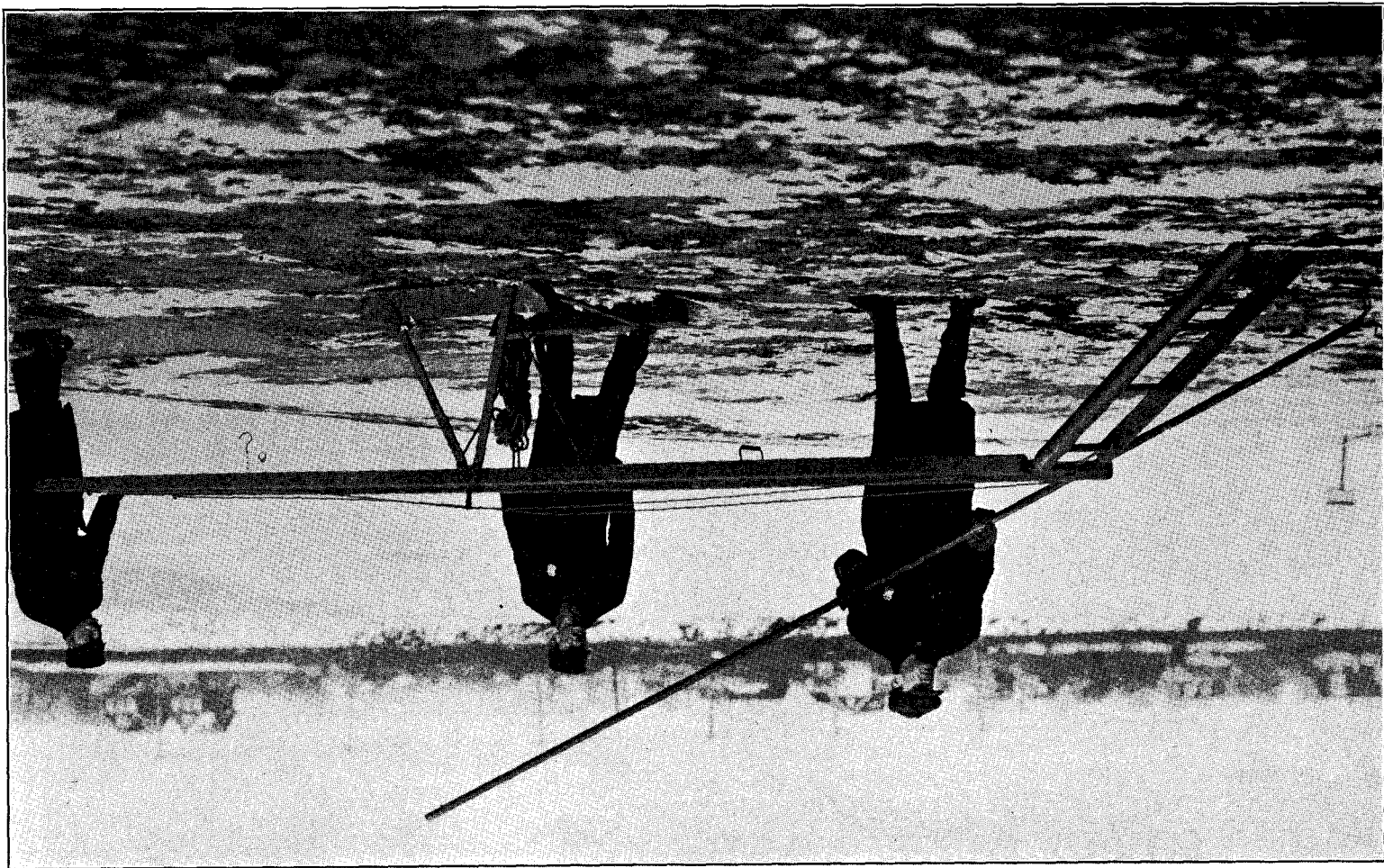
JACOB RIIS PARK.

Plans, specifications and estimates of cost were prepared for constructing 2,000 lin. ft. of timber bulkhead and 2,280 lin. ft. of timber jetties (ten jetties).

The sum of \$32,000 was appropriated for this purpose on May 12, 1916, by the Board of Estimate and Apportionment. It was decided that this amount was sufficient, owing to the fact that the Park Department has received through the Sinking Fund Commission, from the Dock Department, without cost, except for delivery, sufficient piles for this improvement. Because of the cost of materials at this time it is estimated that \$8,000 was saved the City by using the piles from the Dock Department.

