

SUMMARY OF
EIGHTEENTH
ANNUAL REPORT

OF THE

DEPARTMENT OF PARKS

FOR THE BOROUGH OF BROOKLYN

COMPRISING

FIFTY-FIFTH ANNUAL REPORT

OF THE

OLD CITY (Now Borough) OF BROOKLYN
FOR THE YEAR 1915



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PART I

GENERAL REVIEW

THE PARK SYSTEM.

Considering area and population, Brooklyn's park system is far from adequate, the special need being for additional small parks and play spaces. The Borough is fortunate, however, in several respects. Its large park is centrally located and is not surpassed by any park in the country either in beauty of landscape or in the variety of active uses for which it is suitable. The area of Prospect Park is 526 acres. If the Parade Grounds and the Botanic Garden are added the total area of contiguous park property is 624.90 acres. Another feature of which Brooklyn may well be proud is its system of fine park boulevards, especially the Eastern Parkway, Ocean Parkway and Shore Road. The total length of parkways is 28.46 miles.

Some advantage has been taken of our extensive shore front. Five parks and one parkway, with an aggregate area of 373 acres, are located on New York Harbor and adjacent waters. These properties have a distinctive interest and value, and they hold great promise for the future. The picturesque Shore road has reached a new stage of development by completion this year of the long sea wall and making available for various recreation purposes the space stretching along the water front for more than two miles between this wall and the banks of the roadway. The Coney Island parks are already used most intensively in the summer. Canarsie and Dyker Beach parks are waiting for much needed development. The filling in of the salt marsh at Dyker Beach would provide an athletic field on the Narrows with an acreage of 70 acres, or nearly twice as large as the Parade Grounds, and still leave an equal area of uplands for ornamental planting.

In all, the Brooklyn Park system comprises forty-six (46) parks and playgrounds with a total area of 1,142.25 acres. The aggregate assessed valuation of about seventy-five million dollars (\$75,000,000).

BETSY HEAD PLAYGROUND.

During this year one of the best equipped playgrounds and recreation fields in the United States was completed. It occupies four entire blocks in Brownsville, in the neighborhood of Hopkinson Avenue and Dumont Street, a section with a large Jewish population. Besides children's playgrounds and farm gardens there is a large athletic field and outdoor gymnasium, shower baths for use throughout the year, and an outdoor swimming pool for summer use. A model of this playground was included in our carefully arranged exhibit at the San Francisco Exposition, and attracted much attention there. It contributed greatly toward securing first prize for the New York City Parks exhibit.

The buildings and equipment of this splendid recreation centre were paid for out of a generous and far-sighted bequest of \$187,746.84, made by the late Betsy Head of Suffolk County. The land, valued at more than \$250,000, was paid for by the property owners of Brownsville, who showed remarkable public spirit in consenting to an assessment for the purpose. The construction was done under the direction of the Public Recreation Commission, which, upon its termination at the end of September, turned the property over to the Department of Parks for operation. A number of improvements are still to be made this spring and they will be paid for out of the interest on the legacy. Too much praise could scarcely be given to the late Betsy Head, to the property owners of Brownsville, or to the members of the Public Recreation Commission for their contributions to the ends

achieved. The Department counts itself fortunate in having charge of the operation of this model playground.

Mrs. Isaac L. Rice, of Manhattan, has proposed to erect a beautiful fountain and gateway at the entrance to the athletic field as a memorial to the late Isaac L. Rice. Work on this very acceptable memorial is now going forward.

PERSONNEL OF FORCE.

While the framing of park ordinances in the City of New York devolves upon a Park Board, made up of the Park Commissioners of the several boroughs, each Commissioner has completely independent administrative jurisdiction within his own borough. Landscape features are subject to approval by the City's Landscape Architect.

