ANNUAL REPORT

OF THE

Department of Parks

OF THE

CITY OF NEW YORK FOR THE YEAR 1913

PARK BOARD, 1913

*Hon. CHARLES B. STOVER Commissioner for the Boroughs of Manhattan and Richmond, President

†Hon. MICHAEL J. KENNEDY Commissioner for the Borough of Brooklyn, President

Hon. THOMAS J. HIGGINS

Commissioner for the Borough of The
Bronx

Hon. WALTER G. ELIOT

Commissioner for the Borough of Queens

thon. LOUIS F. LA ROCHE
Commissioner for the Boroughs
of Manhattan and Richmond

§ CHARLES DOWNING LAY Landscape Architect

¶CARL F. PILAT
Landscape Architect

||CLINTON H. SMITH Secretary

^{*} Resigned December 1st. † Designated President, December 13th. ‡ Appointed December 1st.

[§] Resigned April 30th.
¶ Appointed June 12th.
∥ Died December 24th.



ANNUAL REPORT FOR THE DEPARTMENT OF PARKS OF THE CITY OF NEW YORK FOR THE YEAR 1913

The year 1913 brought to a close the administration of the late lamented Mayor, the Hon. William J. Gaynor, whose sudden and untimely death at sea on September 10th on the steamship Baltic en route to Europe for a much-needed rest shocked the world. His loss was deeply felt by the citizens of New York City in whose interests he had labored unceasingly the better part of his life and particularly during his term of office as Chief Magistrate of the City for the past four years. The hundreds of thousand who for three days thronged the City Hall to view his remains as they lay in state, and who stood for hours on the streets to witness the passage of the body to its last resting place, attested the high esteem in which he was held by those he had so well and so faithfully served. The liberal policies which marked his administration of the City's affairs were the guiding motives governing the conduct of the Park Board and the respective Commissioners in their administration of the parks under their charge during his term as Mayor. The enormous increase in the number of playgrounds for children both in and out of the parks, the acquisition of new parks and the many large and important improvements in the parks during his incumbency testify to the influence of his views and policies.

The continuance of those policies by his successor, Hon. Ardolph L. Kline, showed a mark of respect and esteem of unusual merit and an appreciation of the wisdom and sagacity of the great man who formulated them, worthy of the highest commendation. Under Mayor Kline the work begun by Mayor Gaynor went uninterruptedly forward and many improvements under way were brought to successful completion during his term of office. During the year a great many of these improvements, planned and authorized during the past three years, were completed, and many others were started. These are recounted in detail in the reports of the respective Commissioners which are appended hereto.

On November 13th Commissioner Michael J. Kennedy was designated President of the Board by Mayor Kline. Upon the resignation December 1st of Commissioner Chas. B. Stover, Examiner Louis F. LaRoche, who had been Acting Commissioner for Manhattan and Richmond, was appointed to fill the vacancy.

The Board passed upon and authorized contracts for work and supplies in the various boroughs during the year amounting to \$1,385,488.08.

The total expenditures for the account of the Park Board during the year amounted to \$30,500, as follows:

Salaries of Commissioners, Secretary and other employees	\$30,100 00
Office supplies	170 00
Contingencies	25 00
Purchase of equipment	205 00
	\$30,500 00

DEPARTMENT OF PARKS, BOROUGHS OF MANHATTAN AND RICHMOND, 1913.

Charles B. Stover, Commissioner.

*Louis F. LaRoche, Commissioner, Examiner.

Edward A. Miller, Chief Engineer.

Jaroslav A. Kraus, Architect.

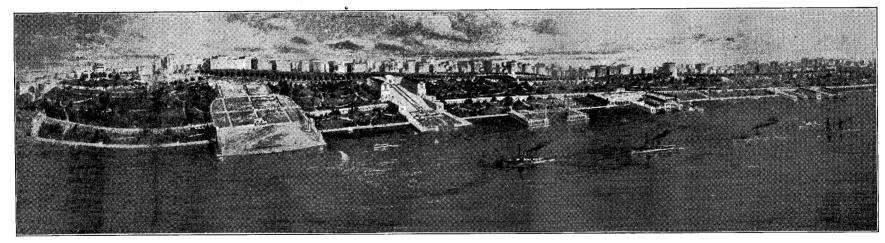
John H. Beatty, Superintendent.

William J. Lee, Supervisor of Recreation.

Mrs. Henry Parsons, Director of School Farms.

Arthur Farwell, Supervisor of Music.

^{*} Appointed Commissioner December 1st.



Birdseye View, Showing Proposed Development of Riverside Park Extension.

REPORT OF THE COMMISSIONER OF PARKS, BOROUGHS OF MANHATTAN AND RICHMOND.

During the year 1913 many important improvements were initiated in the parks in the Boroughs of Manhattan and Richmond, affecting the convenience, comfort and enjoyment of visitors and tending to greatly increase the number of those regularly seeking rest and recreation in the parks. The resources of the Department were used to the fullest extent possible in the furtherance of this work. The working force of the Department was effectively used to supplement the work of the contractors on the various improvements where necessary to complete the work.

Quite the most important of these improvements was the reconstruction of the roadway of Riverside Drive with the latest type of bituminous pavement and the extension of this type of pavement over a large area of the drives in Central Park, supplementing the work done there the previous year. This new pavement supersedes the old water-bound gravel pavement which had been in use in the parks, practically since their original construction. The gravel roadway, however, had proven inadequate to the needs of present day traffic of high-speed automobiles, even when surfaced with heavy asphalt oil binder. Of almost eleven (11) miles of drives in the Central and Riverside Parks, there remain now only approximately four (4) miles of gravel roadway. The work done in Central Park provides a continuous driveway of the new pavement through the park from the main entrance at 5th avenue and 59th street by way of the East Drive to the Mall, thence by the Center Drive and the West Drive to the exit at 110th street and 8th avenue. It is expected that the necessary funds will be granted in 1914 for the completion of the reconstruction of the remaining drives in Central Park, the Loop Drive, around Grant's Tomb in Riverside Park and the Riverside Drive Extension from 135th street to 158th street.

The improvement of Riverside Park by the filling in of the land under water along the riverfront went on apace during the year. The old gravel from the roadway of Riverside Drive was used for this purpose and dumping of earth and rock fill at 79th street, 96th street and 129th street was continued by contractors on both public and private work under restrictions imposed by Department permits.

The additional area added to the park at these points as the result of this filling aggregates nearly fifteen (15) acres, all of which has been accomplished within the past three years. The area south of 79th street had already been graded and put to use as baseball grounds for boys the previous year. With the completion of the filling north of 79th street as far as 86th street, a splendid baseball and athletic field was obtained by surfacing the ground with the old gravel from the park drives and rolling it well. The grounds were ready for use in the latter part of the summer and provided recreation and healthful exercise for thousands of boys and young men for the balance of the season. At 129th street the additional area obtained by the filling has not yet reached an extent sufficient for similar use but it is very likely that in the next year this section will also be available.

The opportunity provided by the reconstruction of the drives to secure a free supply of gravel, was availed of to pave the Department storage yards in Central Park which had never been surfaced with any pavement whatever and were veritable mudholes.

The same material was also used in the construction of the new tennis courts on the South Meadow in Central Park.

SCHOOL GARDENS.

To supplement the work of the playgrounds in providing recreation and healthful exercise for children in the parks, school gardens were established in many of the small parks in the vicinity of which public schools are located. These gardens

are similar to those which for the previous two years had been maintained at the Delancey Street Parkway plots. In these gardens the planting is done by the children of the adjacent public schools under the direction of their teachers. A gardener is assigned by the Department to supervise the work and render any needed assistance. Flowers only are planted and the children do all the cultivating, watering, etc. School gardens are now maintained in Delancey street, Seward Park, Hamilton Fish Park, Stuyvesant Park, Tompkins Square, Chelsea Park, Hudson Park, Jackson Square, Abingdon Square, St. Nicholas Park, Colonial Park and High Bridge Park.

The children's school farms maintained by the Department in previous years at DeWitt Clinton Park and Thomas Jefferson Park were conducted as usual, and new school farms were opened at Corlears Hook Park and Isham Park. The southerly half of the large central lawn in Corlears Hook was used for this purpose. The work of plowing, fencing and erection of a small building for household industries was completed in the spring and the garden was formally opened on May 29th.

At Isham Park the old garden was availed of and a greenhouse of good size which had fallen into decay was rebuilt at slight expense. Here it is intended to have the children propagate the flowers and plants for the summer bedding in the various school gardens. The large attendance of children at these gardens and the interest displayed by them in the work throughout the season justified the extension of this feature of the Department. The report of the Director of School Farms, given herewith, shows in detail the activities in the gardens during the year.

PLAYGROUNDS.

The policy of enlarging the facilities for public recreation and exercise in the parks was adhered to and the efforts begun in that direction during the previous three years of Mayor Gaynor's administration were brought to practical completion.

Besides the added spaces secured for baseball and athletic fields by filling along the Riverside Park waterfront, already referred to, tennis courts were laid out in Central Park on the Sheep Meadow, opposite 66th street and on the East Meadow opposite 99th street for temporary use during the construction of the new courts on the South Meadow and the resoiling of the North Meadow where the old courts had been located. A new policy was also adopted in the conduct of the Sheep Meadow courts. Instead of the players furnishing their individual nets which the Department then stored for them in the tennis house, the Department furnished the nets itself.

This arrangement proved a great convenience and saving to the players and saved the Department the labor and storage space necessary under the old arrangement. Besides, it obviated a great deal of annoyance to both players and Department employees on account of disputes over claims for nets, rackets, etc., a great quantity of which the Department was obliged to keep from year to year because of the failure of the owners to remove them.

The new method proved generally satisfactory and its use will be extended to the East Meadow courts and the new courts on the South Meadow. These courts are practically completed. The gravel filling has been brought up to the new grade and permanent galvanized iron posts for the nets have been set on all the courts. The grounds are now ready to receive the final surfacing. It was originally planned to make this of asphalt following the practice in California and the West and some European countries as well, where this type of hard court has found favor. Objections have been made, however, to this plan by the advocates of the grass court and the dirt court in general use in the East and in England and the matter was again taken under advisement. In any event the new courts should be ready for play next summer, and it is aimed to make them the finest municipal courts to be found

anywhere. During the summer and fall while the construction of the courts was under way baseball and football were permitted on the field for small boys without restriction.

A new baseball field for the small boys of the lower East Side was provided in Corlears Hook Park. The northerly half of the large central lawn was set aside for this purpose early in spring, the southerly half having been converted to use as a children's school farm at the same time.

The new playgrounds which have been in course of construction at John Jay Park were completed and opened for the children's use early in summer, although the construction of the shelter and toilet building and of the park proper had not then been completed.

The large space underneath the Manhattan Bridge Approach adjoining the present Cherry Street Playground was secured for an addition to that ground by the consent of the Borough President and the Bridge Commissioner. This space had previously been used for the storage of paving blocks, building materials, carts, etc. These were removed through the cooperation of the two officials and the ground was cleaned up and levelled and used as a ball field. It is intended to develop this ground later by the erection of a suitable gymnasium building and apparatus and the construction of a running track, basketball courts, into one of the finest in the City.

It has been found in the experience of the Park Department that small gores and triangles of land, of little use for building purposes, are much used by the public when improved as parks or playgrounds. To understand this, let any one look any pleasant day at the multitude of people in the little triangle between St. Nicholas and 7th avenues, just north of 116th street, or the triangle at 137th street and Broadway.

Knowing full well the value of such parcels of land, the Park Department obtained possession of the ground bounded by Lafayette and Kenmare streets and Cleveland place, by transfer from the Borough President. This triangle was improved under contract by the Park Department as a small park and playground. During the past spring twelve very large Oriental Plane trees were planted there and are now growing beautifully. In order that the largest possible use may be gotten out of the small space contained within the building line on this plot, the Park Department, under contract, constructed on the building line a low but very broad coping, so broad that on either side of the ornamental iron fence, which will stand on the top, will be found enough space for comfortable seats. Within the fence the ground will be restricted to the use of women and girls and little children and the men and boys will be seated outside. At the northern end a small space will be prepared for a garden which, like the many others throughout this borough, will be planted and cared for by the children of a neighboring public school, under the guidance of Park Department gardeners. At the very apex of the plot, where two streets meet (one of the few satisfactory sites in our borough for a monument) some statute may be placed.

The large number of people now resorting to this park, in this state of upheaval, foreshadows a very busy little park and playground there on Kenmare street.

Under two other contracts, the Park Department improved the block front on Amsterdam avenue, between 151st street and 152d street, a small portion of which is Park Department property, while the remnant is Aqueduct land which the Park Department will devote to playground uses by leave of the Department of Water Supply, Gas and Electricity.

At the southern end, under one contract, there was erected a playground house, in Colonial style, of buff tapestry brick. The great blocks of fine granite, forming the coping of the surrounding wall, are the granite blocks which originally rested on the

easterly retaining wall of Riverside drive—granite, by the way, which some property owners, when they undertook the improvement of the abutting land, thought to claim as their own; but the Park Department asserted the ownership of the City, and instead of wasting the stone or selling it for a song, has put it to the above use.

In front of this playground house will be a children's garden, conducted by the Park Department in conjunction with the Public School on 145th street, near Amsterdam avenue. The northerly and major portion of this ground, already well shaded by large trees, one of them a very old willow, was laid out under another contract as a children's playground; but beneath the shade of the old trees, the older people will find delight.

Immediately east of this playground on 151st street, there is additional City property, by the way, which some time should be put to public use. The private houses built thereon should be torn down.

This little park and playground has been given the name of Gaynor Park, in honor of the late Mayor, Hon. William J. Gaynor. It was formally dedicated and opened on December 20,

Mayor Kline in the course of his address during the dedication ceremonies, said:

"The late Mayor Gaynor devoted a large part of his time in his official capacity as Mayor of this City to a minute and careful investigation of the playgrounds question, and the result of his study has made for the betterment of the children of New York. I do not think the late Mayor could have a more fitting memorial than such a thing as this, which represents to so large a degree the kindly and liberal spirit which so distinguished him among men."

PERMANENT IMPROVEMENTS AND BETTERMENTS.

Besides the construction of new roads and the playground improvements already referred to, many other works of importance in the permanent improvement and betterment of the parks were undertaken during the year. In addition to those provided prior to 1913, corporate stock funds to the amount of \$1,492,500 were authorized by the Board of Estimate and Apportionment during the year, for the following improvements:

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Repaying of Riverside Drive with bituminous pavement	\$200,000 00
Repaying the West Drive and portions of the middle and East Drives in	
Central Park with bituminous pavement	100,000 00
•	•
Construction of foundation of the Maine Monument	7,000 00
Improvement of the Plaza, 5th avenue and 59th street, in connection	
with the proposed Pulitzer Memorial Fountain	85,000:00
Improvement of the northerly addition to St. Nicholas Park, between the	•
grounds of the City College and 141st street	100,000 00
• •	100,000 00
Improvement of that portion of St. Nicholas Park, between 136th and	
138th streets, west of St. Nicholas Terrace	25,000 00
For the purchase, removal and restoration of "Hamilton Grange" (The	
residence of Alexander Hamilton)	25,000 00
For the improvement of Isham Park	30,000 00
	00,000 00
For the construction of an extension to the bridle path in Central Park,	
from the entrance at 5th avenue and 79th street, to the main path at	
86th street	18,000 00
For the construction of Additions "J" and "K" to the building of the	
	750,000 00
Metropolitan Museum of Art in Central Park	750,000 00
For the continuation of the construction of a concrete bulkhead along the	
Harlem River Speedway	110,000 00
For the construction of a bulkhead along the waterfront of Corlears	
Hook Park	42,500 00
HUOR Lair	12,300 00

There are many other improvements needed to bring the parks to a proper standard, the most important of which were incorporated in the Corporate Stock Budget submitted to the Board of Estimate. Following is the list of those for which funds have been requested but have not as yet been authorized:

Improvement and Construction of that portion of St. Nicholas Park, lying between 128th and 130th Streets, St. Nicholas Avenue and St. Nicholas Terrace, \$43,000.

This land was acquired by the City on November 29, 1909, and turned over to the Park Department for improvement. The area including sidewalks is approximately three acres. The condition of the territory has been the source of continuous complaint.

Improvement and Construction of that portion of St. Nicholas Park, lying between St. Nicholas Terrace and 141st Street, Convent Avenue and the westerly house line of Hamilton Terrace, if continued, \$14,700.

This land was acquired by the City on June 15, 1909, and turned over to the Park Department for improvement. The area, including sidewalks, is 1.332 acres.

Paving, constructing tree plots, planting trees, etc., and otherwise improving the St.

Nicholas Park sidewalk, between 130th Street and Hamilton Terrace, if continued, \$10,700.

The sidewalk at present is unimproved. A strip of bluestone flagging was laid on the original regulating and grading contract. It is the intention to treat this sidewalk in a manner similar to the one on St. Nicholas avenue.

Completion of the Improvement of Conservatory Lake.

During 1910, the work of removing the mud from the bottom of the lake was completed. A stone foundation was put in place on the top of which, covering the entire area of the lake, a concrete flooring was laid. The appropriation now asked for is to complete the work of erecting enclosing walls, etc.

Reconstructing walks and slopes in Riverside Park, between 72d and 129th Streets, \$5,000.

To properly restore or construct the slopes will require an expenditure of approximately \$45,000; \$5,000 was asked for with which to restore the most dangerous sections.

Improvement of High Bridge Park, between 155th and 182d Streets, west of Harlem River Driveways, \$100,000.

Title was acquired to the greater portion of this park under the Laws of 1890 and 1895. The area is 64.343 acres and the total cost of the improvement based on previous constructions of a similar character is \$550,000. In order to begin the improvement the sum of \$100,000 was asked for.

General improvement of Fort Washington Park, including erection of buildings, \$175,000.

Title to this land was acquired under the Laws of 1894. The total area of the park is 40.81 acres. The estimated cost of the improvement, including erection of buildings, is \$675,000. The sum of \$175,000 was asked for in order that the work may be begun.

Constructing a picket fence or ornamental design, and paving and improving the sidewalk on the easterly side of Morningside Park, between 110th and 123d Streets, along 123d Street, Amsterdam Avenue and Morningside Avenue, West to entrance, \$75,000.

The east and north sides and a portion of the west side of Morningside Park is at present protected by an old pipe and wire railing fence 3 feet in height, which is

not only in poor condition, but does not afford sufficient protection to the park to prevent damage to the lawn slopes and shrubbery. On account of the extent, police control is impracticable. It is proposed to build an ornamental wrought iron fence 6 feet in height along the above mentioned sides and to improve the entrances to the park, in accordance with plans already prepared.

New walks where required in Central Park, \$40,000.

The Landscape Architect of this Department has prepared plans covering the construction of new walks, where, in his opinion, they are required in Central Park.

General improvement of Casino Terrace, \$20,000.

The general improvement of the Casino terrace is proposed with the idea of making the Casino and the terrace more popular and more accessible to pedestrians. It is now rather difficult to reach, except by way of the Drive.

Erection of bridge over 87th Street at Carl Schurz Park, \$25,000.

It is the intention to construct the bridge in a rustic manner in keeping with the natural rock territory adjacent, connecting the old East River Park with the extension to the same, all known at present as Carl Schurz Park.

General improvement of Riverside Park, \$20,000.

The work contemplated is the building of new entrances for baby carriages, and new walks in the park so that baby carriages can be taken on all paths.

Completion of the Propagating Houses at the Conservatories in Central Park, \$25,000.

The Propagating Houses, which are located south of the main Conservatories, at the easterly side of Central Park at 5th avenue, opposite 104th street, were designed to consist of a center house and eight wings for the propagation of plants required in the various parks throughout the City.

In 1906 the center house and three of the side wings were constructed at a cost of approximately \$25,000, which was the amount of appropriation available for the purpose at that time. The necessity for the completion of the remaining five side wings each year become more urgent and at the present time improvised hot beds are located in the rear of the Conservatories, even with which it is almost impossible to propagate the plants required each year. It is important for the horticultural work of the Department that propagating houses should be completed as originally planned.

Construction of a new boat and skate house at the large lake in Central Park, \$100,000.

The present boat house located on the east shore of the large lake in Central Park is an old wooden structure, built some twenty-five or thirty years ago, consisting of a small space for the storage of boats, a small space for the public and work rooms in the main story and a shelter in the upper story. The house has been in a dilapidated condition for some years, and the shelter portion has been closed to the public for about three years owing to the unsafe condition. The building is beyond practical repairs, and is inadequate for its purposes.

A temporary portable frame skate building, about 25 feet wide and 125 feet long, is erected on the south shore of the large lake each winter for the use of skaters; a temporary portable toilet building is also erected near the temporary skate house, and a third temporary building for furnishing skates, etc., to the public is also erected at the same location. These buildings present a very unsightly appearance. It is proposed to erect a permanent building for use at all seasons of the year, which buildings shall be adequate and sufficient for boating in the summer and skating in the winter and to contain suitable toilet conveniences for the public at large. The lake is frequented by large crowds both summer and winter, and the present facilities are

wholly inadequate to meet the necessities of the public. A substantial return upon the cost of the building should result from the letting of boat, skate and refreshment privileges.

Construction and equipment of a new comfort station, music pavilion and reviewing stand in Madison square, \$100,000.

The present toilet facilities in Madison square consist of a small frame building containing a woman's toilet on the main story, and a man's toilet in the basement. A new building has been the subject of consideration for more than ten years. Some seven years ago plans were prepared for a building in this park, and an appropriation of \$18,000 made therefor. The Art Commission did not approve of the plans. Additional appropriations have been sought from time to time for a new building. The present conveniences are and have been for years past a constant source of complaint both from the public and the Board of Health and are beyond improvement. Madison square is one of the most congested parts of the City, and the demands for conveniences are great. It is estimated that such conveniences would cost not less than \$50,000. Besides providing for toilet conveniences, it is also desirable to provide for a reviewing stand, Madison square being one of the parks in which concerts are held weekly throughout the summer, and also a point from which practically all of the various civic parades are reviewed.

Remodeling and equipment of the old house in Carl Schurz Park, to provide for a refreshment pavilion, playhouse, music stand and comfort station, \$25,000.

The old mansion in Carl Schurz Park (East river and 88th street), known as Gracie Mansion, is one of the few historic houses still in existence in the City. The past three years it has been used for various neighborhood clubs, and has proved a considerable success for recreative purposes. The building is in poor condition, though structurally sound. It is proposed to remodel the basement to provide suitable modern toilet facilities for the accommodation of the public, to replace the present unsanitary conveniences, and to restore the first and second stories and exterior to good condition, with such alterations as are required to suit the purposes intended.

Construction and equipment of a comfort station, tool houses, stairways and music stand in Colonial Park, \$60,000.

Colonial Park is one of the newly constructed parks, extending from Bradhurst to Edgecombe avenues and 145th to 155th streets, is a much frequented park, and is without toilet conveniences or park buildings of any description other than a temporary frame structure, which serves merely as a tool room. The park being considerably below the level of Edgecombe avenue, there is no entrance to the park between 145th and 155th streets. It is proposed to build suitable structures to meet the needs of the public in that location, as well as a stairway to give access thereto from Edgecombe avenue.

Setting concrete curbs along drives in Central Park, \$20,000.

Twenty thousand dollars (\$20,000) were asked for to begin the work of constructing a concrete curb adjacent to the asphalt gutters along the drives in Central Park.

Alteration of the pavilion in Seward Park, \$25,000.

The pavilion in Seward Park was erected some eight years ago, since which time the use of the park has developed to such an extent that the pavilion no longer furnishes adequate facilities. The toilets are entirely too small, are poorly ventilated and unsanitary. The present baths, however, are adequate, but the construction, which is of timber, has become saturated through leaks to such an extent that it is rapidly deteriorating.

Alteration of the gymnasium and toilet building in Hamilton Fish Park, \$50,000.

The pavilion in Hamilton Fish Park is one of the most pretentious buildings in the playground parks. It contains two large gymnasiums on the main floor, and public toilet conveniences in the basement. The use of this park and playground has greatly increased the last few years, and at the present time the facilities are inadequate. The gymnasiums are in constant use every afternoon and evening during the winter. It is proposed to remodel the basement to provide adequate toilet facilities and locker rooms, and to construct baths for the use of the clubs, as well as the public at large, beneath the sidewalk.

Construction of music stands (3) in Westerleigh Park, Washington Park and Port Richmond Park, Borough of Richmond, \$7,500.

At the present time concerts are held on improvised wooden platforms erected for each concert, and the proposed stands are for the purpose of affording better facilities for giving concerts, as well as to do away with the necessity of erecting temporary stands. It is also proposed, if possible, to provide a refreshment booth in the lower portion of each music stand, for the benefit of the public, and it is quite possible that the revenue therefrom will warrant their construction from a financial standpoint.

Construction and equipment of Menagerie buildings to replace the present frame structures in Central Park, \$100,000.

The Menagerie in Central Park consists of frame structures built many years ago as temporary buildings only, since which time numerous small additional buildings have been constructed, scattered about the site to house small animals. For some years past the erection of a suitable building to house many of the animals now housed in isolated buildings has been under consideration, and it is considered very desirable that a permanent and more sightly housing of the animals be provided.

Laying new walk pavements, taking up and resetting granite coping, and otherwise improving the territory around the Tomb of General Grant, \$20,000.

The present pavement is broken, disintegrated, patched and unsightly. Settlements have taken place in the retaining walls, the coping sags and the granite work requires pointing.

Extension of high pressure water supply and irrigating system in Central Park, \$60,000.

Under various contracts, a modern water supply system was installed along the East Drive of Central Park from 59th to 110th streets; along the West Drive from 59th to 81st streets; along the Center drive and southerly end of park; around the new reservoir across the connecting drive at 104th street, and in the Ramble. The additional sum is required to complete the work throughout the park.

One of the most important of the improvements under consideration during the year is the development of the shore front of Riverside Park. As previously reported, the Department has already, on its own initiative, proceeded with the work of reclaiming the land under water, by filling with excavated rock and earth at three points along the shore, and has to date reclaimed about fifteen acres. Plans for the ultimate treatment of this reclaimed territory were prepared and submitted May 27, 1913, to the Board of Estimate and Apportionment Committee on Terminal Improvements, at the request of the Chairman of that committee, Hon. John Purroy Mitchel. The plan shown herewith, gives a bird's eye view of Riverside Park, from 72d street to 129th street, as it would appear upon the completion of the proposed improvement. It shows the following:

1. A correct sky line over this entire length of Riverside Drive, based upon 42 photographs taken at the time of buildings facing Riverside Drive and Park.

- 2. The United States bulkhead line, to which the park is extended by means of the reclamation of land now lying under water, land which by law is a part of Riverside Park.
- 3. Between the sky line and the bulkhead line, appears a winding arcaded esplanade and driveway, covering the New York Central Railroad tracks on their existing lines. By thus roofing over the railroad tracks artistically, it is possible to extend the existing park over the railroad to the reclaimed portions of the park, thus making them one great whole.
- 4. On the shore front there will be noted five distinct structures, of which the most northerly at the extreme left hand of the picture, is the Armory of the New York Naval Battalion.
- 5. The 1,000-foot stadium, extending from 116th to 120th street, resting upon the rocky hillside of the park, and furnishing seating accommodations for not less than 100,000 people, planned as it is, with an open front to the river, the extensive arena can be used either for games or to witness pageants upon the Hudson river.
- 6. The Robert Fulton Water Gate, or the American Pantheon, extending from 109th to 111th street. Originally proposed in 1909, the year of the Hudson-Fulton celebration, it was styled the Robert Fulton Water Gate, but in the last session of the State Legislature, when the location of this monumental structure was changed, the purpose also was altered, so that it will be a memorial not only to Robert Fulton, but to other distinguished Americans, and hence, may be styled the American Pantheon.
- 7. The Lagoon, about 800 feet in length, and so constructed that within it may be found quarters for the numerous private boat clubs now scattered along this water front, and within the lagoon it is hoped that we shall have placed the replicas of several historic vessels, such as the "Half Moon" and the "Claremont," now in the waters of the Hudson river, also replicas of the Columbus caravels.
- 8-9. The 96th and the 79th street docks, so altered as to make them recreation piers, and attractive features in the landscape, while serving useful and necessary purposes. For instance, the Street Cleaning scows can be loaded within enclosures, and no longer prove a nuisance on the water front.