The contract was advertised and bids opened on September 9, 1916. The work was awarded to the lowest bidder, the D. Donegan Company, for

Life Saving Apparatus Invented by Foreman of Mechanics, Geo. J. Hanlon



\$29,177.90, and was started on October 3, 1916. To date approximately 40% has been completed.

During the progress of this contract the beach has been building up rapidly. When the work is completed about 3,000 feet of shore front, which is 4,900 feet long, will be protected from the sea.

This system of protection has successfully stopped erosion and built up the beach. As a result, the shore line has been extended seaward from 150 to 200 feet where it has been installed.

The Board of Estimate and Apportionment, to date, has appropriated a total of \$47,677 for this work. The bulkhead and jetties constructed have stopped the destruction of the beach and conditions indicate that when the present contract is completed a total of ten acres of land will have been reclaimed. This is valued at \$7,500 per acre, so that \$75,000 worth of park land will be saved to the City.

During the coming year the bulkhead and jetties should be extended to the east property line of the park. The entire beach will then be protected and much valuable land reclaimed.

Installation of Underground Conduit Lines.

An underground telephone line, approximately 5,000 feet long, was constructed through Washington Avenue by the Rockaway Point Company. The line consists of two telephone wires carried underground in a four-inch wooden creosote duct. It will give telephone facilities to the summer colony at Roxbury.

The construction of an underground telephone line through the park is in conformity with the policy of the City government to eliminate all overhead wiring as rapidly as possible.

GENERAL ENGINEERING.

In addition to the above, miscellaneous boundary and topographical surveys were made; park paths and service roads constructed; estimates and grades given for parking and drainage work; baseball, football and hockey fields staked out; and data compiled for estimates, improvements and reports of all kinds.

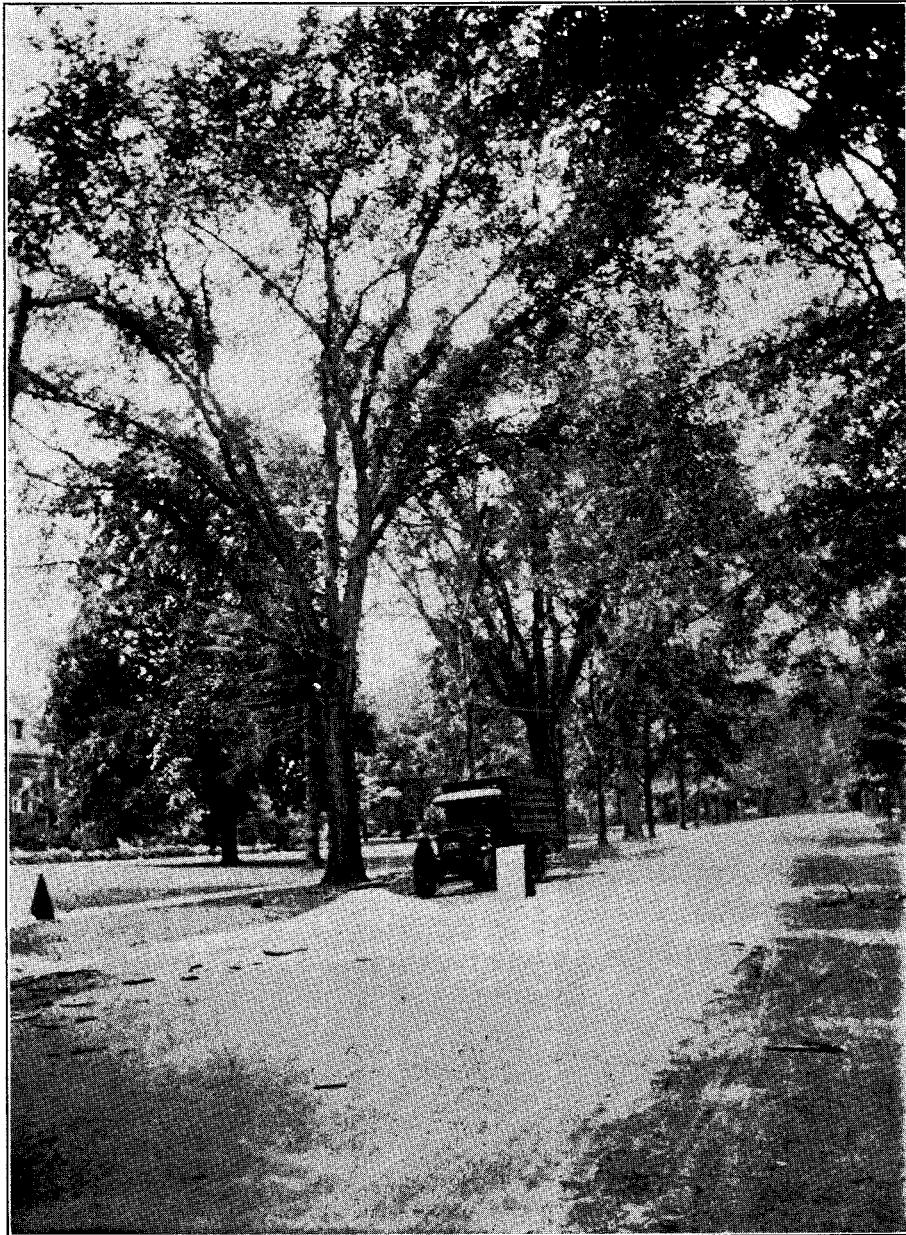
In the past year 114,210 trees received attention from the Forestry Bureau. Of this number 30,333 were in City streets and the balance in City Parks and Nurseries. The division of work accomplished is as follows:

CITY STREETS.

| | |
|--|--------|
| Trees pruned and tarred | 18,341 |
| Trees removed | 870 |
| Trees sprayed | 6,266 |
| Trees' cavities filled | 9 |
| Trees planted | 585 |
| Trees scraped | 864 |
| Inspections on applications of Citizens' complaints..... | 3,061 |
| Inspections on applications of Corporations approved and supervised..... | 337 |



Flushing Trees Needing Care of Pruners and Climbers



Flushing Street Trees Cared for by Pruners and Climbers

TREES IN CITY PARKS.

| | |
|--------------------------------|-------|
| Trees removed | 2,304 |
| Trees pruned and trimmed | 1,385 |
| Trees sprayed | 1,320 |
| Trees planted | 243 |
| Trees tarred | 1,385 |

NURSERIES.

| | |
|---|--------|
| Trees trimmed | 24,875 |
| Trees sprayed | 14,870 |
| Trees removed | 2,805 |
| Trees transplanted and root pruned..... | 200 |
| Trees cultivated | 34,500 |

There was used in this work materials as follows:

| | |
|------------------------------|--------------|
| Arsenate of Lead Paste..... | 3,000 pounds |
| Arsenate of Lead Powder..... | 3,000 pounds |
| Whale Oil Soap..... | 125 pounds |
| Kerosene Oil | 150 gallons |

From the removal of trees, the Department was enabled to obtain salvage in the shape of firewood and lumber, as follows:

| | |
|--|---------------|
| Firewood cut and delivered to schools..... | 263 cords |
| Firewood cut and delivered to libraries..... | 12 cords |
| Lumber cut | 9,100 sq. ft. |

From the appropriation of the Forestry Bureau there was time expended, in addition to work done as represented above, as follows:

| | |
|--|----------|
| Repairing and sharpening tools, etc..... | 549 days |
| Removing snow and watching ice in Parks (emergency)..... | 194 days |
| Watching fires in Forest Park..... | 55 days |
| Grading, etc., at Golf Links..... | 689 days |

The work of the gardeners in the Greenhouses the past year has been the propagation and growing of plants and shrubs for use in the exhibitions in the show house at Forest Park and in the various parks of the borough. Theree exhibitions were held in the year of 1916, one in the spring, one in the fall and one in midwinter. There was a total of 143,983 plants handled in the course of the year.