The operating force of the Department has varied in numbers during the year from six hundred forty-eight (648) to seven hundred eleven (711). Among the supervising staff are a Superintendent, Chief Engineer, Secretary, Chief Clerk, Supervisor of Recreation, General Foreman, Foreman of Mechanics, Arboriculturists, Head Gardeners and Foremen. The force may be divided as follows: Clerical, twenty-one (21); engineering, fourteen (14); mechanical, fifty-six (56); tree forces, seventy (70); foremen, twenty-six (26); gardeners, forty-two (42); laborers, two hundred and ninety (290); hostlers and drivers, twenty-six (26); playground leaders, thirty (30); comfort station attendants, forty (40); miscellaneous, eighty-eight (88). The administrative and executive officers are particularly gratified at the whole-hearted support received during the year from men in every branch of the service. Without this hearty co-operation the work could never have been done under a budget so severely reduced.

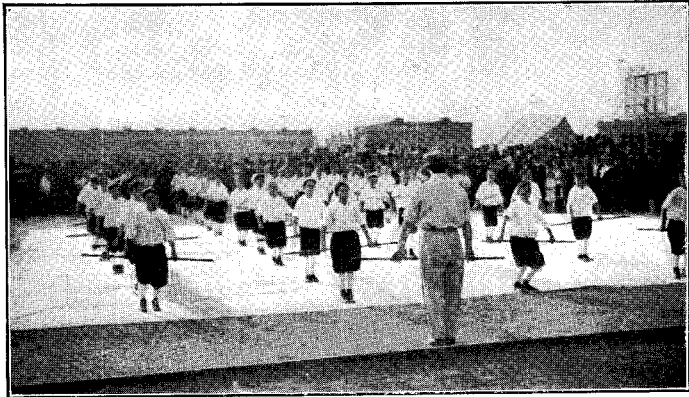
CONSTRUCTION WORK BY CONTRACT.

The most important construction work completed during 1915 under the engineering bureau of the department was the completion of the sea wall along the Shore Road, between Bay Ridge Avenue and Fort Hamilton. A contract for placing 250,000 cubic yards of earth fill back of this sea wall has been more than half finished. Seven timber groynes or jetties have been built at Coney Island to protect the park beach from erosion. In Prospect Park 8,300 feet of irrigation service pipes were laid, with 31 hydrants, and 5,200 feet of sanitary sewers. All the old unsanitary cesspools were eliminated. The entire 15th Street Plaza of Prospect Park was reconstructed. A sheet asphalt traffic road was laid around the edge of the Park Circle at the head of the Ocean Boulevard. The contract for completion of walks in the Brooklyn Botanic Garden was completed in July. Three contracts for completion of the laboratory building and Greenhouses in the Botanic Garden have been awarded and work will be begun as soon as weather permits.

CONSTRUCTION WORK BY PARK FORCES.

From an administrative viewpoint the most gratifying feature of the year's work is in the fact that although during the busy season we were obliged to work with 150 fewer men than in 1914, and although the net expenses for the year show a decrease of \$78,879.07, as compared with 1914, the park employes under the Superintendent have done an unprecedented amount of construction work in addition to their ordinary maintenance activities. These improvements have been made also in spite of our having increased activities to attend to and new properties to operate. Some of these definite improvements and their cost in labor and materials are shown in the following table:

Laying out additional plots of soil at McCarren Park	\$1,113.75
Building new piers for fence at McCarren Park	330.26
Construction of tennis courts and making new walks and steps at Highland Park	3,062.59
Building wall and making changes at Stable	4,634.70
Grading and paving yard and new Road, Prospect Park	3,703.73



Exercises at Opening of Betsy Head Playground.



Exercises at Opening of Betsy Head Playground.