PARKWAYS.

Special attention was given to the improvement of the large parkways which have been added to the jurisdiction of the Department during the past few years.

Park Avenue-By reason of the New York Central Railroad Company's great terminal improvements on Park avenue, this parkway has been lengthened six blocks. For a while, a plan was under consideration, and to some extent had received municipal approval, calling for the erection of a large number of ventilating houses along the middle of the street, about a score in number. But a protest from the Park Department has effected a reconsideration of this plan, and unless such ventilating houses be found absolutely necessary, they will probably never be erected. And instead of such houses, a few of the blocks just north of the new station have been beautifully paved with brick and tile, and north of these blocks six new parkway plots will be laid out. At the present time the design of these plots may be seen in the two lying between 52d and 54th streets. The other four plots will be similarly laid out, and within the present year the Park Department has provided the soil for the plots between 52d and 54th streets, and has planted there trees and shrubs of suitable character. There will be a winding pathway through the middle of these new plots, and it is hoped that within a few years all the old parkway plots from 57th street north to 96th street, may be thus redesigned.



Delancey Street Parkway (School Garden in the Foreground).

Now that this portion of the New York Central Railroad has been electrified, vast building improvements are proceeding on both sides of this parkway, and it is apparent both to the Park Department and to the property owners on this avenue that the ventilating openings in the parkway required in the time of steam locomotion, can now be closed up and there is a movement on foot to this end. When they have been closed the old parkway plots from 57th to 96th street should be improved after the design which may now be seen between 52d and 54th streets.

It is greatly to be desired that such improvements be made as soon as possible, even for the single reason that the iron fence now surrounding the plots north of 57th street has become so weakened by age and rust, and is subject to such constant damage from trucks, that there is great waste in the continuous repairs we must now make.

When these openings are closed, the parkway plots redesigned, and a new fence constructed, it is very desirable that the further suggestion of the Park Avenue Improvement Association be adopted, and ornamental electric lights be erected on the line of the parkway.

Delancey Street—Here the Park Department has this year renewed the three beautiful gardens, which were established there last year in co-operation with the principals, teachers and pupils of the three neighboring public schools. It is the belief of all directly acquainted with this work that it has resulted not only in a very striking improvement of an east side street, but also in the improvement of the conduct of the young people in our parks. Consequently, the Park Department has increased the number of such school gardens in public parks this year, and intends to make them as numerous as our park system permits.

Seventh Avenue—Here the improvement has been completed. In December, 1911, the single line of Plane trees, from 110th street to the Harlem river, were planted, and to-day, almost without an exception, these trees present a beautiful and healthy appearance. In the course of 1912 the Department completed the erection of the beautiful ornamental fence.

Broadway—Here, in the course of the spring of the present year, the Department has planted a double row of Pin Oak trees, from 137th street to 167th street. There will be no fence on this section of the Broadway parkway, because already there is a pathway through the middle of the plots. Thus, north of the Manhattanville Subway Viaduct, the City will be relieved from the constant exposure of fence repairs to which it is subject on Broadway, from 122d street down to Columbus Circle. These Oak trees have been planted very close, and in a few years will make the walks delightfully shady.

In the lower section of this parkway, from 122d street southward, the Department has greatly improved the planting in the course of the past spring. Attention is specially called to the beautiful Washington Thorn, which may now be seen growing in the plots between 110th and 122d streets.

Speedway—Here the Park Department, in the course of the past year, has been engaged in reconstructing the bulkhead, which was erected about sixteen years ago, and has failed at many points because built of timber. We have about completed nearly one thousand feet of new reinforced concrete bulkhead, and at a recent date the Board of Estimate and Apportionment allowed the Park Department a second appropriation of \$110,000 for further bulkhead construction. This work requires the temporary removal of a considerable portion of the surface of the Speedway, at some points, fully one-half of its width. In relaying such disturbed portions of this roadway the Park Department can take preliminary steps for the transformation of this clay Speedway into a parkway road.

In the course of the past winter there was much discussion between the Park Department and the representatives of the drivers, and it was agreed that the time has come for the opening of the Speedway to general parkway traffic. But at the same time the drivers insisted that they should not be forced out before another speedway has been provided for them. Such a speedway may be provided in the Borough of The Bronx.

At any rate, both the Mayor and the Park Commissioner, as well as the vast majority of our citizens, believe that as soon as it can be brought to pass, the Harlem River Speedway should be turned into a parkway. And where could be found one more beautiful?

MONUMENTS AND MEMORIALS.

Three beautiful monuments erected in the parks were unveiled during the year. They are the National Maine Monument in Central Park, the Firemen's Memorial in Riverside Park and the Carl Schurz Monument in Morningside Park.

The Maine Monument stands at the southwesterly entrance to Central Park, facing Columbus Circle. It constitutes a magnificent gateway and a noble decoration to that entrance to the park. It is designed to commemorate for all time the courage of the heroes who lost their lives on the United States Battleship Maine on February 15, 1898, and a memorial to the sailors and soldiers who died for their country during the Spanish-American War.

A prize competition was won by Attilio Piccirilli, Sculptor, and H. Van Buren Magonigle, Architect. Forty-two other designs were rejected in the competition. The artists who advised the selection of this design were the late John LaFarge, the President of the Society of American Artists and Mural Painters; Frederick Dielman, President of the National Academy of Design; Walter Cook, President of New York Chapter of American Institute of Architecture; and William Rudolph O'Donovan, A. N. A., Sculptor.

The central feature of the monument is a pylon 18½ by 21 feet and 40 feet high, with panels on its four faces. It is flanked by two colossi, representing the Atlantic and the Pacific Oceans, suggestive of the national scope of the memorial. The Atlantic is typified by a young man in the fullness of his strength; the Pacific by an old man half slumbering. The figures, if standing, would be more than fourteen feet high.

At the foot of the shaft, and facing the Circle, is a group of sculpture antebellum in idea—Courage awaiting the flight of Peace; Fortitude supporting the feeble. These figures are nearly twice actual life size.

Above the group is the following inscription:

"To the Valiant Seamen Who Perished in the Maine— By Fate Unwarned, in Death Unafraid."

On the lower part of the pedestal supporting this group is a conventional boat prow on which kneels a figure of a boy holding wreaths of olive and laurel, suggesting the new era inaugurated in Cuba through the Spanish War.

A low fountain basin extends toward the Circle from this side of the monument, approached by three broad steps, forming a stylobate.

The corresponding group on the side facing the park is post-bellum in motif— Justice, having entrusted her sword to the Genius of War to execute her mandates, receives it again at his hands, while History records its deeds.

The inscription over this group reads as follows:

"To the Freemen Who Died in the War with Spain that Others Might be Free."

The pylon is crowned by a group representing Columbia Triumphant, drawn in a sea car by three plunging horses. This group is in bronze, which contains some metal

recovered from the sunken Maine and is heavily gilded. The group is 17 feet high, making the monument 57 feet in height.

All the other sculpture is of Knoxville marble. In panels on the lateral faces of the shaft are inscribed the names of those to whom the monument is dedicated.

At either side of the pylon and separated from it by two park roads are two entrances formed by four garden houses of the type familiar in the great parks abroad. Each pair of houses constitutes a gateway, partially connected by a low wall of the height of the park wall, and with seats facing the Circle.

The material used for the pylon, the houses and the wall is Tennessee marble, with a granite base.

In the sculpture decoration of the monument marine forms have been employed; for example, at the top of the pylon the usual triglyphs are replaced by tridents, and on the discs between them are several forms of marine life—the sea horse, Nautilus, various fishes, the sea turtle, star fishes, etc. Around the base of the pylon is a band of dolphins in very low relief, and around the cornices of the Gate Houses are sculptured shells. On the sides of the Gate Houses are panels with the seals of the United States, the Navy, the Army and the State of Maine in very low relief.

The ceremonies, which included a parade of the National Guard and addresses by former President William H. Taft and prominent officials of the City, State and nation, were witnessed by an immense throng of people. Delegations of troops were present from the Army and Navy of the United States and the Cuban Army, the Spanish War Veterans and other military and naval organizations throughout the country.

The Firemen's Memorial, dedicated to the heroes of the Fire Department of the City of New York who lost their lives in the fulfillment of their duty, stands at the top of the slope facing Riverside drive and the Hudson at One Hundredth street.

The Memorial designed by H. Van Buren Magonigle is in the form of a votive tablet 25 feet long, 20 feet high and 8 feet deep, flanked by two groups symbolizing Duty and Sacrifice. At each end of the Memorial, opposite the north and south sidewalks of One Hundredth street, are two flights of steps leading down to a broad platform from which a wide ramped approach descends to the level of Riverside drive. Flanking the steps are two granite walls to retain the bank at each side surmounted by marble balustrades. On the easterly side of the Monument facing the street is an inscription composed by Royal Cortissoz, as follows:

To the Men

OF THE FIRE DEPARTMENT OF THE CITY OF NEW YORK
WHO DIED AT THE CALL OF DUTY
SOLDIERS IN A WAR THAT NEVER ENDS
THIS MEMORIAL IS DEDICATED
BY THE PEOPLE OF A GRATEFUL CITY.

On the southerly face of the Monument is a bas-relief 19 feet long and 8 feet high, representing a dash to a fire in the horse-drawn fire engines, now being superseded by motor engines. On the socle under this tablet is a large mask which spouts a stream of water into a large fountain basin below. On the band course between the bas-relief and the socle is this inscription "To the Heroic Dead of the Fire Department." At the foot of the ramp are two bronze lamp-posts.

All the work including the sculpture above the level of the Property Road curb is Knoxville, Tennessee, marble with a honed finish; below this line honed pink granite from Pompton, New Jersey, is used.

The total cost of the Monument was \$90,500, of which \$50,500 was raised by popular subscription and \$40,000 contributed by the City of New York.

The dedication ceremonies were held September 5. The occasion was marked by a grand parade of the fire fighting forces of the country. Delegations were present from nearly all the large cities of the East, and from many in the West, one delegation coming from far-away Seattle on the Pacific Coast.

The Carl Schurz Monument was erected by the Carl Schurz Memorial Association, of which the Hon. Joseph H. Choate was president.

It occupies an apsis which, in buttress form, projects into Morningside Park in a line with One Hundred and Sixteenth street. The general outlines of this apsis were used as a foundation upon which the monument was erected, in such a manner as to enhance the natural beauty of this charming spot and give a better opportunity for taking in the view which might be obtained from this place, over a large part of the lower lying city. For that purpose a semi-circular granite seat was introduced, placed upon a platform approached by three steps. On the periphery intersecting the seat rises the pedestal which bears the statue.

The statue is about 9 feet high and of bronze. It represents Mr. Schurz in the cloak so familiar to those who knew him, which also in a manner, by its distinctly German cut, indicates his native country. The attitude of the statue is intended to give the impression that Mr. Schurz is about to address, as an orator, a gathering of citizens.

On either side of this apsis an allegorical bas-relief has been introduced—in one of them Mr. Schurz' activity for the advancement and betterment of mankind is taken as the subject; the other deals with Mr. Schurz' telling work on behalf of the liberation of the slaves, resulting in the permanent abolishment of slavery; and also his strong and kindly interest in the welfare of the red people.

On the pedestal itself are carved two figures, one of which has reference to Mr. Schurz' services as a soldier, and the other to his achievements as an orator. The inscription on this pedestal reads:

"CARL SCHURZ, MDCCCXXIX-MDCCCCVI—A DEFENDER OF LIBERTY AND A FRIEND OF HUMAN RIGHTS."

The balance of the plot is paved in ornamental brick, and is surrounded by a bronze balustrade, flanked by two elaborate bronze candelabra.

The architectural part of the monument, as well as the bas-reliefs are executed in French granite of a grey tint.

It was dedicated May 10, many prominent officials of the City, State and nation taking part in the ceremonies, which were preceded by a parade of the National Guard of the City. Prominent among those attending the dedication was the German ambassador and a large delegation of singers from the United German Societies, who rendered a programme of songs in German and English during the ceremonies.

Two memorial fountains offered to the City to be located in the parks were accepted and sites selected for them in 1913. One, the gift of the executors of the estate of Joseph Pulitzer, founder of the New York World, in accordance with a bequest made in his will; the other, the Strauss Memorial, given by a committee of citizens in memory of Isidor Strauss, merchant and philanthropist, and his beloved wife, who bravely went to heroic deaths in the foundered steamship "Titanic" that others might be saved.

The Pulitzer Fountain is to be located on the Plaza at the southeast entrance to Central Park, Fifty-ninth street and Fifth avenue. Preference for this site was expressed by the donor in his bequest, also a request that the fountain be "as far as practicable like those in the Place de la Concorde, Paris, France." The design of Carrere and Hastings, architects, was selected after a competition. It consists of a series of basins surmounted by a sculptured marble figure. To secure a proper setting

for the fountain, a rearrangement of the entire plaza was determined upon, as certain alterations would necessarily have to be made on account of the building of the proposed Fifty-ninth Street station on the new subway rapid transit line. The plans for the work have already been approved by the Municipal Art Commission and the necessary funds have been appropriated by the City, and the contracts are now in course of preparation. The work should be completed in 1914.

The Strauss Memorial is to be placed in the triangle formed by the junction of Broadway and West End avenue, just north of One Hundred and Sixth street, at present occupied by the small park formerly known as Schuyler Park and Bloomingdale Park. The City has renamed it Strauss Park. The design for the memorial by Evarts Tracy, architect, consists of a fountain, the arrangement of which, as shown by the drawings and model, consists of an exedra approached at the sides by steps, and in front of this a long low pedestal surmounted by a reclining figure of memory, gazing into a pool, fed by a stream flowing from a lion's head.

The figure and inscription are of bronze, and the masonry is of light granite.

The plans for the work are under way, and the committee in charge hopes to have it completed in 1914.

The Robert Fulton Memorial Water Gate is another architectural feature to which a park site has been awarded. This structure is to occupy the shore front of Riverside Park, between One Hundred and Ninth and One Hundred and Eleventh streets. It is to be in the form of an enclosed basin to provide a sheltered landing place for the launches and small boats of visiting fleets. From the basin rises a broad flight of steps to Riverside drive. At the top of the steps and flanking it on both sides is the memorial structure proper. The design is by H. Van Buren Magonigle. Funds for its erection have not yet been provided, but the necessity of providing an entrance or gateway to the city fitted to its importance as the premier city of the western hemisphere is so apparent that it is to be hoped that the necessary funds will not long be withheld.

PLANTING.

During the year the Department has done much planting of trees, shrubbery and gardens in the Borough of Manhattan and among the extensive work from the Battery to Spuyten Duyvil Creek brief reference is here made to ten items:

Battery Park—Here a large number of Oriental Plane and Ailanthus trees have been planted alongside the Elevated Railroad, to screen the same more than it has been in the past, though often it has been proposed to thus hide this ugly structure.

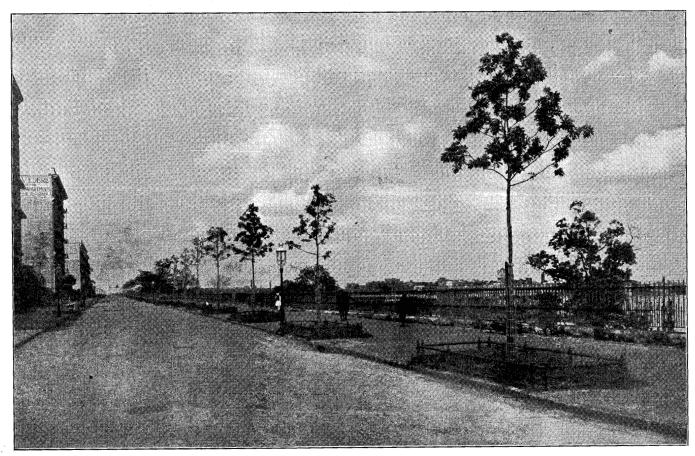
City Hall Park—Here considerable shrubbery has been planted, of which there has been none in recent years. Plane trees have been planted on the Broadway side, between Warren and Murray streets, Gingko, the Cladrastis, the Red Flowering Horse Chestnut, the Kolreuteria and the Styrax Japonica.

Kenmare Street Playground—Here, at the junction of Lafayette and Delancey streets, in a spot where hitherto no green thing has been found, have been planted twelve large Oriental Plane trees, on the little triangle which is now being improved as a children's playground.

Corlears Hook Park—Here the westerly half of the big central lawn has been planted as a garden for hundreds of school children.

Central Park—Here, between the Swedish Schoolhouse and the Belvidere, on the West drive, has been planted a specimen garden, now containing fifteen hundred (1,500) different varieties of plants, not only for the beautification of the park, but for the instruction of the children in our schools, who are invited to the gardens and to the Swedish Schoolhouse, which now is devoted to museum purposes.

Grants' Tomb—On the approach to the Tomb, where hitherto nothing has been planted, is now found a double row of Gingko trees; and on the north of the Tomb,



Plantation of Pin Oaks Along Edgecombe Avenue.

where hitherto have stood only the Li Hung Chang trees and the thirteen Japanese Cherry trees planted one year ago, will now be seen several groups of Cladrastis or Yellow Wood trees, a tree so beautiful that one fails to understand why it is so rarely seen in our parks.

Sakura Park—In this last addition to Riverside Park, directly east of Grant's Tomb, where one year ago several hundred Japanese Cherry trees were planted, we have this spring planted other specimen trees from the far East, such as the Varnish and the Styrax Japonica, and on the sidewalk, in place of the bad Ash trees, the Gingko has been planted.

Broadway Parkway, from One Hundred and Thirty-fifth to One Hundred and Sixty-seventh street. Over the Subway, in the centre of the street, we have planted a double row of Pin Oaks.

Jumel Mansion—Around this mansion, on its sidewalks, the Green Poplar has been planted.

Edgecombe Avenue, from One Hundred and Fifty-fifth street north on the easterly sidewalk. In the hot, bare spot, where stand so many baseball enthusiasts looking down upon the Polo Grounds, we have planted a line of splendid Oriental Plane trees.

The complete planting list is given in the report of the Superintendent, which is made part of this report.

In the planting list are included several trees of historic interest.

Take, for instance, the spreading Willow in Abingdon square. It is said that a young English officer brought a twig of the poet Pope's Willow to America in 1775. Pope had raised his Willow at Twickenham-on-the-Thames from a twig he found in a drum of figs from Smyrna. The English officer presented the twig he brought to America to the stepson of Washington, Mr. Curtis, who planted it near his home in Abingdon, Va., and therefore we planted a Weeping Willow in our Abingdon Square. It is said that in 1790 General Gates took a twig from the Willow tree in Abingdon, Va., and planted it at the entrance to his farm on Manhattan Island, at Twenty-second street and Third avenue. In memory of the Gates' Weeping Willow we have planted another, not far away, in Stuyvesant square.

In the park triangle at Broadway and One Hundred and Thirty-seventh street, we planted thirteen Liquid Amber trees, to take the place of the thirteen planted by Alexander Hamilton in honor of the thirteen original states, at the Grange, near One Hundred and Forty-second street and Convent avenue. All the Hamilton trees have died. A section of the trunk of one is preserved in Jumel Mansion, and of another in the Arsenal, Central Park. The triangle in which the thirteen Liquid Ambers stand, should be called Hamilton Park, and at its upper end, facing south, should be placed the Hamilton Statue, which looks so diminutive in the large lawn west of the Museum of Art, where it now is.

Behind the Maine Monument this spring we planted the "Grove of the Fleets," consisting of 45 Oak trees. Immediately behind the monument stand six Scarlet Oaks representing the six vessels of the Santiago fleet; then come six Red Oaks, for the six vessels of Dewey's fleet at Manila Bay, and then thirty-three Pin Oaks for the 33 first-class fighting vessels of our fleet of to-day. These sturdy trees, planted in honor of our "Men of Oak," form a fitting and impressive background for the Maine Monument and the age it commemorates.

Around the Jumel Mansion there have been planted a number of trees sent from Washington's home at Mt. Vernon, thus linking together his last resting place with his old headquarters in New York City.

THE MENAGERIE.

The Central Park Menagerie was greatly improved during the year. Grounds and buildings were remodeled to provide better accommodations for the animals and more convenient and better means for visitors to view them. The interior of the monkey house was entirely remodeled and decorated. All the cages were removed from the centre of the room and ranged around the walls, affording a great deal more room for visitors. A new snake cage was built at one end of the room. The interior of this cage was modeled and decorated to represent the natural conditions of the country in which the reptiles are found. The rabbit enclosure and a number of small cages scattered over the hillside, in which were housed the wolves, foxes, raccoons and other small animals, were removed and placed in a row in a vacant space in rear of the elephant house, where they are seen to better advantage. An enclosure of iron fencing with a heavy wire mesh roof was built in rear of the row with separate divisions for each cage, to allow the animals an outdoor run. The fencing taken from the old rabbit enclosure was used for this purpose. The hillside slope was regraded and sodded and a fine plantation of magnolias and other ornamental trees and shrubs were set out. A new walk was constructed from the bear pit to the East Drive, where an entrance was made. This new entrance gives direct access to the Menagerie from the main walk along the East Drive and from the west side of the park. Heretofore it could be reached from those points only by a very circuitous route. The new entrance has proven a very great convenience to the public visiting the Menagerie.

All the buildings and fences were freshly painted and the buffalo and deer paddocks were graded up with gravel from the drives. The exterior of the Menagerie was greatly improved in appearance by this work. The collection on exhibition was also greatly improved by the inclusion of animals and birds of unusual character and interest, such as the gnu, the zebra, llamas, etc. These with the splendid lot of lions which the Department owns, all of which were bred in the Central Park Zoo, make the collection a most interesting and valuable one, comparable with that of any other municipality.

CONCERTS.

Band and orchestral concerts were given in the parks during the summer, as in previous years. A total of two hundred and eighty-seven (287) concerts were given during the season, commencing June 1st in Central Park and July 4th in all the other parks and ending September 28th. The concerts were so apportioned to the various sections of the city, from Washington Heights to the Battery, in the Borough of Manhattan, and from St. George to Tottenville, in the Borough of Richmond, that they could be within easy reach of all the people of the city.

The following is the complete schedule of concerts given during the season:

SEASON 1913 PARK CONCERTS

BOROUGHS OF MANHATTAN AND RICHMOND

PARK	June.	July.	August.	September.
BOROUGH OF MANHATTAN.				
Abingdon Square Wed. 8.00 P.M.		4, 9, 16, 23, 30	6, 13, 20, 27	3
Battery Fri. 8.00 p.m.		4, 11, 18, 25	1, 8, 15, 22, 29	5
Bryant Fri. 8.00 p.m.		4, 11, 18, 25	1, 8, 15, 22, 29	5
Carl Schurz Thur. 8.00 p.m.		4, 10, 17, 24, 31	7, 14, 21, 28	4
Central Park Sun. 4.00 P.M.	1, 8, 15, 22, 29	6, 13, 20, 27	3, 10, 17, 24, 31	7, 14, 21, 28
Tues. 8.00 p.m.		1, 8, 15, 22, 29	5, 12, 19, 26	
Wed. 8.00 P.M.		2, 9, 16, 23, 30	6, 13, 20, 27	
Thur. 8.00 P.M.		3, 10, 17, 24, 31	7, 14, 21, 28	
Fri. 8.00 p.m.		4, 11, 18, 25	1, 8, 15, 22, 29	
Sat. 4.00 p.m.	7, 14, 21, 28	5, 12, 19, 26	2, 9, 16, 23, 30	6, 13, 20, 27
Sat. 8.00 p.m.		5, 12, 19, 26	2, 9, 16, 23, 30	
ChelseaTues. 8.00 p.m.		4, 8, 15, 22, 29	5, 12, 19, 26	2
ColonialSun. 4.00 P.M.		4, 13, 20, 27	3, 10, 17, 24, 31	
Columbus Wed. 8.00 p.m.		4, 9, 16, 23, 30	6, 13, 20, 27	
Corlears HookMon. 8.00 P.M.		4, 7, 14, 21, 28	4, 11, 18, 25	· • · • • • · • • · · · · · · ·
DeWitt Clinton Sun. 4.30 P.M.		6, 13, 20, 27	3, 10, 17, 24, 31	
Fort Washington Sun. 4.00 P.M.		4, 6, 13, 20, 27	3, 10, 17. 24	
Hamilton Fish Thur. 8.00 P.M.		4, 10, 17, 24, 31	7, 14, 21, 28	4
Hudson Fri. 8.00 p.m.		4, 11, 18, 25	1, 8, 15, 22, 29	
Morningside Sat. 4.00 p.m.		4, 12, 19, 26	2, 9, 16, 23, 30	6
Mount MorrisTues. 8.00 P.M.		4, 8, 15, 22, 29	5, 12, 19, 26	2
Queensboro Bridge Sun. 4.00 p.m.		4, 13, 20, 27	3	
Seward ParkFri. 8.00 p.m.		4, 11, 18, 25	1, 8, 15, 22, 29	5 .
Tompkins Square Mon. 8.00 P.M.		4, 7, 14, 21, 28	4, 11, 18, 25	1, 8, 15
Washington Square Mon. 8.00 P.M.		4, 7, 14, 21, 28	4, 11, 18, 25	
Borough of Richmond.				
Curtis Field Sat. 8.00 P.M.	21	5, 19	2, 16, 30	6, 20
Port RichmondFri. 8.00 P.M.		11, 18	1, 15, 29	
Washington Park.				_
Stapleton Tues. 8.00 p.m.		8, 22	5, 12, 19, 26	2
Westerleigh Thur. 8.00 p.m.		10, 24	7,21	4
Pleasant Plains Thur. 8.00 P.M.		10. 24	7	
Tottenville		17, 31	14, 28	4,
Alaska Park Wed. 8.00 P.M.		16, 30	13, 27	

Four concerts were given in Battery Park on August 21st and 28th, September 2d and 4th by the Subway Band, composed of employees of the subway lines of the Interborough Rapid Transit Railroad. The concerts were given without any expense to the City.

Orchestral concerts exclusively were given in Central Park, as they had proven so popular the previous two seasons. Similar concerts were given at the grounds of the Curtis High School, St. George, Staten Island, for the benefit of the people of the Borough of Richmond. In Central Park the schedule provided concerts every night in the week, except Sunday and Monday, besides the regular concerts on Saturday and Sunday afternoons. The attendance at these concerts was enormous, and the programmes, which were of a very high order of artistic merit, were received with great applause at all the concerts. Notwithstanding the enormous attendance at these night concerts and the small number of policemen on duty there was not a particle of disorder at any of the concerts; not one interruption of the programme at any time during the season, a record of which the City may well be proud.

The programme for the concert on the Mall, Central Park, on Sunday, September 13th, was arranged in memoriam of the Hon. William J. Gaynor, Mayor of the city, whose death occurred three days previous. The programme was as follows:

The City of New York,

Department of Parks, Boroughs of Manhattan and Richmond.

THE MALL, CENTRAL PARK, Sunday, September 14, 1913, at four p. m. Arnold Volpe and his Orchestra.

PROGRAMME.

Part I.

	Part 1.
	"Star Spangled Banner."
1	Funeral March, "Siegfried's Death"
	In Memoriam,
	Hon. William J. Gaynor, Mayor,
	Died September 10, 1913.
2.	LargoHandel
3.	Overture, "Tannhauser"Wagner
4.	
5,	
	Part II.
6,	"March Slave"Tschaikowsky
7.	Overture, "Poet and Peasant"Suppé
8,	Second PolonaiseLiszt
9.	Selection, "Rigoletto"Verdi
10.	Trumpet Solo, "Inflammatus"
	B. Klatzkin.
	"America."
	A somewhat similar programme was arranged for the concert given at Curtis
At	hletic Field, Staten Island, on the following Sunday, September 20.
	On Sunday, August 17, a special vocal programme was given by the United Ger-
ma	n Singing Societies of New York in connection with the regular concert. The
	nplete programme is given herewith.
COI	Throng Lagranian in St. ov. word in com.

THE MALL, CENTRAL PARK.

Sunday, August 17, 1913, at 4 P. M.

Franz Kaltenborn and His Orchestra and the United German Singing Societies of New York.

P. Albeke, Conductor.

PROGRAMME.

Part I.