Practically all plants and shrubs exhibited and placed in parks were grown in the Greenhouses, either from seed or slips. Of the fifteen gardeners and formen gardeners in the department, five of them were employed in this work. The total of plants grown and handled and the varieties are as follows:

Plants Delivered to Highland Park.

| | |
|----------------------|-------|
| Pansies | 3,290 |
| Daisies | 3,850 |
| Forget-me-nots | 750 |
| Mixed shrubs | 389 |
| Cannas | 5,472 |
| Pennisetum | 740 |
| Ricinus | 300 |
| Geraniums | 838 |
| Salvia | 2,116 |
| Centaurea | 608 |
| Phylanthus | 25 |
| Vinca | 2,268 |
| Achyranthes | 432 |

| | |
|---------------------|---------------|
| Caladium | 161 |
| Alternanthera | 6,098 |
| Acalypha | 155 |
| Cosmos | 75 |
| Digitalis | 240 |
| Aquilegia | 500 |
| Gaillardia | 150 |
| Total | 28,457 |

Kings Park.

| | |
|--------------------|---------------|
| Pansies | 10,755 |
| Daisies | 1,715 |
| Geraniums | 864 |
| Cannas | 388 |
| Pennisetum | 200 |
| Salvia | 260 |
| Ricinus | 10 |
| Acalypha | 588 |
| Centaurea | 1,180 |
| Coleus | 1,290 |
| Ageratum | 448 |
| Phylanthus | 487 |
| Caladium | 4 |
| Total | 18,189 |

Upland Park.

| | |
|--------------------|---------------|
| Pansies | 15,760 |
| Daisies | 11,954 |
| Coleus | 4,940 |
| Salvia | 300 |
| Ricinus | 20 |
| Achyranthes | 864 |
| Caladium | 5 |
| Total | 33,843 |

Kissena Lake Park.

| | |
|-------------------------|--------------|
| Perennials | 204 |
| Salvia | 140 |
| Pennisetum | 160 |
| Centaurea | 600 |
| Cannas | 300 |
| Acalypha | 100 |
| Cosmos | 100 |
| Cobea Scandens | 75 |
| Phylanthus | 30 |
| Pandanus | 5 |
| Asparagus Plumosa | 60 |
| Crotons | 20 |
| Ampelopsis | 64 |
| Cyperus | 35 |
| Total | 1,893 |

Rainey Park.

Nott Avenue Parkway.

| | |
|--------------------|--------------|
| Coleus | 500 |
| Geraniums | 650 |
| Salvia | 400 |
| Cannas | 100 |
| Ageratum | 250 |
| Total | 1,900 |

Ashmead Park.

| | |
|-----------------|-----|
| Geraniums | 54 |
| Coleus | 100 |
| Total | 154 |

Flushing Square.

| | |
|-----------------|-----|
| Geraniums | 306 |
|-----------------|-----|

College Point Park.

| | |
|------------------|-------|
| Cannas | 216 |
| Salvia | 198 |
| Geraniums | 90 |
| Pennisetum | 500 |
| Total | 1,004 |

Linden Park.

| | |
|------------------|-------|
| Salvia | 616 |
| Cannas | 422 |
| Ricinus | 20 |
| Pennisetum | 300 |
| Geraniums | 468 |
| Total | 1,826 |

Forest Park Flower Beds.

Triangle Bed—Golf House.

| | |
|-----------------|-----|
| Coleus | 864 |
| Geraniums | 400 |
| Salvia | 200 |
| Cannas | 288 |

Triangle Bed—Myrtle Avenue Golf Links.

| | |
|------------------|-----|
| Salvia | 544 |
| Ricinus | 65 |
| Pennisetum | 500 |

Central Office Beds.

| | |
|-------------------|-------|
| Centaurea | 448 |
| Salvia | 1,760 |
| Cannas | 242 |
| Achyranthes | 600 |
| Ricinus | 60 |
| Pennisetum | 864 |
| Total | 6,835 |

Department of Parks, Borough of Brooklyn.

| | |
|-----------------------|-------|
| Asparagus Ferns | 100 |
| Pennisetum | 108 |
| Cannas | 504 |
| Phylanthus | 300 |
| Total | 1,002 |

Department of Parks, Borough of The Bronx.

| | |
|------------------|-----|
| Phylanthus | 54 |
| Stevia | 33 |
| Crotons | 16 |
| Maranta | 6 |
| Peperonia | 6 |
| Poinsettia | 12 |
| Total | 127 |

Department of Bridges.

| | |
|--------------|-------|
| Coleus | 1,188 |
|--------------|-------|

Department of Education.