Laying out new walk, Underhill Gore	422.43
Laying out new walk, Sunset Park	269.50
Laying out tennis courts, Red Hook Playground	270.62
Grading slopes, Shore Road	2,221.90
Grading slopes, Duck Pond	319.00
Making manure compost, Prospect Park	2,530.10

\$18,878.58

In addition to the above, the greenhouses were completely renovated and extended, a new wading basin was built, and several new skating rinks, and many tennis courts. Much of the work was done on the construction of a new bridle path in the duck pond section of Prospect Park. The lawns of several of the small parks, such as Saratoga and Irving, were reconstructed. A new children's farm garden was built in Brownsville containing more than 300 individual plots, while the McCarren Park Farm Garden was put in a new location and increased from 200 to 400 plots. The shops turned out many miles of pipe rail fence, renovated most of the rolling stock, built portable hand-stands, park benches, and a considerable quantity of playground apparatus. These improvements and others are set out in much more detail in the second part of this report.

GENERAL MAINTENANCE PROBLEMS.

The Department maintains, repairs and cleans thirty-six miles of park roads and boulevards, with the total area of 1,301,804 square yards; fifty-five miles of park walks, and eight miles of bridle path. It mows and keeps in condition 545 acres of lawn. It operates 46 comfort stations (of which five are new this year), and about an equal number of other buildings. It maintains 26 miles of park fence. It cares for special features such as Greenhouses and Menagerie, and has shops equipped to do a great variety of mechanical work. Outside the parks, about 80,000 street trees are under the care of the department, in addition to the many thousand trees, shrubs, and plantations within park area.

Maintenance of lawns, plantations and buildings in good condition makes increasing demands upon the service as population grows and use becomes more intensive. This is especially true at a period when the yearly maintenance budget is being steadily and rather severely reduced. The care of parkways and roads is an ever present problem because of the light and temporary character of the pavement, which consists of a gravel foundation with an asphaltic coating. After two or three years of service this surface deteriorates rapidly and is in constant need of repairs. This spring it will be necessary to put a new surface on most of the East Drive in Prospect Park. It is intended to take advantage of this occasion to remove the high crown which has been built up through a period of years. If New York City could make a successful claim to a part of the state highway funds, permanent pavement of the park roads would save greatly on maintenance costs.

ACTIVE RECREATION.

Much emphasis has been placed upon the further development of opportunities for active recreation. The layout of apparatus at several playgrounds, such as McCarren Park, Williamsburg Bridge, and New Lots, has been rearranged on better lines. The schedule of work for play leaders has been changed so as to get along with as few as sixteen in winter, thus allowing an expansion to forty in mid-summer. This has made possible the opening of more summer play spaces on vacant lots. New farm gardens and wading basins are described elsewhere. Thus far it has been possible to secure a great increase in recreational activities without conflict with the landscape and horticultural features of park management. The process cannot, however, go much further without the acquisition of new playgrounds. A gratifying change has been observed in the attitude of all classes of

employes toward recreation activities. Little is left of an old point of view which has been expressed in this way: "If all the people would only keep out, what fine looking parks we could have!"

BOATING.

The lake in Prospect Park is one of the best assets of the borough. It contains about seventy acres and is so laid out that in rowing from the boat house through the channels around the large lake and back a distance of almost three miles is covered. From the lake can be seen, especially in Spring and Fall, some of the finest landscape effects to be found anywhere in the park.

A new arrangement has been made whereby the charge for row boats has been reduced from fifty cents to twenty-five cents per hour. This has had the effect of more than doubling the number of persons getting the benefit of this excellent recreation. The amount of boating on week-day afternoons and evenings has been multiplied several fold. In order to accommodate the larger demands at the reduced price the concessionaire was obliged to provide a larger number of boats. He also built and turned over to the City an interesting rustic boat house on the peninsula. This building serves picnic parties and enables many persons to get their boats on the west side of the park. It also serves to reduce the congestion of boats in the narrow channels leading to the large boat house.

WINTER SPORTS.