"	Star	-	9	Sp.	a	n	g	16	20	1	E	3	11	11	n	e	۲.	,,								

3. "Die Ehre Gottes in Der Natur" ("God's Glory in Nature")Beethover	1
The United German Singing Societies of New York.	
4. Violin Solo—"Largo"	i
Mr. Franz Kaltenborn.	
(a. "Sonntag Ist's" ("Sunday Mood")Breu	1
5. b. "Matrosenchor" aus "Der Fliegende Hollander"	r
("Sailor's Chorus" from "The Flying Dutchman.")	
The United Singers and Kaltenborn Orchestra.	
Part II.	
6. Overture—"Der Freischütz"	r
(a. "Ewig Liebe Heimat" ("Forever Dear Loving Home")Bret	
7. b. "Old Black Joe"Foster-Van der Stucker	
c. "Dixieland"	
The United German Singing Societies of New York.	
8. Waltz—"Wein, Weib und Gesang" ("Wine, Woman and Song")Strause	s
9. Selection—"Hänsel und Gretel"	
(a. "Einsiedler in der Nacht" ("The Hermit's Night Song")	
10. b. "Schlacht Hymne" aus "Rienzi"	
("Battle Hymn" from "Rienzi.")	
The United Singers and Kaltenborn Orchestra.	
"America."	,

The foregoing programmes will serve to illustrate the high standard of the selections given at all the concerts, of which there were eighty-one (81) given during the season. These were evenly divided between the Volpe Symphony Orchestra and the Kaltenborn Orchestra, each comprising fifty-one pieces.

A pleasing innovation in connection with these concerts were the "Programme Notes" by Arthur Farwell, Supervisor of Music, who looked after the arrangement of the numbers composing them for all concerts given by the Department.

These notes consisted of comments upon the selections played at the concerts, short historical sketches of their composers and now and then a short poem or an interesting prose selection. The following selections show the general character of the notes:

PROGRAMME NOTES.

By Arthur Farwell, Supervisor of Music, Department of Parks.

Poet and Peasant. Franz von Suppe (1820-1895), Belgian by descent, was the composer of two grand operas, one hundred and sixty-five farces, comediettas, vaudevilles, etc. He belongs to a race of master composers of light overtures which appears to have died out. Present-day light opera composers are careless with regard to their overtures, or have contented themselves with brief preludes, not wishing, perhaps, to spend their energies and talents upon something which will not be listened to in the theatre.

Magic Flute. Opera by Wolfgang Amadeus Mozart (1756-1791). The extraordinary and absurd text of this opera, by Schikaneder, has irritated and perplexed many critics. Were it not for the wonderful music in which Mozart has enfolded it, it would long since have been forgotten. Schikaneder was a combination of theatre manager, actor, author and charlatan, and his text consists of a cheap and melodramatic treatment of Masonic rites and mysteries. Mozart was in financial straits and Schikaneder needed a composer, else the opera would not have been written.

Horn Concerto. The term "concerto" has passed through various meanings. Grove's Dictionary of Music says that "the name is now given to an instrumental composition designed to show the skill of an executant, and which is almost invariably accom-

panied by orchestra." The concerto is cast in the musical form known as "sonata form," which is no other than the "symphonic form," a symphony being merely a sonata for an entire orchestra instead of for one or two instruments. The regular sonata form of four movements is usually shortened to three in a concerto. The term "sonata form" also applies to the internal structure of a single movement, and in this sense applies almost invariably to the form in which the first movement of a sonata, symphony or concerto is cast. Such a "first movement," in its usual form, presents two themes, well contrasted, a development of these themes, and a recapitulation of them. One not infrequently hears the term "first movement form," to distinguish the second meaning of the term "sonata form."

Wotan's Farewell. The closing scene of "Die Walkure," the first day of Wagner's trilogy, "The Ring of the Niblungs" (following the Vorabend, "Das Rheingold"). The Valkyrie maiden, Brunnhilde, one of whose duties it is to carry slain heroes to the hall of the gods, disobeys Wotan, father of the gods, by directing the course of a battle against his wishes. Although his favorite Valkyrie, Wotan must punish her, which he does by putting her to sleep on a high rock, which he causes the god Loki to surround with a wall of fire, through which none but the greatest hero can pass. She is finally claimed by Siegfried, and from goddess, becomes woman.

An Evening in My Garden. (From "The Spectator.")

"Mr. Spectator-There is hardly anything gives me a more sensible delight than the employment of a cool, still evening after the uneasiness of a hot, sultry day. Such an one I passed not long ago, which made me rejoice when the hour was come for the sun to set, that I might enjoy the freshness of the evening in my garden, which then affords me the pleasantest hours I pass in the whole four and twenty. I immediately rose from my couch and went down into it. You descend at first by twelve stone steps into a large square divided into four grass plots, in each of which is a statue of white marble. This is separated from a large parterre by a low wall, and from thence through a pair of iron gates you are led into a broad walk of the finest turf, set on each side with tall yews, and on either hand bordered by a canal, which on the right divides the walk from a wilderness parted into a variety of alleys and arbors, and on the left form a kind of amphitheatre, which is the receptacle of a great number of oranges and myrtles. The moon shone bright, and seemed then most agreeably to supply the place of the sun, obliging me with as much light as was necessary to discover a thousand pleasing objects, and at the same time divested of all power of heat. The reflection of it in the water, the fanning of the wind rustling on the leaves, the singing of the thrush and nightingale, and the coolness of the walks, all conspired to make me lay aside all displeasing thoughts, and brought me into such a tranquillity of mind, as is, I believe, the next 'happiness to that of hereafter.'"

(Author Unknown.)

In the Garden.

Summer is dying, slowly dying—
She fades with every passing day;
In the garden alleys she wanders, sighing,
And pauses to grieve at the sad decay.

The flowers that came with the Spring's first swallow, When March crept timidly over the hill, And slept at noon in the sunny hollow—

The snowdrop, the crocus, the daffodil.

The lily, white for an angel to carry,
The violet, faint with its spirit-breath,
The passion-flower, and the fleeting, airy
Anemone—all have been struck by death.

Autumn the leaves is staining and strewing,
And spreading a veil o'er the landscape rare;
The glory and gladness of summer are going,
And a feeling of sadness is in the air.

See! by the fountain that softly bubbles, Spilling its rain in the lichened vase, Summer pauses—her tender troubles Shadowing over her pensive face.

The breeze through the leafy garden quivers,
Dying away with a sigh and moan:
A shade o'er the darkening fountain shivers,
And Summer, ghost-like, has vanished and gone.

-William Wetmore Story.

At times the programmes were used as a medium for the conveyance to the people of information regarding the work of the Department, such as new planting done, or improvements under way or proposed, and like items of interest to the public.

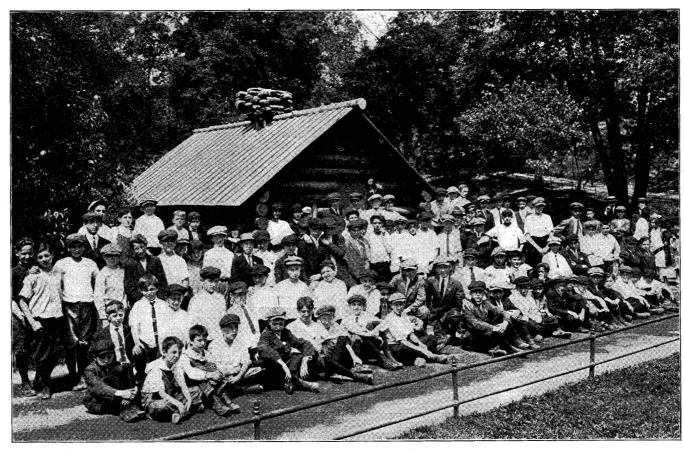
FETES AND CELEBRATIONS.

The use of the parks for formal celebrations was permitted to a greater extent than heretofore, the damage resulting, if any, being very slight. The principal celebrations were the "Dancing Fete" of the Girls' Branch of the Public School Athletic League, held on the Sheep Meadow, Central Park, May 13, the "Athletic Carnival" of the Boys' Branch of the same league held there two weeks later, and the "Historical Pageant" given by the children of the department playgrounds at the same place on August 23. At Hudson Park there were parades and pageants in connection with the celebration of "Old Home Week," May 19 to 26, in what was formerly "Greenwich Village," embracing the territory surrounding that park. In Madison Square Park, festivities in connection with the "Tree of Light," a public Christmas tree furnished by private enterprise and erected in the park with the consent and the substantial help of the Department, lasted all through the Christmas week.

In connection with the City's official celebration of Independence Day, the Department gave band concerts in nearly all the parks and held athletic games and contests in all playgrounds.

These celebrations very naturally attracted great throngs of people to the parks. The visit of the Atlantic fleet of the United States Navy during the week from May 26 to June 2 also served to draw an unusually large number of visitors to Riverside Park to view the ships. Some damage to lawns and shrubbery is necessarily expected to result on such occasions. It is found, however, that this damage is usually slight and does not compare with that done to the parks through the wanton destruction of trees and shrubs by boys and often by adults.

The damage done during one season through such vandalism is almost incredible. Trees planted in the spring are torn up by the roots, or the branches and even the trunk broken off before summer; shrubs newly set out are pulled to pieces to furnish switches for play. Bronze railings, decorative tablets, or fittings of any character are



First Company Auxiliary Boy Police, Central Park.

pried from fences, monuments or walks, apparently to be sold. Within the past year the Seventh Regiment Statue in Central Park has been despoiled of all but one of four handsome bronze placques which adorned the pedestal. A similar bronze tablet of large size was pried off the pedestal of the statue of General Bolivar, and the ornamental bronze decorations of the large horse drinking fountain at 72d street, near the large lake, were ruthlessly smashed and all but one carried away.

These depredations bespeak the urgent need of adequate police protection for the Department property, and the inadequacy of the present police arrangements. A greater force of policemen must be provided, if the parks are to be kept in proper condition and the City's money, expended in labor and materials, be not utterly wasted. The Department has endeavored to secure an increased force of patrolmen from the Police Department without success, and failing this, has tried by other means to protect its property. Laborers have been detailed to special duty at the points where the greatest damage is done, but, being without police authority, and that fact being known to the vandals, their efforts are for the most part futile. As an additional help it was decided to enlist the aid of the boys who frequented the park by forming them into companies of "Auxiliary Boy Police." To this end notices were posted inviting the boys to membership in such an organization. The responses were numerous and the boys were divided into companies, each with its own district defined for its operation. The boys were each furnished with a neat badge and a written permit authorizing them to enforce the Department regulations and to prevent damage in the parks.

An old log cabin, unused for any purpose, was put in first-class condition and set up on the grounds adjoining the Department conservatory at 106th street as a head-quarters for the First Precinct, Auxiliary Boy Police. The activities of the boys resulted in some good, although the fortunate wearers of the Boy Police badges were greatly harassed by those who had failed to obtain them. These attacks often resulted in adding to the damage to the parks rather than preventing it. Gradually for various reasons the ranks of the defenders became depleted, although a sufficient number held on and their efforts succeeded in doing sufficient good to warrant a continuance of the organization for at least another year.

REPORT OF THE SUPERINTENDENT FOR THE YEAR 1913.

The work of maintaining the parks, parkways, drives, playgrounds, baths and comfort stations devolving upon the Superintendent, was carried on throughout the year. This work consists of the usual routine of cleaning and repairing walks, drives, buildings, fences and other structures in the parks; the care of lawns and plantations, including the planting of new trees and shrubs and the propagation of plants and flowers for the summer bedding in the parks and for display in the Central Park Conservatory; the cleaning and repair of playgrounds and playground apparatus, the furnishing of attendants for baths and comfort stations, and of parkkeepers and watchmen for the protection of department property. In addition to this work a great deal of construction work, not ordinarily classed as maintenance, was done by the force under the Superintendent's charge.

The territory maintained by the department during the year consists of 74 parks, comprising an area of approximately 1,440 acres; 70 of these parks are in the Borough of Manhattan, and four in the Borough of Richmond. The total park area in the latter borough amounts to about 64 acres. Within the parks the Department maintains 45 toilet buildings and structures, 27 of which provide accommodations for both men and women, 10 for women only, and 8 for men only. It also maintains 3 bathhouses for both sexes; also 40 playgrounds besides a number of lawn spaces that are set aside within the parks for recreation purposes.



Oriental Plane Trees Along the Drive in Central Park (Replacing the Old Elm Trees of the Original Plantation).

The total force under the Superintendent's charge during the year ranged from 679 during the winter season to 886 during the summer. This force consisted of the following:

Labor Force-

- 3 General Foremen.
- 24 Foremen.
- 425 Laborers, Stablemen, Bath Attendants, etc. (permanent force).
- 125 Laborers (extra summer force).
 - 65 Drivers.
 - 7 Hired Carts (summer only).
 - 1 Automobile Engineman.
- 70 Female Attendants.

Gardening and Arboricultural Force-

- 1 Foreman of Greenhouses.
- 1 Entomologist.
- 4 Arboriculturists.
- 10 Foremen Gardeners.
- 45 Gardeners (permanent force).
- 45 Gardeners (extra summer force).
- 30 Climbers and Pruners (permanent force).
- 25 Climbers and Pruners (extra summer force).

A great many of the laborers and gardeners are very old men, enfeebled by age or infirmity and consequently unable to do a full day's work of a hard or laborious nature. Most of them have been in the service of the department many years. They are detailed to duty as attendants in the various comfort stations, watchmen in the storage yards and department buildings, etc., where possible. Their number, howeyer, greatly exceeds the demand for them for this work, so that a large number of them must be placed on the regular maintenance work in the parks, thus reducing considerably the efficiency of the force available for that work. This condition must be taken into consideration in any analysis of the maintenance cost of the parks. On account of the lack of proper police supervision over the parks it was necessary to withdraw from the force of laborers from thirty to sixty men, varying according to season, for special duty as parkkeepers or watchmen to protect the parks and prevent damage to trees, shrubs, lawns, buildings, etc. These men were stationed at the worst points in the parks, but being without police authority their services were of avail only within certain limits. Most of the damage is done in the parks at night, and can be prevented only by constant and efficient supervision of an adequate number of policemen. The maximum police patrol force in Central Park during 1913 was 70 footmen, 5 bicycle men, 8 mounted men, a total of 83 as against a total of 178 in the year 1897, the last year in which the park police were a separate force under the direct control of the Park Department. The parks outside Central Park are practically without police supervision, as they form merely an incidental part of the extensive post of one or more patrolmen, whose time is usually taken up with the thousand and one occurrences that claim his attention on the other parts of his post.

The damage resulting from the action of vandals in the parks during 1913 exceeded that of any previous year. In Central Park the Seventh Regiment statue was despoiled of all but one of the massive bronze ornamental placques which adorned the pedestal. The work was not done all at once, but covered the period from early spring to fall. All the bronze candelabra which ornamented the large horse drinking fountain at about 74th street were broken off and stolen. The bronze plate on the statue of General Bolivar at 82d street, was pried off, but was recovered, the thieves evidently having been frightened away before they could finish their work. The

ornamental relief work on the walls and balustrade on the Terrace was smashed to pieces in many places. The glass of the Central Park Conservatory and greenhouses was the nightly target for volleys of stones thrown by boys from the adjacent 5th avenue walk. Nearly 500 lights of glass, ranging in size from 16 inches by 24 inches to 84 inches by 30 inches, were broken during the year from this cause. At Chelsea Park the copper roofing of the playground building was ripped off by thieves who were detected by the park watchman while at work, and scared off, leaving their plunder behind them. Sections of the bronze railing around Morningside Park were cut out and carried away. A forty-foot flagpole was broken off at the base in Central Park one night. Buildings were repeatedly broken into and tools and clothing stolen. Drinking hydrants of stone and iron were smashed repeatedly, and hundreds of park settees were smashed during the summer season. The damage to trees and shrubs is incalculable. Newly planted trees and shrubs were broken by the score by boys running through the plantations, grasping the trees to swing around and pulling the branches for switches. The log cabin fitted up for the use of the First Company of Auxiliary Boy Police on the grounds around the Central Park Conservatory, was broken into and the contents stolen. It is absolutely necessary to have more police to protect the parks. The necessary number of men cannot possibly be spared from the maintenance labor force to do so, and if they could be, their efforts would be of little use as they are without police authority. What is needed is a sufficient force of uniformed police in the parks, if the City's property is not to be irreparably ruined.

That the present police detail in Central Park is active is shown by the following summary of their work for the year:

summary of their work for the year:	
Summonses issued (for violation of Park ordinances, Sanitary Code and	4344
Highway law)	644 ·
Aid rendered to persons injured, etc	226
Arrests—	
For misdemeanors	
For juvenile delinquencies 85	
For felonies	
	256

Tennis courts were maintained throughout the season from the first Saturday in May to Thanksgiving Day on the lower half of the Sheep Meadow and on the East Lawn in Central Park. Hockey fields were also laid out and maintained on the large lawn on the hill at West 106th street, and on the East Lawn during the spring and fall school terms for the use of the students of the City College for girls and the various girls' high schools.

Total number of cases.....

The skate houses erected at the large lake at 72d street and at the Harlem Meer, 110th street, in Central Park, for use during the season of 1912-13 were removed in the spring and stored for the summer. In November they were erected again as in previous years. The weather during the winter of 1913-14, however, was so mild that the ice on the lakes never reached the thickness (5 inches), required to allow the public on it with safety. Therefore, no use was made of the buildings.

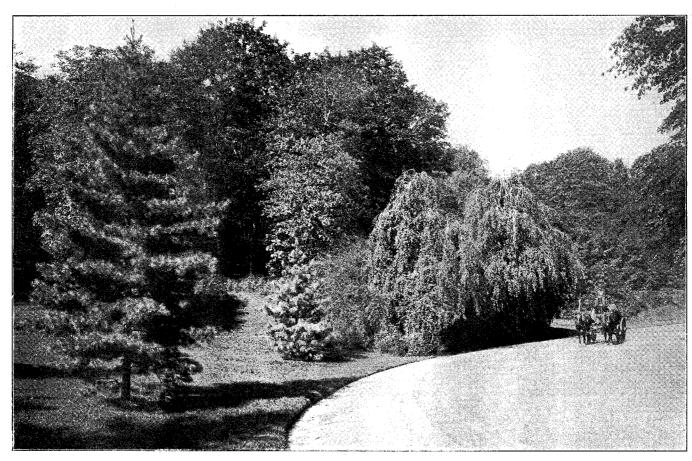
During the summer concert season, temporary bandstands were put up in those parks which are not provided with permanent bandstands and the usual arrangements were made for the necessary lighting of the stands, seats for the band and for the public attending the concerts. As there were a total of 287 concerts given during the season, the great majority of them being night concerts, this feature required the especial attention of a considerable portion of the Department working force during that time, greatly reducing the number available for the ordinary maintenance work during the busiest season.

Especial preparations were made for a large number of festivals and celebrations that were held in the parks during the year. The preparations in some cases involved a great deal of extra work. For the field days of the Public Schools Athletic League, and for the department playground festivals held on the Sheep Meadow in Central Park, it was necessary to rope off the entire field, build bandstands, and provide seating arrangements for a large number of guests, besides marking off with lime the outlines of the various formations for the dances, etc. In the case of the boys' field day on June 6, the entire field had to be marked off with whiting in six-foot squares.

Reviewing stands for the officials were erected for the ceremonies incident to the dedication of the Maine Monument, the Firemen's Memorial, the Carl Schurz Monument, also bandstands on each of those occasions. A grandstand to seat 400 was erected for the vocal concert given by the United German Singing Societies on the Mall in Central Park, Sunday, August 17, and small bandstands were put up for all other celebrations. The complete list of these is given herewith:

Central Park-

Unveiling of Maine Monument. Girls' Athletic League Fete. Playground Festival, History of Manhattan Island.	May 30 May 13 Aug. 3 June 6
Athletic Carnival, Boys' Branch, P. S. A. L.	june o
Riverside Park— Visit of the Atlantic Fleet, week beginning. Unveiling of Firemen's Memorial. Firemen's Parade (Dedication of Firemen's Memorial). Celebration at Jumel Mansion. Christmas Tree Celebration, Madison Square, week beginning. Greenwich Village Old Home Week, Hudson Park (week beginning). Fourth of July Athletic Meet, Battery Park. Public School Athletic League Festival, Curtis Field.	May 26 May 30 Sept. 5 May 21 Dec. 22 May 19 July 4 Aug. 13
Fourth of July Celebrations in following parks, games, etc.—	
Battery. Seward. Tompkins Square. Hamilton Fish. St. Gabriel's. DeWitt Clinton. Chelsea. Cherry and Market Streets Playground. West 59th Street Playground. Queensboro Bridge Playground. Thomas Jefferson. Yorkville Playground. Riverside Park. Jasper Oval. Bennett Park. Reservoir Park.	
U. S. Grant Post 327, services at Grant's Tomb	May 30 June 14 May 10 d at the
beginning of the year by which all the plantations throughout all the par given systematic care and attention during the year. The additional appro- allowed in the annual budget for 1913 permitted the employment of a large	ks were opriation



Plantation Along the West Drive, Central Park.

extra gardeners during the spring and summer and made such a reorganization possible for the first time. The appropriation for the gardening force in past years has been absolutely inadequate for the department's needs, less than sixty men, thirty gardeners and an equal number of climbers and pruners being allowed for the care of trees and shrubs and the flower beds through the parks. It was consequently impossible to give proper attention to all the plantations with this small force. During the past spring and summer more than double that number of gardeners were employed. This force, supplemented by the addition of some capable laborers, was divided into groups of from five to ten men under the charge of a foreman, each group operating in a definite territory. With this organization it was possible to give that constant care and attention to all the new plantations which they require and the results of the work were plainly to be seen in the neat and trim aspect of those plantations, especially those recently established or restored in Central Park. The older plantations were also given more regular attention. In many cases where the old shrubbery had become overgrown and unsightly the plantation was entirely renewed, the old shrubs being taken out and new shrubs planted. In Central Park extensive work of this character was carried on in that portion of the park adjacent to the terrace and the Casino at 72d street. Practically all the shrubbery and plantations around the Casino and the Terrace were entirely renewed. The extensive plantation of herbaceous plants around the Casino was taken out and replaced with flowering shrubs. The old plantations along the slopes of the Terrace and on the shores of the lake fronting the Terrace and extending around the shore line of the lake to the West Drive were replaced with new plantations of trees and shrubs. Willow trees were used in the shore plantations, the original plantations, as shown by old prints having consisted mainly of trees of that species. The work was continued to the west of the Terrace, as far as the West Drive, new plantations replacing all the old along the border of the Drive and on the slopes surrounding the statue of the Falconer in the vicinity of the Mineral Springs. At the Terrace where a new pavement of ornamental brick and granite was laid on the Esplanade and under the Terrace Bridge in the Spring, the slopes were planted with specimen evergreens, Japanese Maples and other ornamental trees and shrubs. Among them were two Japanese cedars (Cryptomeria Japonica), each about twelve feet in height, both of which were growing nicely at the close of the season. On the Promontory overlooking the small lake at 59th street a large number of pines were planted, also a quantity of flowering crab trees and twenty-five Andromeda. In the Menagerie grounds a considerable plantation of trees and shrubs was set out on the sloping lawn space which had previously been occupied by the rabbit warren and a number of small cages. These were removed and set up in a row in a new location and the ground where they had stood was graded and seeded and groups of magnolias and evergreens planted. Three striped Maples (Acer Pennsylvanicum), were also planted here. The plantations around the Seventh Regiment Statue were almost entirely renewed, all the old shrubbery having been so damaged by constant breaking that it had become unsightly. Along the East Drive a great many trees were planted, mainly to replace others taken out or to be removed in the near future. The trees forming the original plantation along this drive are among the oldest in the park. They long ago reached their maturity and are now on the decline, so that their condition is growing worse each year, necessitating more severe cutting each season. This is especially true of the large elms and maples along that section of the East Drive between 59th street and the Mall and on the Center Drive from the Mall to the Terrace. To provide against the day of their ultimate removal an entire new plantation of plane trees was set out along this entire stretch of drive, the new trees being planted between the old ones so that they would have the same spacing between the trees when the old ones shall have been removed. On the Mall, 16 young elms of good size were planted in vacant spaces in the rows which form the distinguishing feature of this part of the park. These elms, like those along the drive, previously referred to, are gradually dying out. Of the original plantation numbering 150 trees there now remain but 67. When it is considered that these trees were of large size when planted nearly 60 years ago, averaging 10 to 12 inches in diameter, it can be seen that they have lived more than the full span of life of the average tree of their kind and their rapid decay in the last few years is not difficult to account for. Twenty more of this lot were removed during the past year and the others are decaying so rapidly that it can only be a matter of a few years before the remainder must meet the axe.

At a number of the entrances to the park where nuisances had become a source of constant complaint, an effective solution was found by planting up the sides of the entrance thickly with shrubbery in which heavy thorns (Crataegus Crus-Galli and other varieties), predominated. At the Sage Plantation of rhododendrons along the East Drive from 85th street to 97th street, several hundred of these shrubs were planted to fill up gaps in the plantation. A lot of planting was done on the upper east side of the park, the section which is given greater use and abuse than any other in the entire park. Twenty scotch pines were planted on the hillside of Fort Clinton, and a six-foot wire fence had to be put up to enclose them for protection. Additional trees were set out along the drives and the old shrubbery plantations were filled out and where necessary renewed. The complete list of planting done in Central Park in 1913 is as follows:

PLANTING LIST, CENTRAL PARK.

59th Street to 66th Street, East of East

- Drive— 29 Privet.
- 6 Witchhazel.
- 1 Rhodotypus.
- 46 Lilacs.
- 25 Aronia Arbutifolia.
- O D
- 9 Persimmons.10 Boleana Poplars.
- 3 Yellow Woods.
- 1 Magnolia.
- 12 Red-flowering Horsechestnuts.
- 2 Styrax.
- 2 Koelreuteria.
- 2 Red Oaks.
- 12 Japanese Walnuts (Juglans Sieboldi).
 - 1 Cryptomeria.
- 100 Ligustrum Regelianum.
- 120 Symphoricarpus.
- 62 Ribes Aurea.

Menagerie Grounds-

- 3 Striped Maples (Acer Pennsylvanicum).
- 6 Sciadopitys.
- 5 Rhus Copalina.
- 5 Rhus Aromatica.
- 3 Koelreuteria.
- 22 Roses-Dorothy Perkins.
- 4 Andromeda.

Menagerie Grounds-

- 1 Persimmon.
- 6 Horsechestnuts.
- 18 Spirea Aurea.
- 2 Pyrus Arbutifolia.

Promontory, 59th Street Lake-

- 25 Bothan Pines.
- 25 Andromeda.
- 1 Willow.

Dairy-

- 6 Viburnum Sieboldi.
- 3 Ligustrum Regelianum.

Kinderberg-

20 Weigelia Rosea.

6th Avenue Entrance (59th Street)—

- 100 Roses Wichuriana.
- 26 Roses Crimson Rambler.
 - 12 Bignonia Grandiflora.
- 20 Ampelopsis Quincafolia.
- 10 Bothan Pines.
- 12 Pyrus Arbutifolia.
- 1 Liquidambar.
- 21 Oriental Planes.

7th Avenue Entrance (59th Street)—

- 12 Crataegus Cordata.
- 10 Privet.
- 3 Philadelphus.
- 3 Viburnum Sieboldi.
- 40 Cornus Sanguinea.

- 7th Avenue Entrance (59th Street)-
 - 3 Ligustrum Regelianum.
 - 3 Stephanandra.
 - 34 Oriental Planes.