Murray Hill High School—Flushing.

| | |
|--------------------|------------|
| Coleus | 100 |
| Salvia | 32 |
| Geraniums | 18 |
| Cannas | 158 |
| Total | 308 |

Public School No. 7—Astoria.

| | |
|--------------------|-----------|
| Salvia | 32 |
| Cannas | 18 |
| Total | 50 |

Public School No. 34—Queens, L. I.

| | |
|--------------------|------------|
| Cannas | 36 |
| Salvias | 64 |
| Total | 100 |

Public School No. 83—Astoria.

| | |
|--------------------|-----------|
| Cannas | 18 |
| Salvia | 32 |
| Geraniums | 36 |
| Total | 86 |

Public School No. 89—Elmhurst.

| | |
|--------------------|------------|
| Cannas | 36 |
| Geraniums | 36 |
| Salvia | 32 |
| Acalypha | 6 |
| Total | 110 |

Police Department Booths.

Police Booth—Rosedale.

| | |
|-----------------|----|
| Cannas | 18 |
| Geraniums | 18 |

Police Booth—Thompson Avenue.

| | |
|------------------|-----|
| Cannas | 18 |
| Geraniums | 18 |
| Pennisetum | 100 |

Police Booth—Elmhurst.

| | |
|-----------------|-----|
| Cannas | 162 |
| Salvia | 160 |
| Geraniums | 244 |
| Coleus | 300 |

Police Booth—Rockaway.

| | |
|--------------------|--------------|
| Pansies | 110 |
| Total | 1,148 |

Department of Public Buildings.

Queens County Court House, L. I. City.

| | |
|----------------------|-----|
| Ageratum | 100 |
| Vinca | 100 |
| Cannas | 75 |
| Geraniums | 150 |
| Coleus | 75 |
| Althernanthera | 100 |
| Total | 600 |

Town Hall, Flushing.

| | |
|--------------|-----|
| Cannas | 108 |
| Salvia | 75 |
| Total | 183 |

Town Hall—Jamaica.

| | |
|-------------------------|-----|
| Privet—California | 60 |
| Cannas | 108 |
| Salvia | 75 |
| Total | 243 |

Court House—Far Rockaway.

| | |
|-------------------------|-----|
| California Privet | 200 |
|-------------------------|-----|

Department of Health—Jamaica.

| | |
|------------------|-----|
| Geraniums | 180 |
| Salvia | 128 |
| Celosia | 128 |
| Cannas | 108 |
| Pennisetum | 150 |
| Ricinus | 2 |
| Caladium | 20 |
| Total | 716 |

Charitable Institutions.

St. Anthony's Hospital—Woodhaven.

| | |
|---------------|-------|
| Pansies | 910 |
| Ivy | 8 |
| Coleus | 400 |
| Salvia | 64 |
| Total | 1,382 |

Flushing Day Nursery.

| | |
|--------------------|----|
| Mixed Shrubs | 40 |
|--------------------|----|

Public Library—Flushing.

| | |
|------------------------------|-----|
| Mixed shrubs and plants..... | 295 |
|------------------------------|-----|

Mount Carmel School—Astoria.

| | |
|------------------|-----|
| Cannas | 108 |
| Salvia | 64 |
| Geraniums | 18 |
| Pennisetum | 108 |
| Total | 298 |

Total of All Plants Delivered.

| | |
|--|----------------|
| Highland Park | 28,457 |
| Kings Park | 18,189 |
| Upland Park | 33,843 |
| Kissena Park | 1,893 |
| Rainey Park, Nott Avenue..... | 1,900 |
| Ashmead Park | 154 |
| Flushing Park | 306 |
| College Point Park..... | 1,004 |
| Linden Park | 1,826 |
| Forest Park | 6,835 |
| Department of Parks, Brooklyn | 1,002 |
| Department of Parks, Bronx | 127 |
| Department of Bridges | 1,188 |
| Department of Education | 654 |
| Department of Public Buildings, Queens.. | 1,226 |
| Department of Health | 716 |
| Police Department | 1,148 |
| Charitable Institutions | 2,015 |
| Total | 102,483 |

Material on Hand to Be Planted.

| | |
|-------------------------|----------------|
| California Privet | 25,000 |
| Celastrus | 1,000 |
| Ilex | 3,000 |
| Aquilegia | 2,500 |
| Platycodon | 1,000 |
| Ivy | 7,000 |
| Berberis | 2,000 |
| Total | 41,500 |
| On Hand | 41,500 |
| Delivered | 102,483 |
| Total | 143,983 |

M. B. Brown Printing & Binding Co.,
New York