The winter climate in New York is too uncertain to permit of the most intensive use of park properties during the cold season. Much, however, has been done to bring out the possibilities in this direction. Places for coasting have been laid out in Highland, Fort Greene, Prospect, Sunset, and other parks. It was once the custom not to allow sleds to be brought into Prospect Park. Our policy has been to welcome them by tens of thousands. This has not been followed by serious accidents or by any appreciable injury to lawns or plantations.

The principal sliding place in Prospect Park is about a fifth of a mile long and thirty feet wide. Snow is banked up along the edges as a provision for safety. This makes an ideal sliding place for children and it has been used considerably by adults in the evening. As many as six thousand sleds an hour have gone down this one slide. A number of new neighborhood skating places have been constructed. The largest one, at Highland Park, will accommodate several thousand. Some of the smaller ones are on the children's playgrounds. At Dyker Beach Park a successful experiment was tried by shutting the salt water out of the marsh in the fall and allowing rain water and melted snow to accumulate. This has made possible a much better body of ice than could be secured with the salt water. In our neighborhood skating places the water is shallow and the average number of days of skating during the season is about four times as great as on the large lake at Prospect Park.

The building of the rustic boat house in Prospect Park has afforded a convenient additional point for accommodating skaters. A new skate and check room house has been built by the department in sections, and the former congestion and inconvenience, as well as expense of skate house construction, greatly reduced. In good skating weather as many as 40,000 persons come to the lake in one day. Occasional festivals have been held at which hundreds of Chinese lanterns were lighted around the shores of the lake. The places for ice skating now provided are located as follow:

Prospect Park	Highland Park
Dyker Beach Park	Bushwick Playground
Gravel Pit	Betsy Head Playground
McKinley Park	Amersfort Park
Red Hook Playground	City Park
Sunset Park	McCarren Park



Tennis Field, Prospect Park.

NEW CAROUSEL.

The old carousel structure in Prospect Park, erected some thirty-five years ago, had become obsolete, unsightly and unsafe. It could not properly be maintained longer. Being located next to the picnic grounds where hundreds of children's picnics gather every year, it has served a decidedly useful purpose. As the City was not prepared to erect a new building, competitive propositions were solicited from the leading Merry-go-round concerns throughout the country. The best offer was accepted and an octagonal building, 86 feet in diameter, was erected according to plans carefully worked out by department engineers. This building cost in the neighborhood of \$12,000, and on completion it became the property of the City. In addition, the concessionaires pay one thousand dollars per year for the privilege of operation. The building harmonizes much better with the landscape than did the old structure and affords excellent shelter from storms. The best modern equipment and two excellent organs have been installed. The basement of the building has been so designed as to furnish suitable space for additional tennis lockers.

STREET TREE PLANTING.

In the fall of 1914 a new policy was announced for planting trees on the streets of Brooklyn. The department receives orders from property owners, and sets out the trees for eight (\$8) dollars each. This charge covers all expenses, such as making hole in sidewalk, excavation, top soil, purchase of tree, planting and tree guard. If the tree dies within three years it is replaced without cost. Most of the old trees in Brooklyn streets were planted years ago, before the coming of the asphalt pavements. Few are of varieties suitable for survival under present conditions and many had been planted with insufficient sidewalk openings and poor soil conditions. These old trees are disappearing rapidly and it is hoped that the present efforts may extend so that Brooklyn will not become a treeless City. During 1915 trees paid for by property owners were planted to the number of 1,146. Some business concerns and institutions ordered trees to surround their properties and a number of Civic Associations took an active interest in securing trees for their own sections. This was notably true of the Prospect Park Citizens Association. This method of co-operative planting is best, as a greater degree of uniformity is secured. A valuable impetus was given to the movement by a gift from Mr. Frederic B. Pratt which will pay for systematic planting of Oriental Plane trees along Bedford Avenue, from the approach to the Williamsburg Bridge to the Eastern Parkway. Many of the tree holes on Bedford Avenue have already been prepared and the planting will be done in the spring of 1916.