Carousel-

- 57 Ligustrum Regelianum.
- 8th Avenue Entrance (59th Street)—
 - 21 Tulip Trees.
 - 6 Scarlet Oaks.
 - 79 Viburnum Molle.
 - 51 Viburnum Opulus.
 - 65 Ligustrum Regelianum.
 - 9 Spiraea Van Houteii.
 - 7 Andromeda.
 - 4 Koelreuteria.
 - 6 Red Oaks.
 - 12 Pin Oaks.
 - 12 Paulownia.
- East Drive, 59th Street to the Mall-
 - 113 Oriental Planes.
 - 1 Norway Maple.
- 67th Street, 5th Avenue-
 - 10 Norway Spruce.
 - 5 Japanese Larch.
 - 16 Scarlet Oaks.
 - 3 Yellow Wood.
 - 30 Ampelopsis Quincafolia.
- 72d Street, 5th Avenue-
 - 8 Liquidambar.
 - 5 White Birch.
 - 1 Koelreuteria.
 - 1 Norway Maple.
- 7th Regiment Statue-
 - 36 Roses, Crimson Rambler.
 - 35 Roses, Wichuriana.
 - 7 Roses, Multiflora.
 - 25 Jasmine.
 - 17 Cornus Mas.
 - 17 Viburnum Cassanoides.
 - 4 Viburnum Sieboldi.
 - 14 Crataegus Cordata.
 - 23 Andromeda Arborea.
 - 3 Sciadopitys.
 - 1 Greenleaf Poplar.
- 72d Street, 8th Avenue-
 - 82 Hypericum Auream.
 - 9 Cercis Canadensis.
 - 15 Rubus Odoratus.
 - 20 Ampelopsis Quincafolia.
 - 38 Ampelopsis Engelmani.

- 72d Street to 79th Street (Casino)-
 - 20 Lilacs (Common).
 - 3 Tulip Trees.
 - 42 Tamarix.
 - 68 Euonymus Europa.
 - 27 Lilac, Rubra de Morley.
 - 39 Lilac, Villosa.
 - 4 Lilac, Madam Lemoine.
 - 50 Red flowering Almond.
 - 50 White flowering Almond.
 - 110 Spiraea Anthony Waterer.
 - 65 Hydrangea Paniculata gr.
 - 64 Euonymus Alatus.
 - 38 Viburnum Opulus.
 - 71 Viburnum Sieboldi.
 - 25 Hibiscus Variegata.
 - 2 Acer Tartaricum.
 - 1 Styrax Japonica.
 - 21 Andromeda.
 - 60 Rosa Rugosa.
 - 23 Rhus Cotinus.
 - 50 Philadelphus Coronarius.
 - 75 Stephanandra.
 - 50 Symphoricarpus.
 - 29 Cornus Mas.

Sheepfold-

- 120 Privet.
 - 2 Forsythia Fortunei.
- 35 Lonicera Fragrantissima.
- 1 Red Oak.
- Mineral Springs-
 - 400 Ligustrum Regelianum.
 - 100 Viburnum Opulus.
 - 125 Spirea Van Houteii.
 - 200 Berberis Vulgaris Purpurea.
 - 50 Spiraea Opulifolia.
 - 50 Cydonia Japonica.
 - 125 Hypericum Auream.
 - 100 Andromeda Mariana.
 - 39 Cephalanthus.
 - 55 Calicarpa Purpurea.
 - 16 Philadelphus Candelabra.
 - 25 Lilac, Souv. de. L. Spaethe.
 - 10 Lilac, Villosa.
 - 6 Lilac, Vulgaris.
 - 21 Lilac, Madam Lemoine.
 - 1 Styrax Japonica.
 - 5 Crataegus Cordata.
 - 9 Andromeda Arborea.
 - 2 Magnolia Accuminata.
 - 4 Scarlet Oaks.
 - 1 Red Oak.

Mineral Springs-

- 3 Boleana Poplars.
- 75 Roses Wichuriana.
- 15 Clematis Paniculata.

Falconer Statue-

65 Norway Spruce.

Mall-

- 16 Elms.
- 3 Oaks.

Along 66th Street Road-

- 31 Acer Campestris.
- 2 Koelreuteria.

West Drive, 75th Street-

- 150 Ampleopsis Quincafolia.
- 32 Lespedeza Japonica.
- 25 Syringa Vulgaris.

West Drive, 77th Street-

- 10 Dorothy Perkins.
- 10 Crimson Ramblers.
- 85 Privet.
- 44 Standard Hydrangea Paniculata.
- 5 Andromeda Arborea.
- 2 Koelreuteria.
- 5 Hibuscus Variegata.
- 30 Mixed Roses.
- 52 Robinia Hespida.
- 44 Rosa Rubifolia.
- 113 Forsythia Fortuni.
- 136 Rose Wichuriana,

West Drive (Webster Statue)-

- 2 Andromeda Arborea.
- 8 Viburnum Sieboldi.
- 1 Cornus Florida.
- 3 Styrax Japonica.

East Drive, 79th Street-

- 95 Celastris Scandens.
- 100 Privet.
 - 23 Rhamnus Frangula,
 - 65 Symphoricarpus Vulgaris.
- 30 Symphoricarpus Racemosus.
- 1 Boleana Poplar.
- 6 Lombardy Poplar.
- 3 Styrax Japonica.
- 6 Viburnum Sieboldi.
- 6 Hydrangea Paniculata.
- 5 Andromeda Arborea.
- 150 Symphoricarpus Vulgaris.
- 30 Sambucus Laciniata.
- 100 Sambucus Aurea.
- 65 Privet.

Japanese Lawn (72d Street)—

- 1 Andromeda Arborea.
- 3 Red Oaks.

Entrance to 79th Street Storage Lard—55 Ligustrum Ovalifolium.

72d Street, West Drive.

- 39 Deutzia Lemoine.
- 8 Symphoricarpus.
- 48 Lonicera Fragrantissima.
- 44 Berberis Thunbergii.
- 9 Pyrus Arbutifolia.

West of Conservatory Lake-

- 4 Styrax Japonica.
- 2 Aesculus Carnea.
- 2 Viburnum Sieboldi.
- 4 Cladrastis Tinctoria.
- 3 Salix Babylonica.
- 2 Scarlet Oaks.

81st Street, West Drive-

- 11 Cryptomeria.
- 3 Acer Polymorphum.
- 1 Acer Dissectum,
- 2 Japanese Larch.

Branch Drive, Opposite 82d Street-

3 Liquidambar.

West Drive, South of 86th Street-

6 Larch.

Bolivar Hill-

- 70 Norway Spruce.
- 23 Norway Spruce.

Swedish Schoolhouse--

- 20 Rosa Rubifolia.
- 25 Spirea Opulifolia.
- 30 Privet.
- 20 Sambucus Aurea.
- 100 Wichuriana Roses.
- 20 Dorothy Perkins Roses.
- 25 Jasminum Nudiflora.
- 50 Norway Spruce.
- 20 Berberis Vulgaris Purpurea.
- 4 Bignonia Grandiflora.
- 25 Sambucus Laciniata.
- 4 Cornus Sericea.

10 Euonymus Alatus.

- 15 Callicarpa Purpurea.
- 20 Lespedeza Japonica.
- 15 Symphoricarpus Racemosus.
- 25 Symphoricarpus Vulgaris.
- 20 Spirea Anthony Waterer.
- 10 Euonymus Europa.

Swedish Schoolhouse-

- 10 Cephelanthus.
- 10 Viburnum Sieboldi.
- 10 Rhus Cotinus.
- 15 Forsythia Fortunei.
- 10 Rubus Odratus.
- 15 Hydrangea Paniculata.
- 10 Standard Hydrangea Paniculata.
- 8 Tamarix Africana.
- 8 Syringa Joseka.
- 8 Syringa Vulgaris.
- 8 Syringa Vulgaris Alba.
- 6 Syringa Charles X.
- 10 Syringa Villosa.
- 6 Hippophea Rhamnoides.
- 7 Magnolia Lennei.
- 10 Rhus Aromatica.
- 10 Andromeda Arborea.

85th Street, 8th Avenue-

- 25 Rhamnus Frangula.
- 23 Viburnum Sieboldi.
- 60 Sambucus Aurea.

Belvidere-

30 Ampleopsis Vetchii.

South Tennis Court-

3 Sciadopytis.

Opposite Tennis Road-

25 Pin Oak.

Bridle Road, North of 96th Street-

- 4 Ash.
- 3 Linden.
- 1 Plane.
- 11 Kentucky Coffee.

Bridle Path-

- 175 Japanese Larch.
- 40 Spirea Anthony Waterer.
- 338 Cornus Florida.

Around Reservoir-

- 21 Spirea Van Houtti.
- 3 Styrax Japonica.
- 2 Acer Tartaricum.

West Drive, 90th Street-

1 Gingko.

West Drive, 93d Street-

5 Liquidambars.

East Drive, North of 86th Street-

39 Oriental Planes.

East Drive, 85th to 90th Street-

30 Oriental Planes.

90th Street, 8th Avenue-

- 4 Syringa Villosa.
- 14 Syringa Joseka.
- 33 Syringa Vulgaris Alba.
- 11 Syringa Mary Legray.

Terrace-

- 9 Acer Polymorphun.
- 2 Cryptomeria.
- 16 Viburnum Sieboldi.
- 7 Cornus Florida.
- 5 Hydrangea Quercifolia.
- 8 Sciadopytus.
- 7 Andromeda Arborea.
- 9 Crataegus Cordata.
- 1 Viburnum Sieboldi.
- 20 Itea Virginica.
- 21 Hydrangea Quercifolia.
- 1 Koelreuteria.
- 150 Symphoricarpus Vulgaris.
 - 6 Salix Babylonica.
 - 3 Pin Oaks.
- 100 Calycanthus Florida.
- 12 Red Cedar.
- 10 Cercis Canadensis.
- 40 Stephanandra Flexuosa.
- 65 Kalmia Latifolia.
- 50 Rhododendrons.

Shore of Large Lake (West Drive)—

- 49 Salix Babylonica.
- 20 Salix Thurlowi.
- 28 Viburnum Sieboldi.
- 1 Andromeda Arborea.
- 10 Cornus Florida.

Shore of Large Lake (Point Opposite

Boathouse)—

- 1 Himalayan Pine.
- 2 Salix Thurlowi.
- 3 Tulip Trees.
- 6 Viburnum Sieboldi.

Shore of Lake (Japanese Point)-

- 117 Cornus Sericea.
 - 4 Cornus Florida.
 - 1 Styrax Japonica.
 - 1 Salix Thurlowi.
- 25 Rhus Aromatica.
- 27 Hydrangea Quercifolia.
- 15 Itea Virginica.
- 24 Tamarix Africana.
- 10 Tamarix Gallicea.
- 15 Stephanandra Flexuosa.

Shore of Large Lake (Bow Bridge)-

50 Hibiscus Variegata.

6 Andromeda Arborea.

126 Callicarpa Purpurea.

44 Hippophea Rhamnoides.

50 Symphoricarpus Racemosus.

6 Viburnum Sieboldi.

Salix Babylonica.

Shore of Lake (Terrace)-

100 Mahonia Aquifolia.

50 Mahonia Japonica.

140 Rosa Rugosa.

135 Stephanandra Flexuosa.

Ramble-

17 Planes.

11 Tamarix Africana.

Ramble (Peacock Lawn)-

1 Oriental Plane.

Ramble (Panther Statue)---

50 Clementis Paniculata.

26 Bignonia Grandiflora.

25 Vitis Heterophylla.

90th Street, 8th Avenue-

23 Syringa Charles X.

30 Eunonymus Yeddoensis.

10 Ampleopsis Veitchii.

40 Cornus Mascula.

16 Crataegus Cordata.

4 Liquidambars.

96th Street, 8th Avenue-

50 Jasminum Nudiflorum.

50 Clematis Paniculata.

25 Ampleopsis Quincafolia.

25 Vitis Heterophylla.

Sage Plantation-

250 Rhododendrons.

97th Street Storage Yard-

53 Lombardy Poplars.

27 Salix Thurlowi.

13 Salix Babylonica.

200 Ampleopsis Veitchii.

Rear of 97th Street Yard— 13 Oriental Planes.

100th Street, 8th Avenue-

70 Berberis Vulgaris.

50 Cornus Sericea.

15 Norway Spruce.

250 Symphoricarpus.

25 Rhamnus Frangula.

30 Sambucus Aurea.

North Meadow-

84 European Beech.

12 Acer Rubrum.

3 Scarlet Oak.

8 Red Oak.

12 Lombardy Poplars.

25 Acer Dasycarpum.

106th Street, 8th Avenue-

50 Clematis Paniculata.

50 Ampleopsis Quincafolia.

106th Street, West Drive— 135 Kalmia Latifolia.

110th Street, 8th Avenue.

4 Gingko.

110th Street, West Drive-

40 Hydrangea Paniculata.

110th Street, Lenox Avenue.

90 Ligustrum Regelianum.

3 Koelreuteria.

North of McGowan's Tavern-

50 Ampleopsis Quincafolia.

50 Clematis Paniculata.

Fort Clinton-

20 Scotch Pine.

West Drive (74th Street)—

1 Oriental Plane.

15 Itea Virginica.

114 Berberis Thunbergii.

In the parks outside Central Park a great deal of planting was done. In Riverside Park the gaps in the line of trees along the Drive caused by the removal of dead trees were filled up and the sidewalk plantation along the house line on the east side of the drive was extended at several points. The approaches to Grant's Tomb were planted with gingko trees and other trees suggestive of the Orient, in keeping with the idea of the Commissioner to give to this section a distinctively oriental character. Thus the small addition to the park directly opposite Grant's Tomb was called Sakura Park and hundreds of Japanase cherry trees were planted there a year ago. The gingko tree planted by His Excellency Li Hung Chang, Minister Plenipotentiary and

Ambassador Extraordinary to the United States from the Chinese Empire, in memory of General Grant, stands at the rear of the Tomb. At about 82d street, on a large boulder within the park a tablet was placed as a memorial of Mr. Cyrus Clark, a well-known citizen who had much to do with the development of Riverside Park. The grounds around the memorial were cleaned up, graded and planted with flowering shrubs. Sixteen elms were planted at the Firemen's Memorial, also a number of lindens, tulip trees and purple beech.

At Battery Park extensive shrubbery plantations were set out at various points in the lawns. The shrubs planted include hardly hydrangeas, dogwood, barberry, magnolias and other flowering kinds. More than a hundred trees were planted on the lawns. The varieties planted include scarlet and red oaks, red maples, red and white flowering horsechestnuts, magnolias, etc. Along the iron structure which carries the tracks of the elevated railroad through the park a row of ailanthus trees and large California privet was planted to screen this unsightly structure. The conditions of soil, light, air, etc., along this structure are extremely unfavorable for trees and the ailanthus was selected for this location for its known ability to thrive under conditions impossible for other trees.

A similar plantation was set out along the Mangin street foundation wall of the Manhattan Bridge, where 32 ailanthus were planted.

At Bowling Green, which adjoins Battery Park, a few additional trees and shrubs were planted to supplement the work done there during the previous year, when this park was entirely regraded, sodded and planted.

At John Jay Park, which has been under construction for two years past, oriental planes were planted around the outside of the playgrounds to furnish shade for the children. At Rutgers Park 28 planes were planted to give shade to the children, who use this park almost exclusively. At Jackson Square and Abingdon Square, where playgrounds and school gardens were maintained for children, shade trees were planted.

In City Hall Park 38 additional trees were planted and new plantations of flowering shrubs. The trees were all selected specimens comprising oaks, yellow wood, horse chestnuts and other beautiful varieties. The magnolias planted here the previous year have done well and with the new planting should make this park very attractive in years to come.

In the small parks along Broadway and on Park avenue many plantations of the hardy hydrangeas and other flowering shrubs were set out. Great masses of these beautiful shrubs were planted at selected points on both thoroughfares. On Park avenue the planting of the parks between 57th and 62d streets was entirely remodeled. The old privet hedges which screened the openings over the New York Central R. R. tunnel were removed, fresh mold replaced the old soil, and climbing roses were planted along the fences around the openings. Lombardy poplars were set out along the sides at intervals and specimen shrubs planted at each end.

The newly-constructed plots over the tunnel between 50th street and 56th street were completed and turned over to the City for planting. On this section of Park avenue the tunnel opening was closed over with a concrete roof, which forms the floor of the park space. The construction work was done by the New York Central R. R. Co. in connection with its improvement of the Grand Central Depot. The two plots between 52d street and 54th street were completed in time for fall planting. Lombardy poplars were planted in groups at each end with groups of small flowering shrubs such as deutzias and the like at the corners. At each end is a circular plot which divides the walk which runs through the centre of each park. In these plots were massed dwarf evergreens furnished by the owners of the Montana Apartments, opposite the park between 52d and 53d streets. The absence of fences along the sides of these parks makes it difficult to prevent damage to the new sod and the plantations, as people

generally, and boys in particular, cut across the parks instead of using the sidewalks at the street intersections. Already considerable damage has been done there on this account although the Department has endeavored to prevent it by stationing a uniformed park keeper there. An idea of what he has to contend with, however, can be gained from the stone fights which took place between the gangs of boys who frequent this part of Park avenue, the ammunition being provided from the gravel which was left in the unplanted plots as a protection over the drainage pipes. The Department was finally compelled to remove both gravel and drains in order to stop the fights, which had already resulted in great damage to the windows of the adjacent houses.

On the upper Broadway parks, from 137th street to 168th street, a row of pin oaks

was planted on each side of the centre walk.

On the street sidewalks adjoining the various parks trees were set out where necessary to fill out the plantations. A new plantation of Oriental planes was set out from 155th street north to 170th street along Edgecombe avenue, which forms the westerly boundary of High Bridge Park. The Department planted a few trees at the request of property owners on other streets throughout the City when proper conditions for the successful growth of the trees were found to exist and there appeared to be a sincere intention on the part of the owners to protect the tree from wilful damage. These requests were not very numerous, as most of the owners of property in the built-up portion of the city seem to prefer to have existing trees removed rather than to have more trees planted. The most usual objection is that the trees interfere with the light and air of the houses, the view of the occupants of the house, or where the property is used for business purposes, the advertisement signs, etc., are shut off from the public view.

On Arbor Day the Department assisted various public schools in their celebration exercises, by furnishing the trees for the pupils to plant and sending a gardener to supervise and assist in the planting. The following trees were thus furnished:

Public School, 81st street and Avenue A, 3 Greenleaf Poplars.

Public School opposite Tompkins Square Park, 1 Scarlet Oak.

Public School, East Broadway, 2 Greenleaf Poplars.

Curtis High School, Borough of Richmond, 6 Oriental Planes.

In the Borough of Richmond the sidewalk plantation of trees on the street fronting the Borough Hall at St. George, partly planted in 1912, was completed in the spring of 1913 by the planting of 138 greenleaf poplars. In the small parks in this borough a number of trees of various varieties, including scarlet and red oaks, sweet gums and planes were planted. The complete list of planting in the parks and on the streets outside Central Park during the year is as follows:

Riverside Park-

74th to 78th streets, 26 Norway Maples.

82d street (Clark Memorial):

20 Hydrangea Paniculata.

22 Cornus Mascula.

435 Symphoricarpus Vulgaris.

37 Spirea Aurea.

10 Syringa Joseka.

100 Ampleopsis Quincafolia.

3 Lombardy Poplar.

40 Stephanandra.

50 Berberis Vulgaris.

135 Berberis Thunbergii.

25 Aralia Pentaphylla.

35 Crataegus Coccinea.

130 Rosa Multiflora.

Riverside Park-

82d street (Clark Memorial):

75 Rosa Rugosa.

20 Rosa Wichuriana.

50 Spirea Van Houtti.

95th street, 10 Oriental Planes.

96th to 108th streets:

4 Tulips.

16 Elms.

2 Purple Beech.

5 Linden.

43 Yellow Wood.

3 Koelreuteria.

3 Liquidambar.

30 Hydrangea Paniculata.

36 Red Oak.

Riverside Park-

Property Road, 96th to 108th streets, 80 Oriental Planes.

121st street:

- 6 Rhus Cotinus.
- 6 Viburnum Sieboldi.
- 12 Rhambus Frangula.
- 6 Hibscus Variegata.

122d street, 1 Oriental Plane.

Grant's Tomb:

- 34 Gingko.
- 25 Yellow Wood.
- 9 Styrax Japonica.
- 15 Red Maples.
- 2 Tulip.
- 4 Koelreuteria.

Sakura Park, 8 Gingko. Claremont, 20 Privet.

135th street to 145th street-

- 10 Oriental Planes.
- 25 Spirea Reevesii.
- 40 Spirea Prunifolia.
- 25 Symporicarpus Vulgaris.

Morningside Park, 3 Viburnum Sieboldi.

Mt. Morris-

- 29 Hemlock.
- 5 Norway Spruce.

St. Nicholas-

- 36 Oriental Planes.
- 12 Viburnum Sieboldi.
- 125 Ampelopsis Veitchii.
 - 5 Spirea op. Aurea.
 - 3 Silver Lindens.
 - 1 Magnolia Accuminata.

Small Park, 137th street, St. Nicholas

avenue, 11 Oriental Planes.

Colonial Park, 8 Oriental Planes.

Speedway, 125 Ampleopsis Vetchii.

Jumel Mansion-

- 38 Green Leaf Poplars.
- 60 California Privet.

5 Elms, 5 Oaks, 4 Maples and 6 Tulip Poplars (from Washington's Headquarters, Mt. Vernon, Va.).

Isham Park--

- 1 Cephalanthus.
- 1 Cercis Canandensis.
 - 1 Standard Hydrangea Paniculata.
 - 1 Andromeda Arborea.
 - 1 Magnolia Accuminata.
 - 1 Jasminum Nudiflorum.

129th street and 3d avenue (Park), 12 Oriental Planes.

John Jay Park, 89 Oriental Planes.

Carl Schurz-

- 11 Oriental Planes.
- 2 Red Oak.
- 1 Gingko.
- 4 Fornus Florida.
- 5 Liquidambar.

Empire Park, 190 Stephanandra.

Empire Park, Broadway, 63d street, 195 Hydrangea Paniculata.

Lincoln Square (66th street and Broadway)—

- 7 Lombardy Poplars.
- 1 Liquidambar.
- 1 Oriental Plane.

Verdi Square (72d street and Broadway), 1 Liquidambar.

Hamilton Park (138th street and Broadway), 12 Liquidambars.

Queensboro Bridge, 7 Oriental Planes. DeWitt Clinton Park, 78 Oriental Planes.

Times Square-

- 8 Lombardy Poplar.
- 3 Koelreuteria.
- 125 Ligustrum Regelianum.
- 125 Ligustrum Ovalifolium.

Bryant Park-

- 439 Privet.
- 10 Viburnum Cassinoides.
- 350 Euonymus Radicans Variegata.
- 29 Oriental Planes.

Herald Square-

- 1 Liquidambar.
- 30 Euonymus Alatus.

Greeley Square-

- 3 Oriental Planes.
- 2 Aronia Arbutifolia.
- 12 Rhus Cotinus.
- 18 Cornus Mascula.

Chelsea Park-

- 1 Koelreuteria.
- 1 Yellow Wood.
- 30 Berberis Vulgaris.
- 20 Hydrangea Paniculata.
- 40 Viburnum Opulus.
- 50 Ligustrum Regelianum.
- 90 Ligustrum Ovalifolium,

Madison Square-

- 9 Oriental Planes.
- 7 Scarlet Oak.
- 3 Koelreuteria.
- 2 Horsechestnuts.
- 1 Red-flowering Horsechestnut.
- 4 Yellow Wood.
- 1 Andromeda.
- 30 Hippophae Rhamnoides.
- 40 Sympnoricarpus Vulgaris.
- 35 Forsythea Fortunei.
- 47 Rhus Cotinus.
- 65 Rhamnus Frangula.
- 35 Rosa Rubifolia.

West 23d Street Park-

- 3 Green Leaf Poplar.
- 2 Koelreuteria.
- 2 Gingko.
- 1 Yellow Wood.
- 5 Oriental Planes.

Stuvvesant Park-

2850 Privet.

- 35 Forsythia Fortunei.
- 40 Aronia Arbutifolia.
- 40 Viburnum Sieboldi.
- 2 Yellow Wood.
- 1 Horsechestnut.

Washington Square-

- 19 Oriental Planes.
- 3 Koelreuteria.
- 4 Green Leaf Poplar.
- 5 Pin Oaks.
- 1 Yellow Wood.
- 2 Red Oak.
- 2 Scarlet Oak.
- 7 Andromeda.

Abingdon Square-

- 600 Privet.
 - 11 Oriental Planes.
- 1 Willow.

Jackson Square-

- 1 Oriental Plane.
- 6 Norway Maple.

Canal Street Park-

- 200 Privet.
- 10 Oriental Planes.

Beach Street Park, 3 Oriental Planes. Duane Street Park, 4 Oriental Planes.

Hudson Park-

- 10 Norway Maple.
- 1 Pin Oak.
- 10 Green Leaf Poplar.

Hudson Park-

- 2 Oriental Planes.
- 3 Red Maples.

Christopher Street Park-

- 400 Privet.
 - 2 Pin Oak.
 - 2 Red Maple.
 - 1 Koelreuteria.
 - 1 Andromeda Arborea.
 - 1 Viburnum Sieboldi.

East 17th Street Park, 5 Oriental Planes.

Cooper Square Park-

- 2 Oriental Planes.
- 4 Red Oak.

Tompkins Square Park-

- 19 Oriental Planes.
- 2 Tulip Trees.
- 2 Gingkos.
- 2 Liquidambars.
- 12 Lombardy Poplars.
- 4 Pin Oaks.
- 3 Red Oaks.
- 1 Scarlet Oak.
- 23 Viburnum Cassinoides.
- 23 Viburnum Molle.
- 23 Viburnum Opulus.
- 23 Viburnum Sieboldi.
- 50 Hydrangea Paniculata.

Hamilton Fish Park-

- 4 Gingkos.
- 20 Lombardy Poplars.
- 4 Pin Oaks

Seward Park-

- 1 Gingko.
- 2 Liquidambars.
- 11 Lombardy Poplars.
- 7 Pin Oaks.
- 25 Oriental Planes.

Delancey Street-

- 15 Lombardy Poplars.
- 36 Hydrangea Paniculata.

Rutgers Park, 28 Oriental Planes

Corlears Hook-

- 13 Liquidambars.
- 9 Greenleaf Poplars
- 2 Gingkos.
- 10 Lombardy Poplars
- 2 Pin Oaks.
- 24 Oriental Planes.
- 2250 Privet.
- Oriental Park (Grand Street), 8 Oriental Planes.

Paradise Park, 15 Oriental Planes. City Hall-

- 11 Oriental Planes.
 - 3 Gingkos.
 - 1 Yellow Wood.
 - 2 Red Maples.
 - 6 Styrax Japonica.
 - 2 Scarlet Oaks.
 - 4 Kolreuteria.
 - 3 Ailanthus.
 - 6 Liquidambars.
 - 4 Red-flowering horse chestnuts.
- 20 Cornus Mas.
- 50 Euonymus Alatus.

Columbus Park, 1 Oriental Plane. Kenmare Park, 12 Oriental Planes

Bowling Green-

- 3 Boleana Poplars.
- 1 Yellow Wood.
- 1 Gingko.
- 1 Cornus Mas
- 1 Horse Chestnut.
- 3 Oriental Planes

Battery-

- 85 Philadelphus Candelabra.
- 100 Spirea Van Houtti
- 25 Chionanthus Virginica.
- 70 Cornus Sericea.
- 75 Berberis Vulgaris Purpurea.
- 50 Hippophea Rhamnoides.
- 50 Euoymus Alatus.
- 25 Eleagnus Longipes.
- 75 Ribes Aurea.
- 100 Aronia Arbutifolia.
- 50 Cornus Mascula
- 35 Hydrangea Paniculata.
- 88 Ligustrum Regelianum.
- 99 Ligustrum Ibota
- 75 Rhamnus Frangula
- 97 Acer Tartaricum.
- 59 Oriental Planes
- 13 Red Oaks
- 21 Horse Chestnuts
- 7 Scarlet Oaks
- 6 Red Maples.
- 15 Linguidambars.
- 11 Yellow Wood
- 65 Ailanthus
- 26 Norway Spruce.
- 20 Dogwood.
- 9 Magnolias.
- 20 Stryax Japonica.
- 5 Red-flowering Horse Chestnuts

Park Avenue Parks-

64th Street:

78th Standard Hydrangea Paniculata.

84th Street:

- 200 Paniculata (Hydrangea).
 - 1 Koelreuteria Paniculata.
 - 2 Andromeda Arborea.
- 57th to 60th Streets:
 - 98 Lombardy Poplars.
 - 12 Crimson Ramblers.
- 57 Dorothy Perkins.
- 72d Street --
 - 5 Koelreuteria Paniculata.
 - 23 Cornus Mascula.
- 52d to 54th Streets:
 - 40 Lombardy Poplars.
 - 245 Ligustrum Regelianum.
 - 40 Stephanandra Flesuosa.