EASTERN PARKWAY TREES.

Through securing the adoption by the Public Service Commission of a new plan for the subway on Eastern Parkway, we have been able to save a large number of elm trees which would otherwise have been sacrificed. By arranging for a double-deck subway the width of the cut has been narrowed sufficiently to avoid the destruction of the two inner rows of trees except where stations are located. Through this means instead of removing the entire inner two rows, involving 648 trees, only 158 will be lost. In other words, 490 of these fine old elms have been preserved through the vigorous action taken by this department. Much attention has been given to persuading the contractors to see the necessity for properly protecting and caring for the trees during the subway construction, and considerable special cultivating work has already been done. Arrangements for irrigation are also under way, and a top dressing of manure is being applied. The gravel pathways are being narrowed to eight feet in width, the gravel removed being replaced with good topsoil. Constant supervision has been given to preserve the trees from injury by careless workmen. The Public Service Commission and its engineers have been co-operating with the Park Department in every way for the saving of these trees.

It may be mentioned here that arrangements have been practically completed for replacement by contractors of 140 street trees destroyed several years ago in the building of the Fourth Avenue Subway.

NEW ZOO BUILDING.

A little more than a year ago the Brooklyn Daily Eagle raised a subscription of \$3,000 for purchase of some ninety animals from the famous Bostock Collection. They had been put on the market as a result of the European War and were brought here from London. Hitherto the menagerie in Prospect Park had contained good collections of Bears, Elk, and some other varieties, but had no Lions or other representatives of the Cat family. The new animals have doubled the variety and value of the collection. It is gratifying to state that the enlarged collection is costing the City no more for maintenance than was formerly the case.

During the year more than \$16,000 was raised by public subscription for the purpose of erecting the first section of a new and more adequate animal house. The construction of such buildings is somewhat experimental but the best advice obtainable was secured. An attractive two-story brick structure is now being put up. There has been considerable delay both because of the method of financing and because of difficulties in securing delivery of materials. It is expected, however, that the upper floor will be open some time in April. The public will then have its first good opportunity to see our collection of monkeys, birds, and small animals now housed in such a way that it is impossible to see them to advantage. It is hoped that means may be found to complete this building which will be equipped on the lower floor with inner and outer cages for the lions and other cat animals.

All Zoological specimens have been either gifts or natural products. A large number of gifts are received each year. The new Brooklyn Zoological Association, of which Mr. George V. Brower is Honorary President, is co-operating actively and is entitled to strong popular support. One feature about the Zoological Collection is that it proves to be an unending point of interest both summer and winter.

COMPOST PIT.

A valuable Compost Pit has been developed in Prospect Park. Muck from Prospect Park Lake is mixed with stable manure and leaves, with a little lime. The leaves were formerly burned. This was started in the summer of 1915. Eighteen hundred cubic yards of exceptionally fine fertilizer was made. All this was spread on the lawns and flower beds in the late fall. About fifteen hundred cubic yards have since been made, and the output this coming year should be double that of 1915. This process saves us several thousand dollars per year formerly spent for purchase of inferior fertilizer.

GREENHOUSE REORGANIZATION.

Our greenhouses have been thoroughly overhauled and the propagating and business end of the greenhouses greatly extended. We are now raising thousands of flowers, shrubs and vines such as were previously purchased each year. This merely keeps some of the gardeners more busy during the winter and is an undoubted improvement in efficiency.

MOTORIZING DEPARTMENT.

By the use of Ford cars and automobile trucks, we have succeeded in reducing the amounts spent for hire of trucks and carts to an extent of more than \$30,000 per year, as compared with 1913. We plan slight further extensions of this principle of motorizing the department.

IMPROVED SUPERVISION, ETC.

By combining our small parks into groups, with a foreman in charge of each group, we have gotten along with fewer foremen and have gotten away entirely from the theory that some one laborer or gardener in each small park is a "Park Keeper"



Highland Park—Artificial Skating Pond.