 - 40 Spirea Van Houtti.
 - 20 Diervilla Rosea.
 - 20 Diervilla Eva Rathke.
 - 40 Symphoricarpus Vulgaris

60th to 63d Streets:

- 20 Ligustrum Ibota.
- 50 Rosa Setigera.
- 92d to 95th Streets:
 - 4 Lombardy Poplars

Seventh Avenue Parks-

110th to 153d Streets:

12 Oriental Planes.

Broadway Parks-

- 60th to 122d Street: 43 Crataegus Cordata
 - 57 Hydrangea Paniculata.
 - 25 Viburnum Cassinoides.
 - 1 Viburnum Sieboldii.
 - 65 Rhus Capalina.

 - 15 Rhus Armoatica.
 - 5 Tamarix.
 - 60 Stephanandra
 - 25 Eleagnus Umbellatus.
 - 24 Syringa Joseka.
 - 12 Syringa Vulgaris.
 - 18 Ligustrum Regelianum.
 - 6 Syringa Villosa.
 - 6 Syringa Chas. X.
 - 6 Syringa Vulgaris Alba.
 - 53 Desmodium.
 - 125 Hydrangea Paniculata.

137th to 168th Street:

410 Pin Oaks.

BOROUGH OF RICHMOND.

Washington Park, Stapleton, 4 Norway Maples.

Triangle Park Plot, Tompkinsville-

- 1 Gingko.
- 6 Red Oaks.

Triangle Park Plot, Tompkinsville-

- 15 Liquidambars.
- 10 Oriental Planes.
- 2 Scarlet Oaks.
- 3 Boleana Poplars,

Curtis High School, 6 Oriental Planes.

The decay of the old trees forming the original plantations in the old-established parks of Manhattan made necessary the removal of a great many of those trees during 1913. By far the greatest number of course was taken from Central Park, the largest park in this borough. 979 trees, mostly of large size, were removed from this park. 201 of these were hickory trees removed from the wooded section in the north end of the park on account of the ravages of the hickory bark borer. This work was undertaken in co-operation with the New York State Agricultural Department in its efforts to stamp out this destructive beetle which has caused the loss of thousands of trees in New York State, particularly in the vicinity of New York City.

In Fort Washington Park 470 dead trees were cut down. Among them were 106 chestnut trees, forty of them over 80 feet in height, one of them over 17 feet in circumference at the base of the trunk, more than half of them over 60 feet, the rest averaging 40 feet, all of which had succumbed to the blight which has destroyed so many of these magnificent trees in the East during the past few years. There were also included in the total 111 Hickory trees and 136 Oaks, mostly ranging in height from 30 to 60 feet, 33 Oaks and 43 Hickories being above that height. This was the first attempt the Department has made to thoroughly clean up the plantations of this park since it was acquired by the City in 1898, as it is still undeveloped. Plans for its development have already been prepared, and the Board of Estimate and Apportionment has been requested to provide the necessary funds for the work. In removing the trees, the largest of them were cut so as to leave standing a portion of the trunk about 3 feet in height, and this stump was cut so as to form a seat with a back.

The list of trees removed from the parks during the year is as follows:

PARK TREES REMOVED, 1913,

MANHATTAN.

Parks.		Parks	
Central Park	979	Corlears Hook	1*
Fort Washington	470	City Hall	3
Riverside	130	Paradise	1*
High Bridge	63	Battery	10*
Morningside	54	Cleveland Square	1*
Clark Playground	18	Stuyvesant Park	2
Colonial	15	DeWitt Clinton	4*
St. Nicholas	7	Alex. Hamilton	13*
Canal Street	10*	Carl Schurz	11
Bryant	11	Small park, 129th st. and 3d ave	12*
Madison Square	5	Greeley Square	1*
Union Square	4	Broadway plots, 137th to 168th sts.	46*
Christopher Street	1*		
Washington Square	12	Total	1.881

Those trees marked with a (*) in the above list were small trees planted within the past year or two, but which failed to take hold. The cause for failing cannot be definitely stated. In some cases the soil was not rich enough; in many cases the trees planted were not of a variety suited to the location, as for instance, the 13 Liquid Ambers removed from Alexander Hamilton Park, 138th street and Broadway, which have been replaced by Oriental Planes which are doing nicely. The 46 trees removed from Broadway parks (137th to 168th streets), were Pin Oaks of extra large size, planted last Spring, when 410 of these trees were set out in the parks. All received the same care and attention, but the 46 died. As there is not more than 18 to 24 inches of soil over the subway structure along Broadway where these trees are planted, it is likely that a great many more, if not all of these trees, will die in a year or two. At Canal Street, Washington Square, Battery and other small parks the trees removed were taken from the sidewalk plantations where the sub-surface structures, such as sewers, gas and electric mains and the like, render the soil conditions unfavorable for tree growth.

The following summary shows the work of the department on the street trees of Manhattan during the year:

Dead or dangerous trees removed	402
Planted	273

Of the number removed, 381 were removed by the department and 35 by property owners under permit issued by the department. Permits were issued only where the tree was dead or dangerous, and where conditions were found to be favorable the property owner was required to plant new trees to replace those taken out. Permits were issued for the planting of 79 trees by property owners during the year, but of this number only 60 were actually planted, some of the owners desiring to defer the planting until next Spring. Of those removed by the department, the greatest number was removed from upper Broadway and Seventh avenue. The original plantation of Elms which lined the sidewalks of these thoroughfares are of about the same age as those on the Mall in Central Park and on the sidewalks of Fifth avenue and Eighth avenue, adjoining the park. They are in practically the same condition, too, and each year a large number of them have to be taken out. The same is true of the Elms on Lenox avenue. The great size of the trees and the constantly diminishing root room they have on account of the increased aggression of subways, sidewalks, vaults, sewers, electric conduits, etc., make it impossible for the tree to gain sufficient sustenance to maintain life. 89 of these large trees, all of them practically dead, were removed from Broadway, between 59th and 135th streets, 32 from Lenox avenue and 19 from Seventh avenue, north of 110th street. The removal of the trees, especially along Broadway, met with the expressed approval of the owners and occupants of the property. In only one instance was a request made to have trees saved that had been marked for removal.

This tree was located in front of a large apartment house on upper Broadway, and although it was very badly decayed and its certain removal is a matter of only a year or two, in deference to the wishes of the property owners, the cavity was filled and the tree put in as good condition as possible. In two other instances new trees were planted in place of those removed. These were also in front of apartment houses. Broadway, from 59th street to Manhattan (128th) street, is now essentially a business street, and the property owners, as well as the occupants of the stores along the avenue, object to the trees as hindrances to their business. The number of trees on this section of Broadway has been greatly diminished since the building of the subway along that thoroughfare. From 59th to 72 streets there are now left only 11 of the original 208. The work of removal is still under way and must be continued in 1914, as the great majority of the trees are even now very unsightly from the constant necessary cutting out of dead and dangerous limbs and will have to be removed.

The following list shows the locations of the street trees removed during the year:

STREET TREES REMOVED, 1913

Location.	No.	Kind.
		(4 Maples.
Amsterdam Avenue	. 7	{2 Oaks.
		1 Horsechestnut.
		14 Elms.
roadway, north of Manhattan St	. 66	46 Oaks.
. 1 (1 C.W 1 - 44 C)	91	6 Maples. 2 Maples.
roadway, south of Manhattan St	91	89 Elms.
dgecombe Avenue		4 Maples.
Vest 86th Street		6 Maples.
th Avenue and 53d Street		1 Plane.
h Avenue		∫ 9 Maples.
		4 Elms.
1st Street	:	1 Maple.
	0.4	(32 Elm.
enox Avenue	. 34	1 Maple.
COAL CARE WATER		1 Horsechestnut.
60th Street, West	• •	1 Maple. 1 Maple.
ast 123d Street	2	∫ 1 Maple.
ext fram sueet	_	1 Poplar.
Vest 155th Street	. 10	2 Elms.
Yest 100th Street		8 Maples.
Vest 130th Street	. 4	∫ 2 Elms.
		1 2 Maples.
Vest 152d Street		5 Maples.
Vest 116th Street	6	∫ 1 Elm.
		5 Maples.
ast 112th Street	. 2	1 Maple.
7 4 141 4 54		1 Oak.
Vest 141st Street		1 Maple. (4 Maples.
ast 118th Street	. 7	1 Chestnut
asi from Sheet		1 Linden.
		1 Elm.
Vest 151st Street	. 2	1 Maple.
	_	1 Elm.
ast 120th Street		1 Maple.
ast 122d Street		∫ 1 Linden.
		1 Maple.
ast 115th Street		1 Maple.
ast 111th Street		1 Maple.
ast 114th Street	4	2 Maples.
Vest 124th Street	. 4	3 Maples. 1 Elm.
Vest 132d Street		4 Maples.
Vest 133d Street		2 Maples.
Vest 134th Street		1 Maple.
Vest 137th Street		1 Elm.
Vest 128th Street		∫ 1 Elm.
		1 Maple.
Cast 117th Street		1 Maple.
		1 Elm.
Vest 139th Street	. 3	1 Poplar.
		1 Maple.
		1 Linden.
1 1 A		
leasant Avenue	. 8	{ 3 Poplars. 4 Maples.

Location.	No.	Kind.
Jpper 7th Avenue		19 Elms.
East 72d Street		2 Poplars.
St. Nicholas Avenue		18 Maples.
West 69th Street		2 Maples.
West End Avenue.		∫ 2 Elms.
vvest End Hvende	U	4 Maples.
East 81st Street		6 Poplars.
West 169d Street	3	1 Maple.
West 162d Street		2 Planes.
Wast 140th Ct		
West 149th Street		1 Maple.
Lower 7th Avenue		1 Maple.
West 106th Street		1 Poplar.
West 165th Street		1 Maple.
East 119th Street		1 Poplar.
West 161st Street	$^{-2}$	∫ 1 Elm.
		\ 1 Maple.
Lawrence Street		1 Elm.
Old Broadway		2 Elms.
Fort Washington Avenue		2 Elms.
East 41st Street.		1 Maple.
West 106th Street		1 Maple.
East 91st Street.		1 Maple.
East 121st Street.		1 Elm.
West 131st Street		1 Elm.
West 55th Street		2 Maples.
		1 Elm.
West 23d Street		
Lexington Avenue	. 6	2 Ailanthus.
III . 100.1 O.		\ 4 Maples.
West 129th Street		1 Maple.
West 156th Street		1 Maple.
West 103d Street		3 Maples.
Convent Avenue		1 Maple.
6th Avenue	. 2	1 Elm.
		∖ 1 Maple.
East 127th Street		1 Maple.
Waverly Place		1 Maple.
Cannon Street		. 1 Poplar.
West 72d Street.		1 Elm.
Audubon Avenue.		1 Maple.
West 100th Street		1 Elm.
Madison Avenue		(2 Elms.
Wiadison Tivenue	. 3	3 Maples.
Foot 77th Street		
East 77th Street		1 Maple.
East 14th Street		3 Maples.
East 116th Street		1 Oak.
East 60th Street		1 Plane.
Cor. Market and Henry Streets		1 Maple.
West 142d Street		1 Maple.
East 11th Street		2 Maples.
West 10th Street		1 Linden.
West 53d Street		1 Plane.
	•	
Total		. 402

TREES PLANTED ON CITY STREETS BY THE PARK DEPARTMENT.

Cannon and Rivington Streets	2 Oriental Planes.
Avenue A (81st and 82d Streets)	3 Green Leaf Poplars
East Broadway and Scammel Streets	1 Green Leaf Poplar.
Audubon Avenue and 168th Street	1 Norway Maple.
99th Street, between Broadway and Amsterdam Avenue	6 Oriental Planes.
4th Avenue (20th Street)	1 Oriental Plane.
Mangin Street	32 Ailanthus.

Amsterdam Avenue (152d Street)	3 Oriental Planes.
St. Nicholas Avenue (151st Street)	2 Oriental Planes
St. Nicholas Avenue (No. 708)	1 Oriental Plane.
Edgecombe Avenue, 155th to 170th Streets	101 Oriental Planes.
West End Avenue (No. 411)	1 Oriental Plane.
West End Avenue (No. 465)	
West End Avenue (101st Street)	
123d Street and Morningside Avenue East	1 Oriental Plane.
Broadway (112th Street)	1 American Elm.
Broadway (155th Street)	1 Oriental Plane.
Broadway (114th Street)	4 Oriental Planes.
Broadway (69th Street)	1 Oriental Plane.
Madison Avenue (120th to 124th Streets)	
,	
Total	104

TREES PLANTED BY PROPERTY OWNERS, 1913, UNDER PARK DEPARTMENT PERMITS.

Broadway	3	West 85th street	2
East 77th street	3	West 138th street	7
West 147th street	3	East 72d street	1
East 78th street	15	West 139th street	3
East 75th street	6	East 50th street	12
East 19th street	6	Beekman place	21
Madison avenue	4	Madison avenue	6
East 63d street	3	Henry street	5
East 64th street	1	Fort Washington avenue	29
Park avenue	6	East 64th street	1
East 82d street	4	Fifth avenue, 70th to 71st streets	. 13
West 85th street	1	East 72d street	1
West 68th street	1	-	
West 74th street	1	Total	151

In the Borough of Richmond a force of six men was employed throughout the year on the care of street trees. This force was all that could be spared for the work with the limited appropriation available and the men were kept busy removing dead and dangerous trees, and trimming out dead and dangerous limbs, in response to requests of property owners, police and other City officials whose duty it is to safeguard the streets. The maintenance of aerial lines of telephone, telegraph and electric light wires in the streets of this Borough make necessary the constant trimming of the branches where they come in contact with the wires, and as the Department has not the men to do this work, permits were issued to the New York Telephone Company, the Richmond Light and Railroad Company and the New York Fire Department to do the necessary trimming with their own men, under the supervision of the Park Department Arboriculturist. Hundreds of trees were trimmed under these permits, but on account of the vast territory covered by the Arboriculturist in his investigation of complaints as to dangerous trees and his necessary supervision of the work of his own men, the work of the linemen of the various companies could not be given much attention. Their cutting, usually done with a hatchet, generally resulted in damage to the trees and caused constant complaint. A return to the system adopted some years ago is recommended, whereby the Department employees do all necessary work on the trees, the companies paying them direct upon certification of the payroll of the Department. This places the responsibility for the proper performance of the work on the Department, while the cost is defrayed by the companies benefited.

In addition to the trees planted on the street fronting the Borough Hall at St. George by the Department, trees were planted by property owners under Department

permits at various locations through the Borough. The work of the Department on the street trees in Richmond is shown in the following summary:

SUMMARY OF WORK ON STREET TREES, BOROUGH OF RICHMOND, 1913.

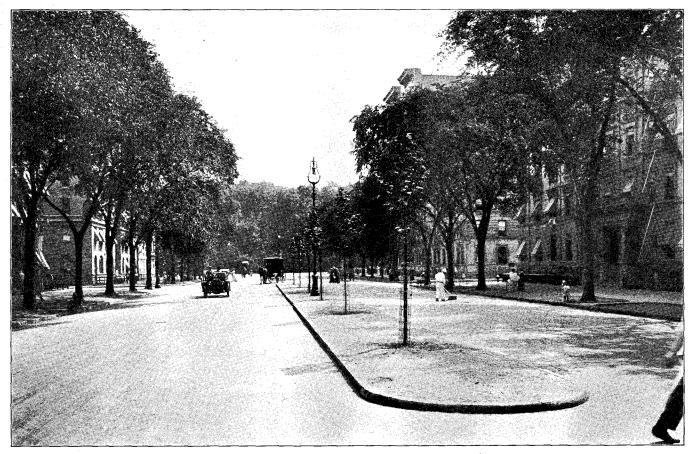
TREES REMOVED BY THE DEPARTMENT.

Location		Nu	mb	er.
PORT RICHMOND:				
South Avenue				1
Richmond Avenue				$\frac{1}{3}$
Charles Avenue				1
Jewett Avenue				3
D CODD A MATE				•
ROSEBANK: Charles Street				1
New York Avenue				$\frac{1}{2}$
WEST NEW BRIGHTON:				-
Westervelt Avenue				3
Post Avenue.				6
Trinity Place				$\check{2}$
Manor Road				1
Burgher Avenue				1
Water Street				2
STAPLETON:				
Beach Street				Ţ
William Street				4
Broad Street				1
St. Paul's Avenue				$\frac{2}{2}$
Van Duzer Street				1
Varian Street				3
Clove Road				ĭ
NEW DORP:				-
Sea View Avenue				1
Rose Avenue.				î
Third Street				1
Fourth Street.				1
NEW BRIGHTON:				
Richmond Terrace				1
Linden Street				1
St. Mark's Place				2
Stuyvesant Place	. . .			4
TOMPKINSVILLE:				
Richmond Turnpike				1
Montgomery Avenue			• •	1
LIVINGSTON:				_
Bard Avenue				$\frac{2}{2}$
Richmond Terrace				2
WEST BRIGHTON:				
Prospect Street				1
Broadway				$\frac{1}{1}$
Manor Road				1
TOTTENVILLE, Potter Street			• •	î
CONCORD, Main Avenue				î
ELM PARK, Morningstar Road				2
MARINER'S HARBOR, Morningstar Road				1
WESTERLEIGH, Fiske Avenue.				3
ARROCHAR, Richmond Avenue				2
CLIFTON, Bay Street				1
Total				7 5
; v.a.,				

TREES REMOVED BY PROPERTY OWNERS OUDER PARK DEPARTMENT FER	MIIS.	
Location.	Nur	nber.
PORT RICHMOND:		_
Heberton Avenue		
Jewett Avenue		
Richmond Avenue.		
STAPLETON:		
St. Paul's Avenue		2
Broad Street		
Riker Street	• • • • • •	. 1
MARINER'S HARBOR:		
Van Pelt Avenue.		
Andrews Avenue		0
Third Street		1
Clinton Street		$\dot{\hat{2}}$
GREAT KILLS:		_
Amboy Road		8
SOUTH BEACH, Sand Lane		5
TOMPKINSVILLE, Richmond Turnpike	,	1
CONCORD, Phine Avenue		$\frac{2}{1}$
CONCORD, Rhine Avenue	· · · · · ·	1
WEST NEW BRIGHTON, Brook Avenue.		10
ST. GEORGE, St. Mark's Place		2
ARROCHAR, Richmond Avenue		1
TOTTENVILLE:		
Amboy Road		
Fisher Avenue		1
Total		65
2344		00
TREES PLANTED BY THE DEPARTMENT.		
Location	Nun	ıber.
	Nun af Pop	nber. dars.
Location. Jay Street, St. George (Borough Hall)	af Por	olars.
Location. Jay Street, St. George (Borough Hall)	af Pop Ermits	olars.
Location. Jay Street, St. George (Borough Hall)	af Pop Ermits	olars.
Location. Jay Street, St. George (Borough Hall)	af Por ERMITS Nun	olars. nber.
Location. Jay Street, St. George (Borough Hall)	af Por ERMITS Nun	olars. nber. 12
Location. Jay Street, St. George (Borough Hall)	af Pop ERMITS Nun	olars. nber. 12 2 3
Location. Jay Street, St. George (Borough Hall)	af Pop ERMITS Nun	olars. nber. 12 2 3
Location. Jay Street, St. George (Borough Hall)	af Pop ERMITS Nun	olars. nber. 12 2 3 3
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Location. Jay Street, St. George (Borough Hall)	af Pop ERMITS Nun	12 2 3 3
Location. Jay Street, St. George (Borough Hall)	af Pop ERMITS Nun	12 2 3 3
Location. Jay Street, St. George (Borough Hall)	af Popermits Nun	12 2 3 3 30 4
Location. Jay Street, St. George (Borough Hall)	af Popermits Num	12 2 3 3 30 4
Location. Jay Street, St. George (Borough Hall)	af Popermits Num	12 2 3 3 30 4 5 4 2
Location. Jay Street, St. George (Borough Hall) TREES PLANTED BY THE PROPERTY OWNERS, UNDER PARK DEPARTMENT PL Location. WEST NEW BRIGHTON: Bard Avenue Dongon Street DuBois Avenue Bodine Street. Oakland Avenue Pelton Avenue Carey Avenue Bennett Avenue. PORT RICHMOND: Harrison Avenue Hatfield Avenue Hatfield Avenue	af Popermits Num	12 2 3 3 30 4 5 4 2
Location. Jay Street, St. George (Borough Hall)	af Popermits Nun	12 2 3 3 30 4 5 4 2 7
Location. Jay Street, St. George (Borough Hall)	af Popermits Nun	12 2 3 3 30 4 5 4 2 7
Location. Jay Street, St. George (Borough Hall) TREES PLANTED BY THE PROPERTY OWNERS, UNDER PARK DEPARTMENT PILOCATION. WEST NEW BRIGHTON: Bard Avenue Dongon Street DuBois Avenue Bodine Street. Oakland Avenue Pelton Avenue Carey Avenue Bennett Avenue Harrison Avenue Hatfield Avenue Hatfield Avenue Heberton Avenue STAPLETON: Court Street. Targee Street.	af Pop	12 2 3 3 30 4 5 4 2 7
Location. Jay Street, St. George (Borough Hall) TREES PLANTED BY THE PROPERTY OWNERS, UNDER PARK DEPARTMENT PLANTED BY THE PROPERTY OWNERS, UNDER PARK DEPARTMENT PROPERTY O	af Pop	12 2 3 3 30 4 5 4 2 7
Location. Jay Street, St. George (Borough Hall)	af Popermits Nun	12 2 3 3 3 30 4 5 4 2 7 7 3 5 5 2
Location. Jay Street, St. George (Borough Hall)	af Popermits Nun	12 2 3 3 30 4 5 4 2 7
Location. Jay Street, St. George (Borough Hall)	af Popermits Nun	blars. 12 2 3 3 3 3 3 4 4 2 7 7 3 5 2 2 18
Location. Jay Street, St. George (Borough Hall) TREES PLANTED BY THE PROPERTY OWNERS, UNDER PARK DEPARTMENT PILOCATION. WEST NEW BRIGHTON: Bard Avenue Dongon Street DuBois Avenue Bodine Street. Oakland Avenue Pelton Avenue Carey Avenue Bennett Avenue Harrison Avenue Hatfield Avenue Haberton Avenue Palmer Avenue STAPLETON: Court Street Targee Street Broad Street NEW BRIGHTON: Curtis Place Hamilton Avenue TOTTENVILLE:	af Pop	blars. 12 2 3 3 3 3 3 4 4 2 7 7 3 5 2 2 18
Location. Jay Street, St. George (Borough Hall)	af Poper Num	blars. 12 2 3 3 3 3 30 4 4 2 7 7 3 5 5 2 2 18 8 8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

TREES TRIMMED BY THE DEPARTMENT.		
Location.	Num	ber.
PORT RICHMOND:		
John Street		6
Jewett Avenue		17
Anderson Avenue		1
Lafayette Avenue		1
Mersereau Avenue.		12
Washington Place		4
NEW BRIGHTON:		
Hamilton Avenue		. 17
Fourth Avenue		2
WEST NEW BRIGHTON:		
Westervelt Avenue		6
Post Avenue		15
Bement Avenue		4
Taylor Street		3
ROSEBANK:		
Clifton Avenue.		2
New York Avenue		3
Pennsylvania Avenue		3
NEW DORP:		
Sea View Avenue		7
Third Street		20
Fourth Street		20
STAPLETON:		
Metcalf Avenue		1
William Street		8
Van Duzer Street		1
RICHMOND:		
Centre Avenue		3
ST. GEORGE, Fort Place		2
TOMPKINSVILLE, Sherman Avenue		2
CLIFTON, Townsend Avenue		7
m . 1	_	1.07
Total		167
Number of Permits Issued.		
For removal of trees	25	
For planting trees	33	
For trimming trees	14	
Total	72	
	90	
Total number of requests received for attention to street trees.	.52	

The requests covered locations in all parts of Staten Island, which constitutes the Borough of Richmond, from St. George at one end, to Tottenville at the other, a distance of about eighteen miles, and from Kill Von Kull to South Beach, across the Island, about nine miles. A great deal of the trimming and removal of trees in this Borough during the year was due to the laying of sidewalks and other improvements ordered by the City on hitherto unimproved streets. These improvements usually necessitated the widening of the sidewalk space, with the result that many fine trees standing in the line of the improvements and too old to be transplanted, had to be removed. The Borough is essentially a home section, however, and the desire of the residents to have their streets beautified with shade trees is shown in the large number of trees planted by them under Park Department permits. Of course only a comparatively small area of the streets of the Borough has been finally improved, and it is to the maintenance of the trees along these streets that the Department desires to give special attention. To do this, an increased force of men is required, as the present



Seventh Avenue, North of Central Park. Oriental Planes in Parkway Center Plots. American Elms on Sidewalks.

force is barely sufficient to safeguard the City's interests by the removal of dangerous trees and dead wood.

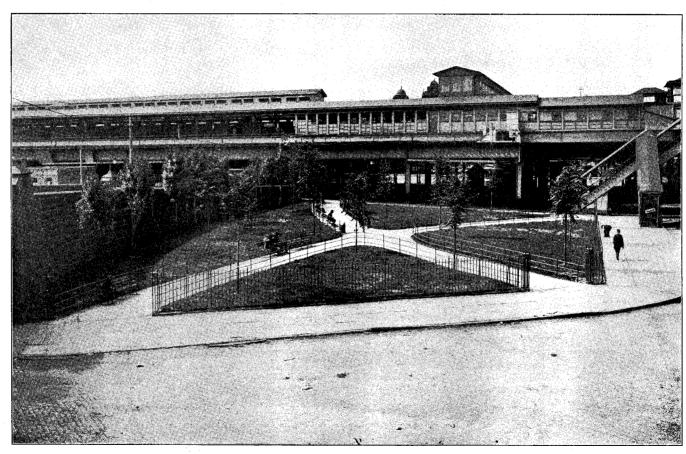
RESOILING AND REGENERATION OF LAWNS.

In Central Park the regeneration of lawns was carried on during the spring and fall. The north meadow and the ball ground, both seeded in the late fall of the previous year, showed a good stand of grass in the spring. The north meadow seed did not germinate as quickly as the ball ground, and it was given another harrowing and seeding by order of the Commissioner. Both fields were cut and rolled frequently during the season and should be in condition to open to the public next summer. During the summer the park flock of sheep was pastured in the ball ground, partly to keep the grass down and to help fertilize the sod and partly to permit of the use of the sheep meadow for tennis and baseball.

A large number of small lawn spaces throughout Central Park, in which the grass was poor, were spaded up, fertilized with manure and lime and seeded. On some of the larger lawns a number of large areas covered with summer grass, which made unsightly spots on the lawns in the fall, were similarly treated. Outside Central Park the principal work on the regeneration of the soil was carried on in Riverside Park, the parkway plots on upper Seventh avenue, and Hudson Park. In Riverside Park the lawns at the Firemen's Memorial were spaded up and sodded and a number of small lawn spaces along Riverside drive were reseeded.

The Seventh avenue parkway plots from 110th to 153d street, in which the soil is of a very poor quality, were also treated in the same way, except that they were sown with a mixture of cow peas and vetch, which will be turned under the coming spring. At Hudson Park the lawns and slopes were similarly treated. These border the sunken lagoon which is located in the centre of the park running east and west, and the sloping banks and side lawns occupy almost all of the westerly portion of the park outside the lagoon. These slopes have been alternately sodded and planted in past years, the last time two years ago, when they were planted thickly with barberry shrubs, in an endeavor to keep these slopes from being trampled into dust. Even this plan failed however, scarcely a vestige of the 3,200 shrubs planted remaining at the end of the second year. To protect the slopes after the seeding done this year six-foot wire mesh fences were erected to completely enclose the plots. The seed used in this season's work was treated with a nitrogen-bearing bacteria, as an experiment. To provide a basis of comparison as to the effect of the bacteria, certain sections in Central Park, Hudson Park and the Seventh avenue parkway plots adjoining sections sown with the fertilized seed were seeded with the plain, unfertilized seed. No difference was apparent in the results, both sections germinating about the same time and showing equal growth thereafter. All the principal lawns and plantations in Central and Riverside Parks and the larger small parks throughout Manhattan were thoroughly fertilized with stable manure. The lawns of the small parks were treated with pulverized sheep manure.

The improvement and construction of certain small parks and playgrounds, work not properly classed as maintenance work and not provided for in the annual maintenance appropriation, took up a considerable portion of the time of the working force during the year. As the force available for ordinary current maintenance purposes under the annual budget appropriation is none too large for that work, the work of construction and improvement of new parks and playgrounds can be done by the Department working force only by neglecting to some extent the work of maintaining the existing parks and playgrounds. A great deal of such work was done during the past year to supplement the work of the various contractors, on improvements where the corporate stock funds provided for the work proved insufficient to allow of the completion of all the work by contract. Among these were the

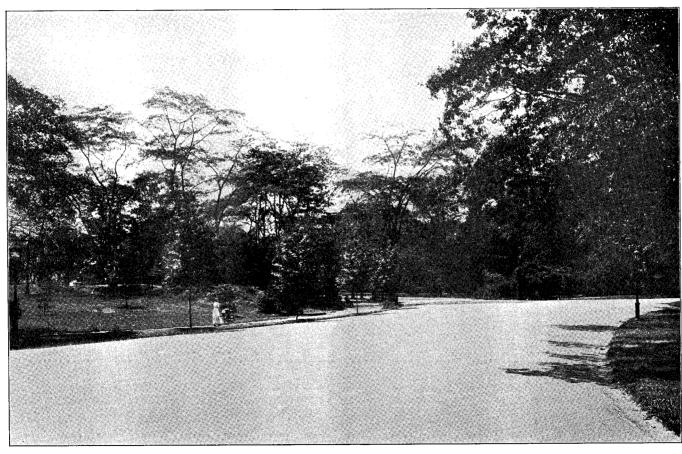


Small Park, 129th Street and 3d Avenue.

construction of the new drives in Central Park; the construction of new gravel tennis courts at 93d street, Central Park; the construction of the new playground and ball field on the reclaimed land along the Riverside Park water front, from 79th to 86th streets; the improvement of the small park at Kenmare street; reconstruction of Cooper Park; improvement of the new Park avenue plots, from 52d to 54th street; construction and improvement of John Jay Park and of the playground at 151st street and Amsterdam avenue.

Much of the work of the Department force on these improvements was in connection with the use of materials on hand in the Department. For instance, for the construction of the playground at 151st street, heavy granite coping was used from the easterly retaining wall of the Riverside drive extension. This retaining wall, as constructed by the City, is partly on the private property abutting the drive, and the coping and wall above the grade of the drive has been removed by the Park Department upon demand of the property owners, whenever a building is erected along the drive. 662 linear feet of this wall and coping were removed during the year, each piece being approximately 5 feet long, 2 feet wide and 2 feet thick. All of this coping was carted to the park plot at 167th street and Broadway, and stored there until the construction work at the 151st street playground was started, when it was carted to that ground. The old gravel removed from the Central Park drives was used in the construction of the new tennis courts. This gravel was stored on top of Bolivar Hill, at 83d street, near the 8th avenue boundary wall, the contractor delivering it at that point. As this is one of the highest points in the lower end of the park, this enormous pile of gravel made a very conspicuous and unsightly feature in that part of the park, and proved a source of many complaints from owners and residents of adjacent property. A great quantity of this gravel was carted away by the Department teams and carts, and used in the construction of the new tennis courts at West 93d street, the paving of the Department storage yards at 97th and 79th streets, and the filling in of earth walks in the upper section of the park. There still remains, however, a large pile containing some thousands of cubic yards of gravel, which should be removed as soon as possible, as it is very objectionable and conspicuous in its present location. On the construction of playgrounds and baseball fields on the Riverside water front, north of 79th street, the old gravel from the roadway of Riverside drive was used. The gravel was hauled by the contractors, but the work of grading, rolling, etc., was done by the Department force. At Cooper Park the construction of a new comfort station and the erection of a heavy iron picket fence around the park made necessary the removal of trees and shrubbery and the regrading, resoiling and seeding of the entire plot. The iron fence used here was portion of a fence removed from the Delancey Street parkway some years ago, but never used. The sections were put in order and painted and delivered to the contractor on the site of the work by the Department force. The stone coping which, in the new design, forms a seat along the outside of the park, was redressed by the Department masons. At the Kenmare street plot, acquired in 1912, and prior to that time used as a dumping ground for ashes and rubbish, the ornamental iron fence was erected and the concrete sidewalk pavement surrounding the park was laid by the contractor. The Department force excavated the interior portion of the plot, graded the playground space with gravel and filled the planting space with good mold and graded and seeded it.

At the new park plots on Park avenue, between 52d and 54th streets, the preliminary construction work was done by the New York Central Railroad Company, in connection with its improvement of the Grand Central terminal. The work of the Department consisted of filling the plots with mold, placing a sod border along the edges, planting trees and shrubbery and seeding the plots with grass seed. Only these two plots were completed, but subsequently the plots from 50th to 52d street



New Drive Pavement, Central Park.

and from 54th to 56th streets were finished by the railroad company, and turned over to the Department for planting. This work will have to be done in 1914.

The drives and bridle paths in Central and Riverside Parks were kept in good condition throughout the year. The laying of a new bituminous concrete pavement on the West Drive and portions of the East and Centre Drives in Central Park, and on Riverside Park, from 72d to 113th street, made repairs to those drives unnecessary, except in the early spring, before work on the new pavements had been started. The condition of the old pavement, especially on Riverside drive, after the winter's wear of the heavy automobile stages, was so bad that vehicles could not travel upon it at any speed without risk of damage. It was therefore necessary to practically resurface the entire drive to put it in condition for traffic until the contractors for the new pavement could begin their work. The remaining gravel drives (the East Drive, from 66th street to 110th street; the West Drive, from 59th street to 66th street, and the various branch drives connecting the two) were regraded and rolled and resurfaced with asphalt binder. The roadway of Riverside Drive Extension, from 135th street to 158th street, which is of macadam construction, was similarly treated. 4,000 cubic yards of North River (Roa Hook) gravel and 59,000 gallons of asphalt binder were used in this work. The bridle paths were given constant daily attention throughout the year and were in excellent condition for riding at all times, winter or summer. During the slack summer season the paths were spiked up with the road rollers and resurfaced with a layer of fresh gravel. 2,500 cubic yards of gravel were used in this work. At many points where the constant addition of new gravel from year to year had raised the grade of the paths too high, the surplus gravel was removed and the surface brought to the proper grade. The old gravel was used to fill in depressions in the various playgrounds of the Department. The number of riders on the bridle paths has greatly increased in the last few years and the work of maintaining the paths in condition for riding has consequently increased. Where formerly the paths were used very little in winter and no attempt was made to keep them in good condition in freezing weather, there is now a great number of riders out, no matter what the weather may be, and there is immediate complaint if the paths are not smooth or the ice on them is not broken up and the paths not in the best possible condition. In view of this, the absence of complaints during the year and the favorable comments of the riders upon the condition of the paths shows that the Department's work was well done.

The Harlem River Driveway, popularly known as the Speedway, was maintained in condition for fast driving of light harness horses throughout the year. There was a considerable increase of activity on the Speedway during the year past, the number of fast horses driven there being far in excess of the previous two or three years. The number of people visiting the Speedway to watch the driving on Sundays and on the matinee days also showed a large increase, and a return to the activity that made this driveway so popular before the advent of the automobile seems under way. Twenty-seven matinee trots were held on the Speedway by the New York Road Drivers' Association during the season, which opened with the annual parade of the association on Saturday, May 10th, and closed with the last matinee, November 23d. The races were held on Sunday afternoons, and were divided into three series: Spring, summer and fall, prizes being awarded for best records in each series. An average of seventy to eighty horses took part in the spring and fall series and fifty in the summer series. Among them were some of the best blooded stock in the country, including Mr. C. K. G. Billings' Champion Uhlan, which set a new mark of 262/5 seconds for a quarter mile in a special race on the lower stretch of the Speedway on October 26th. The "New York Herald" estimated that about 15,000 persons came to see the races on the day that Uhlan was scheduled to race. The usual Sunday crowds were about half that size. The best time made during the season was as follows:

Trotting—"Fair Maiden, 1.02, November 19; owner, Mr. I. V. Hunt. Pacing-

"Master McKerron," 1.02, June 8; owner, Mr. E. J. LaPlace. "Clover Patch," 1.02, November 19; owner, Mr. I. V. Hunt.

The best time made over the course since the opening of the Speedway was made by the pacer "Star Patch," owned by Mr. John Laurence, November 3, 1911, when he stepped the half mile course in 593/4 seconds in a special race.

The best records for the regular Matinee Races are as follows:

Pacing—"Dick Mason," 1.00 flat, October 20, 1912; owner, Mr. H. B. Clark.

Trotting—"Fair Maiden," 1.02, November 19, 1913; owner, Mr. I. V. Hunt.

Copy of the programme for the meet held October 26th is given herewith:

Wm. Cahill, 1st Vice-Pres. E. J. La Place, Pres.

I. V. Hunt, 2d Vice-Pres.

ROAD DRIVERS' ASSOCIATION OF NEW YORK

Fifth Fall Matinee, October 26th, 1913

For

Silver Trophies and Ribbons

Starter

James Shannon

Judges

G. H. Riley

R. O. Currie

Timers

W. Ring

W. J. McIntosh

Brush Committee

E. Shoemaker, Chairman

E. O. Binzen

G. Stamburger

L. Smith

I. V. Hunt

D. O. Dilleo.	a cumous		
TROT	TTERS.	PACERS.	
Hts. Pts.	Hts. Pts.	Hts. Pts.	Hts. Pts.
Pair Maiden 8 16 Belle Isle 6 13 Eva Tanguay 2 9 Francis Milroi 2 9 The Orphan 2 9 The Trip 2 9 Acora 3 8 Georgie Olcott 2 7 Jessa Chester 1 6 Jennie C 3 6 Oakland Boy 3 6 Kippewa 5 Hazel Delmar 2 4	Sprightly 1 4 C. C. - 3 Sweet Estelle. - 3 Tommy Barron. - 2 Bergen Winter - 1 Little Bla A. 2 - Prince Edward 2 - Regent's Ghost 4 - The Dream - - Vermont Bellini 6 - Lester M. 4 - Baron Dell - - Doris B. - -	Clover Patch	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	t 1.30 P. M. Class.	Brush 3—At 1.30 P. M Class B Trotters.	Л.
94 Princess May, b 2 Oakland Boy, Jr 20 Exultant, b.g.	.mW. Callahan P. Conroy J. Gilmore	Courier Boy	C. Fendt A. Mullady Crossmann

Class E. Trotters. Bergen Winter, b.g. E. Bass Estelle Cord, b.m. T. Olpp Jessa Chester, b.m. W. Witzell Jack, b.g. T. F. Reddy Lee Olcott, b.g......G. R. Kingston Emerald Chimes R. H. Clark

	Courier Boy
18	Kippewa, br.g
78	Francis Milroi, b.mA. Mullady
15	The Orphan, b.mH. Crossmann
	Lester M., b.g

Brush 4—At 1.30 P. M.

	Class C Pacers.
	Sidney Patchen, b.gC. Hackett
34	Bonner, ch.g
61	Funston, r.gE. Bass
	Celia, b.m

	Brush 5—At 2 P. M.		Brush 10—At 3 P. M.
	Class A Pacers.		Class B Pacers.
49		17	Bright Direct, b.gC. Hlawatsch
29	Louise E., b.mW. Scott Ouida, b.m J. Chaimowitz	$\begin{array}{c} 15 \\ 53 \end{array}$	Jim D., b.g F. Harrington Hiram Abiff, b.g R. H. Clark
	Brush 6—At 2 P. M.	$\frac{11}{32}$	Brownie, b.gE. Binzen
	Class AA Trotters.	43	Sidney Direct, ch.gE. Bass Peerless Pete, g.gT. Connors
2	2 Fair Maiden, b.mI. V. Hunt Oakland Boy, b.gJ. A. Murphy	8	Conniston, gr.gGeo. Stamburger
1	Belle Isle, b.m		
	Brush 7—At 2 P. M.		Brush 11At 3.30 P. M.
	Class A Trotters.		Class C Trotters.
	6 Vermont Bellini, c.gH. Crossmann	28	C. C., br.gG. Gall
59 59	3	11	Tommy Barron, b.g. E. Carpenter
3		62	Regent's Ghost, ch.gW. Mangan Baron Dell, b.gA. Mullady
	Brush 8At 2 P. M.	40	Acora, b.gJ. Kennedy
4	Class AA Pacers.		
4:	2 Bessie Pandit, b.mH. Crossmann 1 Aristocrat, b.gA. Mullady		Brush 12—At 3.30 P. M.
2	= and and an area		Class D Trotters.
	Fanny D., b.mJ. J. Archibald	26	Excelsior, b.g
	Brush 9At 2.30 P. M.	41 }	Sprightly, b.g
	Class AAA Pacers.	$\frac{48}{7}$	Sweet Estelle, b.m
	Dick Mason R. M. Clark	5	Georgie Olcott, b.m T. Young
2:	2 Clover Patch, br.mI. V. Hunt Star PatchJ. Laurence	12	Hazel Delmar W. Callahan Red Lake, Jr E. Bass

If horses are not at post at starting time, races will go on without them.

Although the renewal of activity among the horsemen attracted increased numbers of drivers and spectators, the number of ordinary pleasure vehicles using the Speedway is very small, and as the speeding is mainly a Sunday attraction for the general public, the question of opening the driveway to automobiles and general pleasure traffic is still being agitated.

The usual floral display was on exhibition at the Central Park Conservatory during the winter season, the houses being open free to the public daily from 10 a.m. to 4 p.m. At Easter time the annual show of azaleas, tulips, hyacinths, lilies and other seasonable flowers was given, and the annual Chrysanthemum Show was given in November.

In the flower beds throughout the parks the display of flowers was maintained from early spring to late fall. In the spring they were bright with the vivid colors of the tulips, hyacinths, daffodils and narcissus planted the previous Fall. In the beds where bulbs were not planted there were to be seen the beautiful color harmonies of the vari-hued pansies and the pink and white of the daisies which at Summer's approach were displaced by the more formal and intricate designs composed of geraniums, coleus, cannas, alternantheras and other flowering and foliage plants. Upon the removal of these in the Fall, the beds were heavily fertilized with rotted stable manure and planted with spring-flowering bulbs for the next season. Most of these flower beds are located in the small parks in the downtown business section of the city where their beauty can be enjoyed by the thousands of people who pass through the parks daily on their way to and from business. The largest display is in City Hall Park through which probably a greater number of people pass in a day than in any other park in the world. In this park there were planted during the season about 15,000 tulips, hyacinths and other spring-flowering bulbs and 12,000 summer bedding plants. The principal displays were as follows:

Bedding Plants.

City Hall Union Square Madison Square Tompkins Square	11,930 5,535 3,549 3,465	Terrace	254 435 23,792 2,253
Hamilton Fish Washington Square Stuyvesant Square Seward Park Contage Healt	9,469 2,800 9,971 6,765	Riverside Park: 72d Street Claremont Morningside	1,108 7,695 510
Corlears Hook Delancey Street DeWitt Clinton Bryant Park (N. Y. Public Library Grounds) Hudson Park St. Gabriel's Park Ave., 34th to 40th Sts	798 2,970 3,280 505 1,570 2,700 3,905	Mt. Morris Thomas Jefferson St. Nicholas Colonial High Bridge Park (155th St.) Small park at 23d St., North River (under jurisdiction of Dept. of	3,512 4,189 1,464 2,000 2,920
Central Park: 58th Street Plaza Arsenal Casino Mall Dairy McGowan's Pass.	1,802 8,489 2,309 1,325 400 4,534	Docks) Hospital Boat "Westfield," Jackson St., East River (under Dept. of Health) Public School No. 171 Borough of Richmond: Washington Park, Stapleton Pleasant Plains	700 1,435 294 1,000 850

All the bedding plants as well as those used for winter display in the Conservatory were propagated at the Department greenhouses and nursery.

School garden plots were laid out in the following parks in addition to those established at the Delancey Street, Parkway and at Chelsea the previous year:

Seward Park.
Columbus Park.
Hamilton Fish Park.
Stuyvesant Square.
Tompkins Square.
Hudson.

Abingdon Square. Jackson Square. St. Gabriel's Park. St. Nicholas Park. Colonial Park. High Bridge Park.

All these with the exception of Abingdon Square were planted with the usual summer bedding plants such as cannas, geraniums, etc., by the Department gardeners and cared for by them during the summer. It was planned by the Commissioner to interest the school children in these gardens and have them take care of the flowers as an aid to them in their nature study. When first planted, some of the teachers brought their classes to the gardens but with the advent of the vacation season all interest waned and the care of the gardens was left entirely to the Department gardeners for the balance of the season, except at Abingdon Square where the school children took entire charge of the garden, doing all the planting themselves, raising the flowers from seed. Their interest was kept alive through the entire season and the garden made a good showing without any material assistance from the Department. The same plan was adopted at the special garden plot at Seward Park assigned to the Hebrew Educational Alliance, and met with similarly successful results. The obvious conclusion resulting from the experience of these school gardens is that it is useless to endeavor to get the sustained interest of the children in ready-made

gardens, though not a difficult matter when the gardens are the result of their own work.

The Department received at its manure pits at the 97th Street Storage Yard in Central Park 2,716 loads of fresh manure during the year and distributed 1,689 loads, about 2,300 tons, of rotted manure on the lawns and plantations throughout the parks. The manure is gathered by the Department from its own stables and the stables of the Police, Fire and Street Cleaning Departments, the armories of the artillery and cavalry regiments of the National Guard and a large riding academy, all of which are located within short hauling distance of the storage yard. In all cases, the Department does the hauling but assistance is given in loading the manure at all stables except the riding academy, where the largest supply is obtained. Here the Department employees not only do the loading but have to fork the manure up from the basement to the street level, requiring three handlings in loading. The two manure pits are of solid concrete, of a respective capacity of 4,250 and 4,400 cubic yards water measure. The fresh manure is wet down thoroughly in the pit. The floor of each pit is so graded as to drain the liquid to one end where it is raised by a pump and sprayed back over the top of the pile. This process is repeated daily. Toward the end of the summer, the entire pile is turned by hand by the Department laborers, the manure on top of the pile being put on the bottom so as to have all the manure well rotted. A concrete roadway runs from the ground level to the bottom of the pit so that the trucks and carts can be easily loaded right at the pile. The cost of the manure averages about two dollars a ton delivered on the lawns, as against an average price of five dollars a ton for manure purchased outside the Department. Since the close of the year a new arrangement for the gathering of the manure has been put in effect whereby the cost of hauling has been cut almost in two thus further reducing the final cost of the finished product. The total quantity of manure distributed to the various parks was as follows:

MANURE DELIVERED FROM DEPARTMENT MANURE PITS, 1913

То	No. of Loads.	To	No. of
City Hall	. 9	Tompkins Square Park	. 1
Madison Square	_	Bryant Park	. •
Washington Square	. 60	Greeley Square	. 1
Stuyvesant Square		Isham Park	
Claremont Park		Jackson Square Park	
DeWitt Clinton Park	. 10	Christopher Street Park	. 1
Mt, Morris Park	. 7	Times Square	
Delancey Street	. 3	West 23d street	. 14
Thos. Jefferson Park	. 58	Speedway:	
Corlears Hook Park	. 29	St. Nicholas	
Hudson Park	. 3	7th avenue and 155th street	. 4
Morningside Park		Amsterdam avenue and 152d street	
Battery Park		Broadway	. 37
Union Square Park		Edgecombe avenue	
Abingdon Square Park		Riverside Drive	
Seward Park		Central Park	
Hamilton Fish Park		P. S., 67th street and 1st avenue	
Chelsea Park		Total	

The mechanical force of the Department was employed largely in the small jobbing repairs necessary to keep the buildings, structures and equipment of the department in good condition. All the Menagerie buildings were thoroughly repaired and painted, and extensive changes were made in the interior of the Monkey House and in the cages for the wolves, foxes and other small animals. Playground structures and apparatus were kept in condition for use throughout the season and new supplies of jump ropes, swings, etc., were made at the department workshops for use on the playgrounds. Pipe-rail fences were erected at numerous points in Central Park and in many of the small parks to replace the old wire strand fences which it is found impracticable to keep in repair.

By closer supervision of the work of the mechanics and adjusting the work so as to have the high-priced mechanics employed on work which could not be done by the labor force, the efficiency of the mechanical force was increased and a great deal more was accomplished in the repair and maintenance of department property. Thus the five gasolene road rollers and the two motor lawn mowers which the department uses during the summer were operated by laborers, instructed in their duties by the Department machinist. Pipe-rail fences previously erected by the Department pipefitter were put up by other laborers and the pipefitter was employed on the repair of iron fences and structures, work which requires a grade of skill commensurate with the pay of a pipefitter, \$5.50 a day, when not engaged on the repair of the steam heating plants throughout the Department, which is his proper work. Laborers were also used for the laying of concrete foundations for pavements, etc., the setting of asphalt block pavements, the construction of concrete walls, sewer basins, etc., with satisfactory results in every case, greatly reducing the cost of the work and leaving the higher paid mechanics free for more important and difficult work. The laborers employed on this special work received only \$2.50 a day, the same as the laborers who merely clean the walks, etc., although the work they are required to do necessarily demands a certain amount of skill which is found in comparatively few of the men composing the laboring force. They should be paid at least \$3 a day when engaged upon this class of work, as an incentive for the men to develop whatever ability they possess for such work. Even at the higher rate of pay the Department would save money on the work these men do. The rollers and motors, for instance, are run by automobile enginemen at \$4.50 a day in other City Departments. Provision has been made in the Budget for 1914 for six laborers at the increased rate, but there are many more who should be likewise provided for.

By making increased use of concrete in construction and repair work, the necessity of annually repairing certain structures and equipment was obviated and the cost of annual maintenance was correspondingly lowered for the future. For instance, when the wooden flooring of the bridge over the bridle path in Central Park, near the South Gate House of the Reservoir had become worn out, it was replaced by a concrete flooring. The wooden floor required replacing about every two years, whereas the concrete floor should last in good condition indefinitely. As the concrete floor was laid by laborers, the cost of repair was reduced to a minimum. Concrete hydrants of a new pattern were constructed at the department storage yard at 79th street and installed throughout the parks in place of the old iron hydrants. The new hydrants are so constructed that neither the waste nor the supply pipes can be interfered with or obstructed by mischievous persons. The old pattern iron hydrants were being constantly put out of service by the clogging up of the waste or supply pipes with dirt, sand, stones, sticks or other foreign matter placed there, usually by mischievous boys. This necessitated the constant repair of these hydrants by the plumbers. The new hydrants make this unnecessary as they cannot be clogged up. A large number of them were put in service in all parts of the city early in the summer and went through the entire season without requiring any attention whatever. In the construction of

sewer basins an economy of time and expense was effected by constructing them of concrete, using a barrel for the care of the mould and the earth for the outside, instead of having them built of brick laid by a mason bricklayer as in the past. The repair of the iron fences on the Broadway parks from 60th to 122d street, 7th avenue parks, 110th to 153d streets, and the Park avenue park from 34th to 40th streets, and from 56th to 96th streets, required the daily attention of the Department ironworkers, besides which it was found necessary to issue orders to the amount of \$1,000 for repair of these railings by outside concerns. As the character of the work is such that no fair estimate can be given of the cost of the work in advance, it must be done by day's work by these concerns. This arrangement does not give satisfactory results and involves the contractors in disputes with the City's Inspectors as to the value and amount of work done. It would be far better to have the City provide the Department with an increased appropriation for ironworkers to do the work itself. Application for this increased force has repeatedly been made to no avail. The following summary shows the most important items of the work of repair and renewal of buildings, structures, etc., during the year:

BUILDINGS AND STRUCTURES REPAIRED AND PAINTED.

Interior and Exterior.

Shelter and tool house, observation house and school farm, Jefferson Park.

Three swing sheds, 2 shelter pavilions, 2 sand pits, 1 slide, 2 see-saw structures, toolhouse and pavilion.

Double slide, sand pit, 3 swing frames, 2 see-saw structures, Ryan Park.

Milk booth, Tompkins Square Park.

Shelter house, school farm, Corlears Hook Park.

Swing frames, pavilion and attendant's house and 2 sand houses, Carl Schurz Park.

Sand house, see-saw structure and pavilion, St. Gabriel's Field House, Jasper Oval.

Shelter house, Tompkins square.

Shelter house, 3 swing pavilions, sand pit, slide and protecting shield, Seward

Three comfort stations, Harlem River driveway.

Newsstand, Union Square Park.

Arbor, winter shelter, summer shelter, DeWitt Clinton skate house, women's toilet and men's toilet, large lake, Central Park. Conservatory, lake cottage, boat landing, large lake, Central Park. Varnish room (shop), rope storeroom and office (shop), Central Park. Eight rooms, Meteorological Oservatory, arsenal, men's toilet, women's toilet, typewriter's office, playground, Supervisor's office, stoop, police station, leaders, sheds at McGowan's Pass, bridge over the bridle road south of the arsenal, bridge over the bridle road at the south gate, large reservoir, Central Park.

Women's toilet, Mt. Morris Park.

Newsstand, Greeley square.

Toolhouse, men's toilet, women's toilet, Hudson Park.

Walls, Ceilings, Etc.

Men's toilet, coal room, Columbus Park.

Women's toilet, passage way, bath room, men's toilet, passage way, bath room, 2 attendants' rooms, Hamilton Fish Park.

Kitchen, 3 bedrooms, hall of top floor, Jumel Mansion.

Interior and Exterior.

Field house, urinal, Tompkins square.

Urinal, adjoining room, sand house, Corlears Hook.

Monkey house, elephant house, bird house, lion house, hay, buffalo house, 3 deer paddock houses, pelican, eagle, Angorra goat, bison, zebra, Aoudad, wolf, antelope houses, menagerie, Central Park.

Grand stand at the Speedway.

Railings and Fences Repaired and Painted.

1,249 feet 1-pipe railing.	50 tripod iron horses.
4,972 feet 2-pipe railing.	13 iron picket gates.
1,284 feet 2-pipe railing with mesh.	600 feet 3-rail wood fence.
10,816 feet 3-pipe railing with mesh.	570 feet 2-rail wood fence.
7,548 feet 3-pipe railing with mesh.	1,612 feet iron picket fence.
2,490 feet chain railing.	

,548 feet 5-pipe railing with mesh. 2,490 feet chain railing.	1,012 feet from pieket fence.
Rolling Stock and Apparatus Repair	ed at Department Work Shops.
12 dump trucks.	4 tree spraying wagons.
2 spring trucks.	520 signboards.
13 sprinkling wagons.	50 snow plows.
1 sand sprinkler,	6 ice planes.
1 Buckeye mower.	4 ice scrapers.
5 grass carts.	1,675 settees.
8 dirt carts.	279 rubbish cans.
5 road (hand) carts.	12 distance posts (for Speed-
26 box wheelbarrows.	way).
3 automobiles.	13 toolboxes.
7 buggies.	1,360 pieces miscellaneous play-
1 surrey.	ground apparatus and equip-
1 delivery wagon.	ment.
2 light platform wagons.	1,489 pieces miscellaneous equip-
4 disc harrows.	ment, tools, etc.

New Work.

3 playground floats for City Day	976 lights of glass put in.
Parade.	Model of section of proposed fence
33 squirrel houses.	for Kenmare Street Park.
2,710 engineer's stakes.	Model of proposed fence for the
2,014 tree stakes.	Speedway.
1,393 fence posts.	

Miscellaneous.

18,950 feet asphalt block pavement	12 concrete drinking hydrants
laid.	made and put in to replace
8,114 feet concrete pavement laid.	iron hydrants in various
510 linear feet of rustice fence re-	parks.
paired.	

Miscellaneous New Work.

Storage yards at Seventy-ninth street and Ninety-seventh street in Central Park graded and paved with concrete pavement.

Sheepfold yard at Sixty-sixth street, Central Park, paved with asphalt block pavement.

Concrete foundation laid for asphalt pavement on walk in front of the Central

Buffalo and deer paddocks, the outdoor pens at the antelope house and the paddocks for the zebu, camel, Indian buffalo and aodad, graded with road gravel and new drainage installed where required.

Earth walks in the upper end of Central Park filled and graded with the old asphalt binder material removed from the East drive during the work of resurfacing the drive.

Depressions along the street sidewalks of Central Park along Fifth avenue, Eighth avenue and One Hundred and Tenth street filled up with gravel.

Asphalt block pavement laid under the swings, and see-saws in the playgrounds in Tompkins square, Five Points, Hudson Park and DeWitt Clinton Park.

Concreted the floor of the bridge over the bridlepath at the south gate house of the large reservoir in Central Park.

Installed electric lighting at the following buildings: Comfort station north of Arsenal Building, Central Park; men's and women's comfort stations, Mt. Morris Park; comfort station building, North Meadow, Central Park; storage sheds, Ninety-seventh Street Storage Yard, Central Park.

Removed the geyser fountain attachments from the display fountains on the Mali, Central Park, and the fountain at Madison Square Park and replaced them with spray fixtures.

During the year new machinery of improved type, run by electric power, was installed in the department workshops at Eighty-sixth street, Central Park. A power hacksaw driven by electricity was also installed in the machine shop at the Ninety-seventh Street Storage Yard. The new machines greatly facilitate the work of repair of the department equipment.

School Farms.

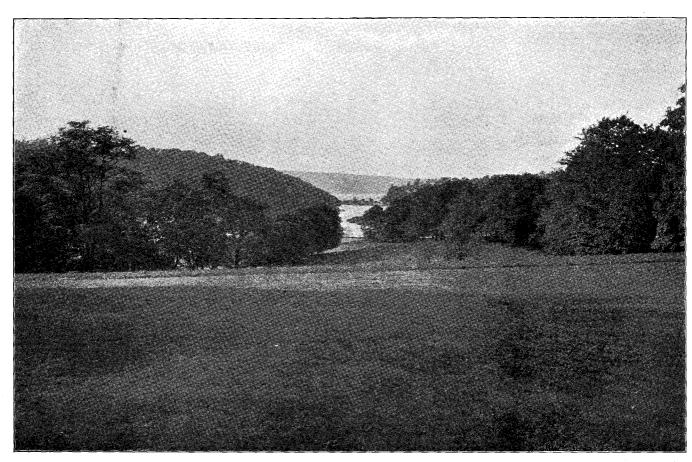
The children's plots in the school farms at Thomas Jefferson, Corlears Hook and DeWitt Clinton were manured and spaded up in the spring by the department laborers. The new school garden at Isham Park was plowed up, manured and graded. Repairs were made to the buildings, fences, etc., as needed during the year. To provide a building for the school farm at Corlears Hook Park, the portable building which had been in use as a comfort station for women at Fort Washington Park was removed and set up there. In its old location at the southern end of Fort Washington Park, it was not much used, as most visitors to that park used the entrance at the north end of the park leading directly to Fort Washington Point. In its place four small temporary toilet buildings, two for men and two for women, were erected in the upper end of the park. The winter platform at the DeWitt Clinton School Farm was put up for the winter of 1912-13 and removed in the following spring. The necessary supplies for the maintenance of the school farm buildings, etc., were furnished from the department storerooms as needed during the year.

Playgrounds.

The playground structures and equipment were repaired as needed throughout the year. The grounds were given all necessary attention, holes and ruts being filled with gravel from time to time as required. The running tracks were kept in good condition throughout the year. For the Fourth-of-July celebrations all the grounds and tracks received special preparation, also for the various special athletic meets held during the summer season.

Baths and Comfort Stations.

The baths and comfort stations throughout the department were open for public use daily throughout the year. Owing to the opening of the new station for women at West Eightieth street in Central Park, and the toilet rooms for girls at the Yorkville and Five Points playgrounds, it was necessary to shorten the period during which certain stations were open to the public to eight hours instead of sixteen, as no extra attendants were provided for the new places, and the regular force had to be drawn upon to care for them. During the summer season this force was further curtailed



View from Isham Park Through Spuyten Duyvil. Inwood Hill to the Left, Hudson River, and Palisades in the Distance.

owing to the withdrawal of six attendants necessary to relieve the regular attendants during the vacation season. An increased force has been provided for 1914, however, so that the stations can be opened on the original schedule again.

The department was represented in the Annual Work Horse Parade on Memorial Day. Four entries were made, two teams and two single horses. The condition of the horses and equipments was highly commended by the judges.

In the City Parade on May 17 the department was very creditably represented by a batallion of four companies of employees, consisting of one company each of foremen, park keepers, gardeners and laborers, each in the uniform of his grade. The batallion paraded in regular military formation with color guard, carrying both the national and city colors.

A division of the rolling stock, consisting of 27 vehicles of all types used in the department, including plows, mowing machines, graders, snow plows, manure spreaders, etc., was also paraded. Two decorated floats containing the playground department's exhibit were also in line. The entire division made a splendid showing for the department. The marching of the men under command of General Foreman Leonard, acting as Major, and their general military bearing received applause all along the line.

Respectfully submitted,

J. H. Веатту,

Superintendent of Parks, Boroughs of Manhattan and Richmond.

REPORT OF ARCHITECT'S OFFICE FOR THE YEAR ENDING DECEMBER 31, 1913.

METROPOLITAN MUSEUM OF ART.

Addition "H," Interior Finish.

McKim, Mead & White, Architects, contract awarded to Richard E. Heningham, \$315,000; contract dated January 26, 1912; contractor commenced work February 13, 1912; time allowed on contract 300 calendar days.

Work on this contract was completed June 15, 1913.

Boiler House.

McKim, Mead & White, Architects; contract awarded to Wills & Marvin, \$249,942; contract dated March 30, 1912; contractor notified to commence work May 6, 1912; time allowed on the contract 350 working days; extra, March 29, 1912, for temporary boiler house, \$4,500. Temporary boiler house removed and building turned over to the City December 15th.

Carpenter Shop.

Contract awarded to Harry Hansen, \$44,799; contract dated August 7, 1912; contractor notified to commence work August 12th; time allowed on the contract 250 working days; building completed and turned over to the City.

Carriage Entrance to Addition "E."

Contract awarded to Tower Construction Co., \$14,674; contract dated May 14, 1912; contractor notified to commence work May 27th; time allowed on contract 90 working days; time extended by resolution of Park Board, October 2, 20 working days; work completed and turned over to the City.

Additions I and K.

Plans and specifications prepared by McKim, Mead & White, Architects; estimated cost \$750,000; plans and specifications are now before the Board of Estimate, and specifications are being printed.

Sprinkler System

Plans and specifications prepared by McKim, Mead & White, Architects, for additional sprinklers to be installed in the various parts of the Museum; advertised September 23, 1913; bids opened October 2, 1913; contract awarded to Wells & Newton.

The following were the bidders:

Automatic Sprinkler Co	\$3,895 00
Donegan & Swift, Inc.	3,871 00
Globe Automatic Sprinkler Co	3,650 00
Wells & Newton Co	3,472 00

Work commenced in November, and it is expected that same will be completed the early part of January, 1914.

AMERICAN MUSEUM NATURAL HISTORY.

Erecting Mezzanine Floor on Easterly Stairway, Between 4th and 5th Stories.

Plans and specifications prepared by Trowbridge & Livingston, Architects; approved by the Board of Estimate May 31, 1912; advertised August 5, 1912; bids opened August 15th; contract awarded to Jos. Di Benedetto, \$2,598; contract dated October 14; contractor notified to commence the same day; time allowed on contract 60 calendar days; work completed January, 1913.

RECONSTRUCTION OF THE PLAZA.

Plans and specifications were prepared by Carrere & Hastings, Architects, for the reconstruction of the Plaza, 5th avenue and 59th street, in connection with the Pulitzer Memorial Fountain; estimated cost \$85,000, and plans are now with the Board of Estimate.

BAND STAND.

Plans and specifications prepared by Carrere & Hastings, Architects, for a new band stand to be erected in Central Park; estimated cost of this work \$50,000.

FIREMEN'S MEMORIAL, RIVERSIDE DRIVE.

Plans and specifications prepared by H. Van Buren Magonigle; approved by Board of Estimate July 17 and December 11, 1911, and March 14, 1912; contract awarded without public letting to J. L. Ward Co.; contract dated June 14, 1912; amount of contract \$24,000; extension of time granted to May 15, 1913; work completed and monument dedicated September 5th.

SETTING OF THE SCULPTURE FOR FIREMEN'S MEMORIAL.

Plans and specifications prepared by H. Van Buren Magonigle; approved by Board of Estimate July 17, December 11, 1911, and March 14, 1912; contract awarded without public letting to Attilio Piccirilli, sculptor, for \$17,000; contract dated June 6, 1912; extension of time granted to May 15, 1913; work completed and dedicated September 5th.

ERECTION OF CARL SCHURZ MEMORIAL, MORNINGSIDE PARK, WEST 116TH STREET.

Plans and specifications prepared by Henry Bacon, Architect; approved by Board of Estimate July 17, 1911; contract awarded without public letting to Piccirilli Bros. for \$19,753; contract dated June 20, 1912.

Work completed and dedicated May 10, 1913.

Bronze Railings and Lamp Posts, Carl Schurz Memorial.

Plans and specifications prepared by Henry Bacon, Architect; Karl Bitter, sculptor; contract awarded without public letting to Roman Bronze Co. for \$3,040; dedicated May 10, 1913.

PLAYGROUND BUILDING AND COMFORT STATION IN JOHN JAY PARK.

Plans and specifications prepared by Architect, Department of Parks; approved by Art Commission December 30, 1912; advertised June 23, 1913; bids opened July 3, 1913, as follows:

General Construction.

2.	Hansen & McHugh	31,224 00		
4.	Thos. McKeown, Inc.	33,993 00		
	Contract awarded to P. F. Kenny Co., \$30,762; contractor commenced			
ten	tember 2, 1913; time allowed 200 working days.			

Plumbing and Gas Fitting.

1.	F. L. Delaney	\$2,679	00
	William C. Duggan	2,349	00
	R. & A. Isaacson	2,624	00
4.	John J. Kenny Co., Inc.	2,869	00
	P. F. Kenny Co	2,700	00
	National Plumbing Co	2,343	00
	Contract awarded to National Plumbing Co., \$2,343.		

Heating.

1.	M. J. Callahan Co	\$1,295 00
2.	William C. Duggan	1,347 00
3.	National Plumbing Co	1,373 00
4.	Wm. J. Olvaney	$1,372\ 00$

Contract awarded to M. J. Callahan Co., \$1,295.

The building has been designed to provide toilet facilities for boys and girls, shower baths, locker rooms, and game rooms, for boys and girls using the large playground between 76th street and 78th street and East River, and the pavilion on the main floor is arranged for use as a band stand during the summer months.

The pavilion will be closed in the winter time, and will be equipped with gymnasium apparatus suspended from the trusses. The building is of English Gothic design, built of brick trimmed with limestone, will contain a boiler room, coal room and store room in the cellur, toilet facilities, locker room and shower rooms on the basement level, which is partly above and partly below the playground level. The main or pavilion floor is arranged for a large pavilion and four rooms, which are to be used by the attendants, musicians, and for whatever other purposes it may be deemed necessary in connection with the playground work.

COMFORT STATION AND PLAYGROUND BUILDING AT WEST 151ST STREET AND AMSTERDAM AVENUE.

Approved by Art Commission June 18, 1912; estimated cost \$21,000; plans and specifications were prepared by the Architect of the Department of Parks the latter part of December, 1912; contract advertised March 1, 1913; bids opened March 13, as follows:

General Construction.

Jos. Balaban Co	\$19,640 00
Jos. Di Benedetto	17,565 00
Durkin & Lass	18,775 00
William H. Egan	17,789 00
A V Johnson & Co.	18,849 00
Kelly & Kelley	21,350 00
Marble Arch Co	17,675 00
Neptune B. Smyth	21,960 00
	17,996 00
Werner-Bartels Co	21,573 00
John T. Williams Co	21,167 00
	William H. Egan A. V. Johnson & Co. Kelly & Kelley Marble Arch Co. Neptune B. Smyth Thomas J. Waters Co. Werner-Bartels Co.

Contract awarded to Jos. Di Benedetto, \$17,565; contract dated March 26, 1913; contractor notified to commence work April 28; the time allowed on the contract was 100 working days; work completed and building turned over to the City in November.

	Plumbing and Gasfitting.	
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	Altman Plumbing Co. Adolph Berengarten D. L. Delaney William C. Duggan Jos. F. Egan Frank J. Fee Eugene Glucksman John J. Kenny Co. Jacob Levy Edw. J. McCabe Christ. Nally M. J. O'Brien Rapid Constr. Co. V. S. Rittenhouse John H. Spence Contract awarded to Edward J. McCabe, \$1,565.	\$2,250 00 2,480 00 1,925 00 1,991 00 2,200 00 1,981 00 1,845 00 2,335 00 1,565 00 1,774 00 1,795 00 2,300 00 2,463 00
1.	Heating and Ventilating.	\$1.007 00
2. 3. 4. 5.	M. J. Callahan Co. Jas. Curran Mfg. Co. Wm. C. Duggan Eugene Glucksman Philip Paul	1,059 00 985 00 1,135 00 1,015 00
	Contract awarded to Wm. C. Duggan, \$985.	

The building was designed to provide accommodations for the large playground on Amsterdam avenue, from 151st to 152d streets. It is built of golden yellow tapestry brick trimmed with artificial stone, with Spanish metal tile roof, and has toilet facilities for boys and girls, shower baths for boys and girls; a large playroom to be used in inclement weather; also rooms for playground attendants, together with the necessary boiler room, coal and large store rooms for gymnasium apparatus.

COMFORT STATION AT COOPER SQUARE, 6TH STREET AND 3D AVENUE.

General Construction.

Contract awarded to Hansen & McHugh, \$17,679; contract dated December 23, 1912; contractors notified to commence work December 30, 1912; time allowed 125 working days; work completed and building turned over to the City the end of November.

Plumbing and Gasfitting.

Work completed; turned over to the City the end of November.

Heating and Ventilating.

Work completed and turned over to the City the end of November.

The building has been designed for the southern end of Cooper Park, and is entirely below grade. Toilet facilities are provided for men and women, and the entire building is lighted by vault lights in the sidewalk. There is an extensive ventilating system provided and exhausted through an ornamental cast iron combination vent duct, smoke stack and lamp standard. The walls are constructed of steel beams and concrete arches faced with furring blocks, and the floors and walls of the toilet rooms faced with tile, Knoxville marble partitions and trim.

ALTERATION BALL GROUND COTTAGE, CENTRAL PARK.

McBride & Callan Contracting Co., contractors for the general construction; amount of contract \$10,250; contract dated December 23, 1912.

United Plumbing & Contracting Co., contractors for the plumbing and gasfitting work, \$1,997.

Wm. C. Duggan, contractor for the heating, \$852.

Work completed August 1st.

This alteration included the entire reconstruction of the interior, the construction of a cellar, there being none under the old building, and the addition of an extension. It now provides toilet facilities for both men and women, shower baths and a large playroom for children, men's and women's attendants rooms on the main floor. The cellar contains a boiler room, a large store room and a coal room. The toilet rooms are lined with white tile to a height of 7 feet; the toilet partitions are of pink Knoxville marble, and the floors of 2-inch hexagonal vitreous tile. The shower rooms are fitted up with three showers each for boys and girls. They have marble partitions and white Portland cement floors and walls. The building is equipped with all modern mechanical arrangements in connection with the plumbing, including regulating valves for the hot water, an automatic sump pit for the lifting of all surface water which may accumulate in the cellar, and is heated by steam.

ISHAM PARK COMFORT STATION, ISHAM PARK.

Plans and specifications were prepared by the Department Architect for a comfort station for men and women and tool house in Isham Park, 214th street and Broadway.

This building is to be erected on the present foundations of the old tool house in the park, and will be built of terra cotta blocks, stuccoed, with Spanish metal tile roof and heated by "gasteam" radiators. Estimated cost, \$5,000.

COMFORT STATION, STAPLETON, S. I.

Plans and specifications prepared by the Department Architect; building designed to provide toilet facilities for men and women, and also a shelter to be used as a bandstand; to be constructed of brick with granite trimmings and granite columns for the shelter, with cornice and copper roof. Estimated cost, \$15,000.

ISHAM MANSION, IN ISHAM PARK.

Plans and specifications were prepared by the Department Architect for the general overhauling of the Isham Mansion in Isham Park. This work is to consist of the general overhauling of the Mansion, including painting of the exterior, decorating the interior; installation of a steam-heating plant and new electric wiring and fixtures, and the fitting up of the various rooms as meeting rooms for historical societies, as well as one room for the exhibition of old New York exhibits, etc. In general, this work is to include the restoration of the Mansion to its original and Colonial condition.

The estimated cost of this work is \$10,000.

SEVENTH AVENUE FENCES, 110TH-153D STREETS.

Plans and specifications prepared by the Department Architect; work completed April 2, 1913; contract executed by Anchor Post Iron Works; amount, \$54,950.

KENMARE STREET, FENCE AROUND TRIANGULAR PLOT.

Bounded by Kenmare Street, Cleveland Place and Lafayette Street..

Plans and specifications prepared by Department Architect; approved by Art Commission April 28, 1913; advertised April 19; bids opened May 1; contract awarded to Hansen & McHugh, \$2,397. Work consists of ornamental brick piers with limestone caps and bases, and an ornamental wrought iron railing on a concrete seat to enclose the playground and planting space. Work completed October 3, 1913.

SIDEWALK ON KENMARE STREET.

Work done by open market order; Hansen & McHugh, Contractors, \$897. The sidewalk was constructed with 7-inch cinder foundation, 5-inch concrete and 1-inch top dressing; work completed October 1, 1913.

Drawings were prepared for ornamental cast iron tree gratings for the trees on Kenmare street; order issued to Vulcan Rail & Construction Co., \$495; work completed in November.

SPEEDWAY FENCE,

Plans and specifications prepared by Department Architect for a new speedway railing to be erected along the newly-constructed speedway bulkhead. This fence was designed to carry out the effect of the present speedway railing which has been removed from this section of the speedway, and is so arranged that it can very easily be erected and maintained since it is made up of standard cast iron panels, very heavy galvanized wrought iron top rail, and in every respect is far superior to the present railing. Its estimated cost of \$19,000 is less than the cost of the present railing.

ADDITIONAL TOILET FACILITIES IN THE QUEENSBORO BRIDGE COMFORT STATION.

Plans and specifications were prepared by the Department Architect for the installation of additional toilet facilities for the girls using the Queensboro Bridge Playground. The work was completed by Department mechanics.

COOPER SQUARE FENCE AND SEATS.

Drawings prepared for a new fence and seating arrangement around Cooper Park; order issued to Vulcan Rail & Construction Co. September 3, 1913, \$437. The old Delancey street picket fence was used on this work, and is so arranged that permanent seats are provided on the full length of the park, on 3d and 4th avenues and 7th street. An open market order was issued to Hansen & McHugh for all mason work in connection with same, amounting to \$398. Work was completed December 5th.

INSTALLATION OF GASTEAM RADIATORS IN THE FOLLOWING:

Comfort Station for Men and Women, Mt. Morris Park	\$383	00
Tool House, 143d street and Riverside Drive	56	25
Marble Arch Cottage, Central Park	117	38
Comfort Station, Morningside Park, 114th street and Morningside Drive	217	00
Comfort Station, 138th street and Riverside Drive	336	78
Comfort Station, 151st street and Riverside Drive	260	02
Comfort Station, 110th street and Lenox avenue	112	26
Comfort Station, 106th street and 5th avenue	102	50
Comfort Station, Chelsea Park	366	00

\$1,952 19

All the old park buildings have been heated with "scorcher" stoves, which necessitated a great deal of care, and caused a big waste of space, and were likewise very expensive. This new arrangement of gasteam radiators will eliminate the handling of coal and ashes, and will allow the use of all the space heretofore used for coal storage, for the use of attendants, or any other purpose which may be desired. The cost of the installation is quite small, and since the gas is paid for by another Department, it is in every respect a big saving to this Department.

FORT WASHINGTON STADIUM.

Preliminary plans were prepared by the Department Architect for an open air stage and comfort station for men and women. It is proposed to erect this building on the shore of the Hudson River; the sub-structure is to be built of massive concrete and the upper stage arrangement is to be a reproduction of the *Toarmina*. The old columns taken from the old Hall of Records and now stored in the corporation yards in Manhattan, are proposed to be used for this purpose. These plans were submitted to the Art Commission, and approved by them as preliminary. Estimated cost, \$30,000.

PAVILION, CONSERVATORY LAKE, CENTRAL PARK.

Preliminary plans were prepared for a pavilion east of the Conservatory Lake at 74th street and 5th avenue. It is expected that money will be procured for this

work through private subscriptions. The plans for a structure built of very light granite with tile roof, with space for the storage of the small yachts, and pavilion space for the use of fancy skaters. Estimated cost, \$10,000.

MISCELLANEOUS ELECTRIC WORK.

Plans and specifications prepared by the Department Architect for the installation of electric lights in many of the park buildings that have heretofore been lighted by oil lamps or gas mantles, many of them having no lighting equipment whatsoever.

MINERAL SPRING HOUSE IN CENTRAL PARK.

Plans and specifications were prepared for the altering of the section for the Mineral Spring House, which had been destroyed by fire; open market order issued to A. V. Dietz; amount of work, \$425.

Drawings and specifications were prepared for the providing and setting of new artificial stone columns to replace the old broken terra cotta columns in front of the Greenhouses in Central Park; open market order issued to Watson Engineering Co. amounting to \$600.

GREENHOUSES IN ISHAM PARK.

Specifications were prepared for the general overhauling of the Greenhouses in Isham Park; open market order issued to A. V. Dietz; amount, \$300; work completed in October.

TRIANGULAR PLOT AT CANAL STREET, STAPLETON, S. I.

This triangle has long been an eyesore in that location, and a great many complaints have been received in this Department as the result. Plans and specifications have been prepared for the general reconstruction of this triangle, including new curbs, sidewalks, concrete copings and brick fence. Estimates were received, and an order for same issued to Vulcan Rail & Construction Co. and to Frank E. Haynes & Sons, amounting in all to \$969. Work completed December 30th.

JUMEL MANSION.

Work of remodeling Jumel Mansion and bringing it back to its original design has been continued, and several open market orders have been issued for various branches of this work, including the reconstruction and remodeling of the deck railings on the roof, the balcony railing over the side entrance, the main balcony railing over the main entrance and new Colonial benches on the veranda, and various other cdds and ends done both through open market orders and by Department mechanics.

CONCRETE DRINKING FOUNTAINS FOR MANHATTAN PARKS.

Full size drawings and models were prepared for concrete drinking fountains; about 150 of these fountains have been cast in the Department shops by Department mechanics and have been placed in position throughout Central Park, as well as in several smaller parks throughout Manhattan and Richmond.

ALTERATION OF THE SHOWER BATH APPARATUS IN SEWARD PARK PAVILION.

Difficulty has been encountered in keeping the shower bath apparatus, valve, etc., in working order in this building, due to the fact that these baths are used day and night, all the year, and it was therefore found necessary to devise a very simple and yet a substantial mixing valve to be used in connection with the shower baths. After several patterns had been submitted a valve was finally installed, made of brass, in very few parts, very easily taken apart and adjusted, and regulated so that the hot and cold water mixes to the required temperature. It is also arranged in a manner that it cannot be tampered with by people using the shower baths. Open market order issued to J. J. Foley Plumbing & Heating Co.; work completed in August; cost, \$227.

Respectfully submitted,

JAROS KRAUS,

Architect, Department of Parks, Boroughs of Manhattan and Richmond.

DEPARTMENT OF PARKS.

December 10, 1913.

Hon. L. F. LAROCHE,

Commissioner of Parks:

Dear Sir—In conformity with general instructions, I have the honor to transmit herewith a report as to the work done on construction, etc., under the supervision of the office of Chief Engineer, Department of Parks, Boroughs of Manhattan and Richmond, for the year ending December 31, 1913.

In connection with the general report, a statement showing the amount of work done on each contract or park during the year, is attached.

Yours respectfully,

EDWARD A. MILLER,

Chief Engineer.

CENTRAL PARK

Paving with Bituminous Pavement the West Drive, Between 110th and 102d Streets, and the Drive from Webster Statue Southerly to 59th Street and 5th Avenue.

In 1912, an appropriation was made available, covering the laying of about 50,000 square yards of bituminous wearing surface upon a concrete foundation, on the West Drive of Central Park, between 66th and 102d streets. The work also included the paving of several of the Entrance Drives on the west side of the park.

In 1913, a further appropriation of \$100,000 was made available with which to continue the work, and the sections as stated above, were placed under contract.

Although the original construction of the Central Park Drives was outlined in the 1912 report, it might be of interest to know that continuous repairs had to be made to these roadways by scarifying the surface, removing the mud, spreading fresh gravel and properly rolling the same. These repairs required considerable outlay and owing to the fact that the ordinary gravel roadways would not withstand the heavy automobile traffic, especially when chains are used, a new pavement had to be laid.

The original construction of the drive consisted of a foundation of rubblestone or Telford upon which was place a two-inch layer of broken stone and then six inches of gravel. Through the continuous repairs and adding fresh gravel, the crowns of the drives were raised to such a degree that driving on or using the quarters was practically prohibited owing to the steepness of grade.

The road gravel which was excavated was hauled by the contractor to 79th street and was used as a surfacing material over the rock and earth filling previously deposited in the extension of Riverside Park, thereby creating a new playfield upon a solid foundation.

The pavement is under a five-year maintenance guarantee and the indications are that the wearing surface will outlive the maintenance period.

It is to be hoped that further appropriations will be made available with which to continue the work until all the drives have been repaved.

The total amount of work done follows:

14,775 cubic yards of excavation of materials of all kinds.

6,010 cubic yards of concrete furnished and laid.

43,255 square yards of bituminous pavement furnished and laid.

Improvement of Entrance to Central Park at 90th Street, Central Park West.

The lines of the entrance drive at 90th street and Central Park West, were straightened out, that is, the sharp curves were eliminated, the roadway widened and the bell-shaped approach to the main West Drive, was lengthened to such a degree that the dangerous conditions which existed and the chances of accident through automobiles colliding, were remedied.

In connection with this improvement, a new drainage system was installed,

alterations were made to the water supply system, walks, steps, etc., the lawns were reshaped and resolded, trees and shrubbery were moved and replanted and the roadway paved with a new pavement, composed of broken stone and binding materials of asphalt.

The amount of work done follows:

252 cubic yards of excavation and removal of same.

757 square yards of asphalt roadway pavement laid.

126 cubic yards of concrete.

And the necessary alterations to drainage, water supply, walk systems, lawns, planting, etc.

Water Supply System for the 97th Street Storage Yards.

The water supply system for the 97th Street Storage Yards was installed in order to provide fire protection and supply the various buildings.

A connection was made with the 20-inch main in 97th Street Transverse road.

The work done follows:

400 linear feet of 4-inch cast-iron pipe, furnished and laid.

40 linear feet of 2½-inch wrought-iron galvanized pipe, furnished and laid.

250 linear feet of 1-inch wrought-iron galvanized pipe, furnished and laid.

3 4-inch gates in brick vaults.

1 1-inch stop-cock in iron box.

2 fire hydrants.

1 patent connection (20-inch by 4-inch) with main

—and all the necessary excavation and backfilling of trenches, pits, etc., and repaving of walks, roadways, etc.

Improving Central Park in the Vicinity of the Maine Monument.

Upon the completion of the work embraced in the contract covering the erection of the Maine Monument, the grounds adjacent were left in an unsatisfactory condition and had to be adjusted, partly by day's work and partly by open market orders.

This involved the reconstruction of about 3,000 square feet of walk and 7,000 square feet of lawn.

Repairs to Walk Pavements in Central and City Parks.

The walk pavements of Central and City Parks were repaired and new pavements laid, where necessary, as far as the limited appropriation at hand would permit.

Wherever the pavement was found to be beyond repair, new pavement was laid on a concrete base.

The total amount of work done follows:

62,789 square feet of rock asphalt mastic wearing surface laid, where required.

240 cubic yards of Portland cement concrete in foundation.

20 cubic yards of excavation.

RIVERSIDE DRIVE.

Paving with Asphaltic Concrete, etc.

In 1913 an appropriation of \$200,000 was made available with which to begin the work of paving Riverside Drive, from 72d street north, with a pavement which would withstand the light and heavy traffic to which this drive is subjected.

It was decided that an asphaltic concrete pavement upon a 6-inch cement concrete foundation would be the best pavement which could be laid, that is, the pavement which would meet the varied requirements.

The heavy traffic on Riverside Drive, especially the busses, compelled this Department to make continuous repairs, which necessitated the expenditure of considerable of the maintenance appropriation.

In the original construction of Riverside Drive in the early 70's, for some reason or other, the west side of the drive was constructed at a lower grade than the easterly side. The difference between these grades varied from a foot to two feet.

One of the problems involved in repaving the drive was to make the westerly and easterly curbs as nearly level as possible so that the traffic would not be confined to two-thirds of the drive width as was the case under the original construction, owing to the steepness of the westerly quarter. There is still a list or a difference in grade between the easterly and westerly sides, but it is carried to a minimum.

The dilapidated curb and edging on the westerly side of the drive was taken up and a new 6-inch cement curb with a steel protecting bar at the arris, was set on the westerly side of the drive, between 72d and 104th streets.

The edging on the easterly side of the main drive, where necessary, was reset, the basins were brought to the newly established grade, and the pipe lines and drainage system in general, overhauled and cleaned.

After this work had been done, the existing roadway was excavated to a subgrade established at nine inches below the approved and newly-established finished grade of wearing surface and the material excavated was hauled to the extension to Riverside Park at 96th street and 79th street, where it was spread over the stone and earth fill to continue the work of surfacing and preparing a playground.

A Portland cement concrete foundation, six inches in depth, was then laid and a wearing surface, consisting of three inches of asphaltic concrete was placed thereon as a finish. This wearing surface consisted of asphaltic cement and broken stone (a mineral aggregate), passing through various screens, from 2 mesh to 200 mesh in varied percentages.

The work has been fully completed to 113th street.

The pavement is under a five-year maintenance guarantee, and the indications are that the wearing surface will outlive the maintenance period.

Aside from the fact that the city has a substantial pavement, the Department will not be put to the expense of purchasing gravel and otherwise maintaining the roadway pavement on Riverside Drive, that is, between 72d and 113th streets, for a period of at least five years.

It might be of interest to state that the amount of work done on the three contracts, is as follows:

17,184 cubic yards of excavation of all kinds and removal of same.

11,066 cubic yards of concrete in roadway foundation.

66,382 square yards of wearing surface laid.

68 road or receiving basins rebuilt.

9,043 linear feet of cement curb laid.

944 linear feet of bluestone edging taken up and reset on concrete foundation.

PUBLIC DRIVEWAY.

(Harlem River Driveway).

In the 1912 report this office advised you that the work of constructing a reinforced concrete bulkhead to take the place of the wooden bulkhead was well under way, and that at the close of the year 608 linear feet of the same had been constructed, some in part, some complete, with the exception of the granite coping.

The original construction of the bulkhead of the Harlem River Driveway was completed in 1897. This bulkhead along the river front of the Harlem River, between 155th street and Dyckman street, defines the bulkhead line or channel line as laid out by the United States Government.

In the original construction the bulkhead referred to (the total length of which, as the same is built in sections, is 6,100 linear feet), was built partly of stone in the shape of a retaining wall and partly of cribs with dressed timber facing. The dove-

tails or tennons of the crib logs in a great many sections had rotted and the face work had dropped into the river, carrying with it considerable of the crib fill. It was beyond repair, and with the appropriation available, the most important sections, or more properly speaking, the most dangerous ones, were taken down to mean low water line, in fact, somewhat below the same, and a monolith of concrete was laid over the crib foundation. Upon this monolith the cellular construction was built. The granite coping was set, the sidewalk of asphalt wearing surface on reinforced concrete foundation was laid, the curbs reset to proper grade and the roadway finished as under the original contract (clay surfacing on a rubblestone cinder foundation).

The contract provided for the taking down and re-erecting of the existing ornamental iron fence and furnishing and erecting new fence of a similar design, where required.

An examination of the iron work revealed the fact that the same had rusted through and it was impossible to re-erect or even use it as proposed. A new design of fence was prepared and submitted to the Art Commission for consideration. This new work will not be undertaken until the spring of 1914.

Subsequent to the time work was begun on the bulkhead contract, and in fact, since it has been completed, other sections of this wooden bulkhead have failed and dropped into the river.

The Board of Estimate and Apportionment has authorized a further expenditure of \$110,000 with which to continue the work of constructing reinforced bulkhead, but this money is not sufficient to take care of all of the failed sections, and it is to be hoped that a further appropriation will be made in the spring of 1914 with which to continue the work after the second contract has been executed.

The estimated cost of completing the entire work, that is, constructing a reinforced cellular concrete wall or bulkhead in place of all the wooden sections, is about \$550,000.

In considering the construction which would best fit the problem in general, the Engineer had to bear in mind the fact that this wooden bulkhead above mean low water was built on wooden cribs, which acted as a foundation, and which varied in depth from say ten to twenty feet.

In considering the problem, the permanent structure was so designed that the weight which the old crib foundations had to support was a little less per square foot than under the original construction, and it was deemed sound engineering judgment that these cribs had reached their ultimate settlement and that they would sustain any structure which was of even weight or lighter than the one originally in place.

The work done on this contract follows:

14,742.72 cubic yards of crib filling excavated.

7,724.43 cubic yards of earth and stone back of the crib excavated.

2,153.17 cubic yards of class "A" concrete, furnished and deposited. 3,565.24 cubic yards of class "B" concrete, furnished and deposited.

341.96 cubic yards of class "C" concrete, furnished and deposited.

44.15 cubic yards of class "D" concrete, furnished and deposited.

72.08 cubic yards of class "E" concrete, furnished and deposited.

895.56 linear feet of granite coping, furnished and set.

2,629.68 cubic yards of dry rubble wall constructed as back filling.

4,508.88 cubic yards of clean earth filling deposited as back filling.

743.17 cubic yards of steam cinders furnished and deposited as back filling.

854.45 linear feet of curbstones redressed and reset.

7,969.20 square feet of walk pavement of rock asphalt mastic furnished and laid.

199.60 square yards of asphalt block gutters furnished and laid.

3.345.93 square yards of roadway pavement laid as specified.

2 gutter outlets constructed as specified.

Stairway with railing furnished and set complete as specified.

JOHN JAY PARK.

Improvement of Same.

In my annual report for 1912, the work done and under way on the construction of this park was fully described.

During the winter of 1912 and 1913, the work under contract, construction of park, was practically suspended. It was resumed as soon as weather conditions would permit and prosecuted to completion during the summer months.

The park is located between 76th and 78th streets and fronts on the East river, separated from the same by Exterior street. A strip of land, 40 feet wide, on the westerly side of the park, was set aside for street purposes and a new street was constructed known as Cherokee place. This was done owing to the closing of 77th street, as the same passed through the park.

One of the features of this new park, which might practically be termed a "play-

ground," is the playground layout and shelter house.

These playgrounds, the one for girls and the other for boys, are enclosed with high picket fences, are of modern construction, properly drained, and are well patronized by the children of the neighborhood.

The new shelter house and comfort station is in course of erection, and the completion of same is anticipated in the early spring of 1914.

Trees were planted in the Esplanade Walk and also in the main Plaza on the easterly side of the park.

The sidewalks surrounding this park were improved under another contract for "furnishing and setting curb and laying cement sidewalk."

A further contract was entered into covering the erection of a 7-foot picket fence on the surrounding walls of the park. This work was prosecuted to completion.

Through the opening of this park, not alone playground facilities are offered to the children of the east side, but the Recreation Building provides shelter for the mothers and little ones of the neighborhood.

The total amount of work done on constructing the park proper follows:

3,783 cubic yards of excavation of all kinds, except retaining walls.

1,256 cubic yards of excavation of all kinds for retaining walls.

1,668 cubic yards of retaining wall masonry.

- 86 shoes in concrete base for fence foundation.
- 6 walk basins built complete.
- 2 surface basins built complete.
- 565 linear feet of 6-inch vitrified drain pipe, furnished and laid.
- 130 linear feet of 8-inch vitrified drain pipe, furnished and laid.
- 2.093 linear feet of bluestone edging, furnished and set.
- 1,325 linear feet of 3-rail pipe fence, furnished and erected.
- 47,087 square feet of gravel walk completed.

Water supply system completely furnished and installed.

Playgrounds constructed complete.

Sidewalks.

- 19 linear feet of old curbstones taken up, reset, redressed, etc.
- 327 linear foot of new curbstones furnished and set, etc.
- 13,806 square feet of granolithic sidewalk pavement laid.

Receiving basins built.

Fences.

2,138 linear feet of wrought iron picket fence, furnished and erected complete.

Completion of the Addition to Riverside Park, East of the Tomb of General Grant.

Some years ago the westerly half of the plot of ground bounded by 122d street, Claremont place, Riverside drive and Claremont avenue was improved. The easterly section was left unimproved owing to the fact that funds were not available.

In 1913 an appropriation was made available with which to prosecute the completion of this easterly half of the park.

The easterly rock slope was graded, a new entrance was constructed between Claremont avenue and Riverside drive at 122d street, several flights of steps were constructed as an entrance at the northerly end, new walks were built, drainage was installed, as also a water supply. Owing to the limited amount of money available, it was impossible to remove as much of the rock as should have been removed in order to properly grade the slopes on the easterly side of the park between Claremont place and 122d street. This work, as also the work of shaping the lawns, spreading mold, sodding and planting, remains over for 1914, should additional money be made available.

The work done follows:

1,200 cubic yards of excavation of all kinds.

5 walk basins built.

372 linear feet of 6-inch vitrified drain pipe laid.

1 surface basin built.

127 linear feet of 8-inch vitrified drain pipe laid.

A water supply system installed complete.

139 cubic yards of rubble masonry walls.

596 linear feet of bluestone steps furnished and set.

6,620 square feet of rock asphalt mastic walk pavement laid.

51 cubic yards of broken ashlar masonry built.

22 linear feet of bluestone checks set.

419 linear feet of wrought iron picket fence furnished, but not erected.

155 linear feet of new ornamental iron fence erected along the side of steps.

The picket fence which was to be set on a concrete coping along the Claremont avenue side of the park was not set owing to the fact that the same would necessitate the removal of solid rock, in some places 15 feet high. This fence was removed to the 97th Street Storage Yards, and is now being erected as an enclosure for the same on a granite coping.

PLAYGROUND AMSTERDAM AVENUE, BETWEEN 151st AND 152D STREETS

For many years title was vested in the City to the plot of land lying between 151st and 152d street, facing on Amsterdam avenue and running east 125 feet. This parcel of land was under the jurisdiction of the Department of Water Supply, Gas and Electricity, Park Department and by consent under the Street Cleaning Department.

The park area consisted of a small and very irregular piece of land, absolutely unsuited for any purpose. After considerable delay, through action of the proper board, the entire area was turned over to the Park Department for playground purposes. The area is about 0.574 acres.

A plan was prepared covering the laying out of a playground of about two-thirds of the plot and a sunken garden the other one-third. In connection with the latter a field house was erected. The topography of the plot is left practically at its original level, that is, the depressions were filled and the ground graded so that water will be shed.

A modern playground was built on a broken stone foundation, the finishing layer being composed of clay, fine gravel and steam cinders.

In order to properly drain the ground, a sub-soil drain system was installed,

enclosing walls were built, topped off with a granite coping, on the top of which a seven-foot high picket fence was erected. A water supply and drainage system was installed, the exterior sidewalks were paved with cement pavement, tree plots were excavated and filled with mold or garden soil, and trees planted.

The entire work will be completed before the close of the year, in fact, action is now being taken by this Department to formally open this playground on December

the 20th.

The work on this construction follows:

1,430 cubic yards of excavation of all kinds.

100 cubic yards of filling deposited.

430 cubic yards of rubble and concrete masonry in walls and seats.

388 linear feet of granite coping, redressed and reset.

9,740 square feet of cement sidewalk laid.

85 cubic yards of mold furnished and deposited in tree pits.

The playground construction consisted of

360 cubic yards of broken stone spread.

116 cubic yards of gravel, furnished and spread.

58 cubic yards of steam cinders, furnished and spread.

A water supply system was installed which included the following:

15 linear feet of 2½-inch lead pipe.

215 linear feet of 2½-inch galvanized-iron pipe laid.

3 21/2-inch stop-cocks.

1 flush hydrant.

1 patent connection, 20 inch by 2 inch.

9 square yards of asphalt roadway pavement restored.

1 manhole built.

1 surface basin built.

150 linear feet of 8-inch vitrified drain pipe laid.

2,114 linear feet of 3 and 4-inch tile pipes laid in sub-soil drainage.

630 linear feet of wrought-iron picket fences, furnished and erected.

PLAYGROUND BETWEEN 170TH AND 171ST STREETS

High Bridge Park

One of the most picturesque and natural sections of Highbridge Park, between 170th and 171st streets, facing on Amsterdam avenue and extending to the east for a considerable distance, was converted into a children's playground at very small expense.

The area in question is land partly sloping and partly level, and forms, owing to the fact that it is thickly studded with trees and affords shade and shelter, an ideal

site for the purposes designed.

After the underbrush, loose stone, rubbish and foreign material had been cleaned away, certain sections of level land were regulated and graded and swings and children's play apparatus were installed. Benches were set under the trees and the playground, which in area covers a space of about 2½ square acres, was well patronized during the hot weather.

Outside of the expenditure incurred for apparatus, the cost of constructing this

playground was trivial.

TEMPORARY PLAYGROUND BETWEEN 174TH AND 175TH STREETS

High Bridge Park

Owing to the continuous demands made upon the Department for playgrounds, especially in the outlying districts, it was deemed advisable to convert a section of flat land, between 174th and 175th streets and Amsterdam avenue, in Highbridge Park, into a ball field or playground, it being understood that the construction of the

same was to be carried on in such a manner that it would not interfere in any way with the future development or layout of Highbridge Park.

Excavations were made and depressions filled and permits issued, covering the delivery of clean earth filling. After the filling had been deposited and the stones and rubbish raked from the surface, the entire plot was rolled and is used as a ball field, under permits issued by this Department.

The area of said field is about one acre.

As the filling was deposited free of charge and regulated and graded, the only expense to which the City was put in constructing this temporary playground, was the rolling, harrowing and raking.

The total amount of filling deposited is approximately 3,000 cubic yards.

PLAYGROUND, 180TH STREET AND HIGHBRIDGE PARK

A temporary playground is now under course of construction. Large amounts of filling were deposited in the depressions. The work is still under way and will not be completed until the spring of 1914.

The area is approximately two acres. It will probably be used as a ball field for older boys.

The work remaining to be done is the levelling off, raking, harrowing and rolling the ground, which, at this season of the year is impractical.

The work done to date is the furnishing and delivery, free of cost to the City, of 2,000 cubic yards of clean earth fill.

The Commissioner of Parks had in mind the terracing of the slopes so as to save the expense of constructing retaining walls, varying in height from two to thirty-five feet, but this work was only contemplated and was abandoned owing to the lack of funds.

Fence Along West Side of Playground—Amsterdam Avenue, Between 174th and 175th Streets

The new playground in Highbridge Park, facing on Amsterdam avenue, between 174th and 175th street, was set aside as a ball field and in order to accommodate the various ball clubs, it was taxed to its full capacity.

Some of the ball clubs laid out their fields in close proximity to Amsterdam avenue and batted balls very often broke the windows on the west side of Amsterdam avenue.

In order to remedy these conditions, a contract was executed covering the furnishing and erecting of a 15-foot high gas pipe and wire mesh fence along the front of the playground on Amsterdam avenue, between 174th and 175th streets.

Through the erection of this fence the batting of balls out of the field was reduced to a minimum.

The work done follows: 297.33 linear feet of gas-pipe fence furnished and erected.

IMPROVEMENT OF THE PLAZA AT 110TH STREET AND 8TH AVENUE

The plaza referred to was originally paved with an asphaltic wearing surface on a bituminous concrete binder on a foundation of concrete and different kinds of stone block pavement.

The maintenance period had expired several years ago and through the continuous repairing and patching the pavement was uneven, depressed, disintegrated, etc. Through the raising of the grade of the car tracks, the pavement on the line of the curbs of 8th avenue was so low that pools of water formed after every rain.

A contract covering the repaying of this plaza was executed early in 1913 and the work was completed in the early summer.

The entire area was excavated to a subgrade, the stone blocks and disintegrated concrete were removed, the depressions were filled in with broken stone, thoroughly

rammed and rolled. After this work had been completed, a Portland cement concrete foundation was laid as a base, on the top of which, a bituminous wearing surface was laid, consisting of asphalt and small stone. The curbs, where necessary, were reset and new curb furnished in place of such stone as could not be redressed.

The work done follows:

- 80 linear feet of new curb furnished and set.
- 75 linear feet of old curb reset.
- 1,286 cubic yards of excavation of materials in roadway.
 - 174 cubic yards of stone chips and broken stone filling.
 - 172 cubic yards of stone chips deposited in place.
 - 697 cubic yards of concrete laid.
- 4,447 square yards of asphaltic concrete wearing surface laid.

PIPE RAIL FENCES IN CITY PARKS.

For the better protection of the lawns in Washington, Madison and Union squares and in Colonial Park three-rail pipe fences were erected under various contracts.

The lawns in Washington and Madison squares are now all enclosed, and the railing has been set along the edge of the steep slopes in Colonial Park.

Owing to the fact that the subway construction, as it passed through Union square, required an open cut, a considerable amount of the railing erected in Union square had to be taken down, and this was shifted to other smaller parks.

The amount of work done follows:

2200 0000000000000000000000000000000000		
In Washington square		
In Madison square	8,841 linear	feet
In Union square	4,437 linear	feet
In Colonial Park	1,782 linear	feet
Total	20,848 linear	feet

RIVERSIDE DRIVE.

Repairs to New Pavement Damaged by Breaking of Water Main.

Shortly after the new pavement of Riverside drive had been laid on the roadways, a water main burst at Eighty-seventh street and caused a cave-in and settlement in the roadway and sidewalk.

This work was repaired at the expense of the Department of Water Supply and this Department.

The work done follows:

197 linear feet of curb reset.

290 square yards of roadway pavement.

42 cubic yards of excavation.

2 basins rebuilt.

30 cubic yards of concrete.

8 linear feet of drain pipe laid.

REPAIRS TO ROADWAY PAVEMENTS OF STREETS AND AVENUES UNDER THE JURISDICTION OF THIS DEPARTMENT.

The pavements of roadways, plazas, streets and public places under the jurisdiction of this Department were kept in good repair during the year.

The total amount of work done follows:

13,922 square yards of sheet asphalt wearing surface laid.

1,520 square yards of asphalt block pavement laid.

46½ cubic yards of concrete in foundation laid.

The engineering force was employed during the year on the laying out and supervision of the various contracts described in this report, and, in addition thereto, on the preparation of surveys, specifications, estimates of cost for new and contemplated work, and the measurement of all supplies purchased on contract or open market orders

for the Boroughs of Manhattan and Richmond, as well as the tabulation of all bids received for the various boroughs on contracts and supplies.

I transmit a list showing this work, in addition to the work necessary on contracts, etc.

Specifications.

Specifications were prepared during the year as follows:

"For paving with bituminous pavement the West drive in Central Park, from Fifty-ninth street and Fifth avenue to the Webster Monument, and from One Hundred and Second street to One Hundred and Tenth street."

"For constructing a playground at One Hundred and Fifty-second street and Amsterdam avenue."

Three different specifications for "Paving with Asphaltic Concrete, Riverside drive, from Seventy-second street to Ninety-fourth street, Ninety-fourth street to One Hundred and Tenth street, and One Hundred and Tenth street to One Hundred and Fourteenth street."

"For repairing asphalt roadway pavements."

"For constructing a concrete bulkhead along the Public driveway, between One Hundred and Seventy-fourth and One Hundred and Eighty-third streets."

CONTRACT PLANS AND OTHER DRAWINGS, ETC.

Plan of grounds around Arsenal.

Map of Riverside Park and drive, Seventy-second street to One Hundred and Twenty-ninth street.

Construction plan of Columbus Park.

Topographical map of park, One Hundred and Thirty-eighth street and Broadway.

Topographical map of north end of Morningside Park.

Construction map of playground, West Fifty-ninth street.

Construction map of One Hundred and First street playground.

Map of proposed bridle road from Seventh avenue and One Hundred and Tenth street to Bridge 25, Central Park.

Map showing boundaries of One Hundred and Fifty-second street and Amsterdam avenue playground.

Record map of Madison square.

Drawing of tablet, Washington Headquarters, One Hundred and Fifty-seventh street subway station.

Contract drawings for One Hundred and Fifty-second street playground.

Topographical map of Union square.

Plan of Cherry street playground and adjacent bridge property.

Contract drawings for repaying Riverside drive, Seventy-second street to Ninety-fourth street, Ninety-fourth street to One Hundred and Tenth street, One Hundred and Tenth street to One Hundred and Fourteenth street.

Topographical plan of Seventeenth street park.

Plan and profile of sidewalk, Riverside drive, Eighty-sixth street to Eighty-seventh street

Construction map of Seventh avenue plots, One Hundred and Tenth street to One Hundred and Fifty-third street.

Construction map of John Jay Park.

Contract drawings, concrete bulkhead for Speedway, One Hundred and Seventy-fourth street to One Hundred and Eighty-third street.

Map of lower end of Union square, showing Lafayette Statue.

Map showing approximate location of 2-inch water pipe in North Meadow, Central Park.

Topographical map of Triangle, west of Washington Park, Stapleton, Staten Island.

Topographical map of grounds around Museum of Art, Central Park.

Topographical map of Riverside drive, Eighty-sixth street to Eighty-seventh street, showing conditions before and after break in water main.

Topographical map showing location of rocks, steps, etc., of Fort Horn, Morning-side Park.

Topographical map and survey of small park at One Hundred and Fifty-first street and One Hundred and Fifty-second street and Amsterdam avenue.

Map and survey of Battery Park, showing location of trees.

The filed construction map of Queensboro Bridge playground, west of Sutton place, was completed.

Profiles, cross sections and flat plan of High Bridge Park playground, opposite One Hundred and Eightieth street and Amsterdam avenue.

SURVEYS.

Surveys were made as follows:

Washington Bridge plaza at Amsterdam avenue.

Kenmare Street Park.

Riverside drive, Seventy-second street to One Hundred and Tenth street.

Amsterdam avenue and One Hundred and Tenth street (defective drainage).

Location of Ailantus trees at 157 Second avenue.

Battery Park, adjacent to new Barge Office.

Plaza, Fifty-ninth street and Fifth avenue, for Pulitzer Fountain.

Post-holes along New York Central Railroad at Hudson River, Eighty-third street to Eighty-sixth street.

North end of Morningside Park, showing location of rock, steps, etc., at Fort Horn.

Elevations of West drive, Central Park, for quantities, second contract.

Survey of break in sea-wall, Carl Schurz Park, Eighty-sixth street and East River.

Cross sections for proposed bridle path from One Hundred and Tenth street and Seventh avenue to cross drive at about One Hundred and Second street in Central Park.

Survey showing location of water mains and appurtenances on work done in Central Park during the year 1912.

Survey of property, gate house, One Hundred and Thirty-fourth street and Amsterdam avenue.

Topographical survey of small park located at Seventeenth and Eighteenth streets and Avenue C.

Topographical survey of Union Square Park.

Cross-sections, plaza, 110th street and 8th avenue, for estimating purposes.

Survey of playground, St. Gabriel's Park.

Survey of small park, 115th and 116th streets and 7th avenue.

Topographical survey of 79th street storage yards.

Survey for John M. Carrere statue.

Cross-sections and final measurements for contract, "Improving Addition to Riverside Park, 122d street."

Survey for new curb, etc., adjacent to the Firemen's Monument at 100th street and Riverside drive.

Survey of Riverside drive for improvement exterior to the roadway.

Survey showing locations of water mains in Morningside Park.

Cross-sections of Riverside drive roadway, between 113th and 127th streets, for future contract use.

Topographical survey of a portion of High Bridge Park, opposite 180th street, east of Amsterdam avenue.

A re-survey of same location after filling had been deposited.

Survey showing the topography of a portion of High Bridge Park, between Amsterdam and Edgecombe avenues, 170th and 172d streets.

Surveys were made showing the profiles of certain streets projected across Riverside Park, from the drive to the railroad, between 72d and 95th streets.

Encroachment survey, 82d street and Riverside drive.

Survey of retaining wall on the easterly side of Riverside drive, south of 148th street, sections taken and the amount of encroachment computed.

Topographical survey of a portion of St. Nicholas Park, from 136th to 138th streets, St. Nicholas terrace to Convent avenue.

Topographical survey of a portion of Central Park, 79th street to 85th street, from 5th avenue to the old Reservoir line.

Surveys of the existing Harlem River bulkhead and drive are now being prosecuted.

ESTIMATES.

Estimates of cost were made as follows:

Extension of Laurel Hill terrace through High Bridge Park.

Reinforced concrete facing for the rock cut at 123d street, adjacent to Fort Horn. Estimates showing cost of proposed bridle path from 110th street and 7th avenue to 102d street and Central Park.

Estimate of cost and materials required in the matter of constructing a playground and building retaining walls in High Bridge Park at 180th street and Amsterdam avenue.

Preliminary estimates of the quantities and cost for new cellular concrete bulkhead along certain sections of the Harlem River driveway to be used as a base for contract No. 2.

Modification of the above estimate, eliminating certain features.

MISCELLANEOUS.

An athletic field was staked out on the Green, Central Park, for the games of 10,000 school children.

The old water pipe lines in Battery Park were defined on the ground from the records of the Department, and a plan was prepared showing a more modern system.

Grades were established for the new pavement of the West drive, for the new pavement of Riverside drive, from 72d street to 110th street, and for the curb and surface of the new tennis grounds in the Meadow, north of the new reservoir basin, Central Park, as well as for the street and curb adjacent to the Firemen's Memorial Monument.

Considerable time was devoted to preparing for the Bureau of Municipal Statistics of the Department of Finance, a statement showing the areas of walks, roads, lawns, water, rock, playground area, etc., under the jurisdiction of this Department.

Inspections were frequently made of the work of other departments in territory under the jurisdiction of this one, namely, the ducts for the fire alarm telegraph through the 79th street transverse road, the high pressure mains through City Hall Park and Mail street and through Battery Park, various electric ducts of the Department of Water Supply, Gas and Electricity, etc.

Investigations and reports under different dates showing locations of failures to the old wooden bulkhead, the easterly boundary of the Public driveway.

Report showing elevations taken on concrete monoliths built under first contract, Public driveway bulkhead.

Examination and report as to break in 15-inch drain pipe, entrance to Speedway, at about 160th street.

Report on modification of contract for paving the Public driveway, adjacent to the concrete bulkhead, giving the quantities and estimated cost of same, together with comparative quantities and cost for a different character of roadway pavement.

Inspection of work now being done by the Department of Water Supply in the matter of laying a 20-inch main in the Public driveway, from Dyckman street to 175th street.

Location for construction map of 20-inch water main laid in Speedway by Department of Water Supply.

Report showing the area of a number of unimproved playgrounds in northern Manhattan.

Report as to the condition of the wearing surface, Queensboro playground.

Report on complaint as to the condition of the yards adjacent to the 101st street playground. Levels and sections were taken and a tracing was submitted with report.

Statement relative to roadway pavements under the jurisdiction of the Commissioner of Parks of Manhattan, showing when and by whom the pavements were laid, the names of the contractors, the maintenance period, character of pavements, intrinsic value and their costs.

Checking up all bills on open market orders issued by the Chief Engineer's office. Examination of park territory disturbed in prosecuting the work under the Catskill Aqueduct and Rapid Transit Subway contracts, in order to insure the proper restoration of territory disturbed.

Defined the lines of tennis courts in Meadow, Central Park.

The usual routine office work of tabulation of bids, inspection of materials and work, cement testing, as well as the measuring of all supplies, such as gravel, sand, mold, sod, etc., and the general field work on construction and on contracts in force, and of surveys for new work was carried on during the year.

Respectfully submitted,

Edward A. Miller, Chief Engineer.