Coasting—Prospect Park.

with the emphasis on policing and supervision rather than on work performed. Many small but useful changes have been made in the handling of the labor forces, such as the doing away of useless positions as "Watchman," and providing that men who clean comfort stations shall do so only as an incidental part of their duties, most of their time being given to laboring work in the park where the station is located. Another similar change is by insisting that men who drive teams and carts shall also take part in the loading and unloading. A much better control of the teams and carts has been worked out for the purpose of reducing the waiting time.

PROTECTION OF PARK PROPERTY.

Better results have been secured in protecting park property. This has partly been a matter of educating our own employes. It has also largely been a matter of educating the public. The schools have been used to a considerable extent for this purpose. We have also gotten out a much more complete and attractive supply of signs which have helped in this matter and which also are a great convenience to the public. 600 standardized signs were purchased on contract this year and 1,419 miscellaneous signs were made in our shops.

SHOP REORGANIZATION.

The shops have been thoroughly reorganized and our mechanics are now producing much more than previously; so much so that it is difficult to supply them with the materials needed. The park buildings and fences have been more generally painted. Much more playground apparatus has been made and repaired. The substitution of iron swings for wooden swings is resulting in considerable saving. Pipe rail fences made in the shops and substituted for makeshift wire fences reduce maintenance cost of fences and give better protection to the lawns.

LABOR CONDITIONS.

Relations with the working forces in the department have been greatly improved. Readjustment of pay schedules have resulted in increases for many of the outdoor men, while the cost of clerical work and engineering services has been reduced. The department has done away with the old practice of putting from one hundred to two hundred raw men on in the spring for temporary work and having a large lay off in the summer and fall. The temporary men so employed were of comparatively little value and all the men in the department were made uncertain of their position when the lay off approached and naturally concerned themselves with efforts to influence their own tenure. The present method is to have a continuous force working on full time during the summer and on shortened time in the winter. The men feel that they have a steady job and give us a gratifying support. In 1915 we did our heavy spring work, including greatly enlarged activities, with one hundred and fifty fewer men than the previous year. The men appear to realize that they are dealt with on their merits without regard to outside influences. The increased rate of pay for men previously underpaid has made it possible to do away with Sunday time except where the need for it is genuine. Working time of the playground attendants has been readjusted so as to make the hours more reasonable. Those who formerly worked 365 days at \$2.50 per day now work 300 days per year at \$3 per day. This enables us to give each playground worker an occasional day off without pay and enables us to concentrate and expand our work in the summer and to reduce it to a minimum in the winter time.

FINANCIAL RESULTS.

As a result of administrative changes already partly outlined the department has gotten through the year very comfortably on a budget \$95,000 less than last year, and \$160,000 less than the 1913 budget. The maintenance of Prospect Park alone showed a net saving over last year of \$39,773.56. Some of the most interesting classified items of reduction for this year have been: \$11,500 in purchase of botanical

supplies, including sod, top-soil and fertilizer. \$15,000 on supervision of small parks. \$12,000 on care of comfort stations and \$27,500 in hire of outside teams and carts. The carrying out of a greatly increased work program with considerably reduced expenditures is due primarily to the unusual business and executive ability of the Superintendent. Detailed statistical tables will be found in the complete official report for 1915.

PART II

DETAILED REPORT

New Construction Work Paid For Out Of Corporate Stock

SHORE ROAD.

The contract for the completion of the sea wall along the Shore Road, between Latting Place and Bay Ridge Avenue, and between 92nd Street and Fort Hamilton Avenue, which was begun in 1914, was practically completed during 1915. The work consisted of constructing 6,624 linear feet of granite ashlar and concrete sea wall, furnishing and placing 46,000 tons of rip rap and 350,000 cubic yards of earth fill. The contract for the furnishing and depositing of 250,000 cubic yards of earth fill along the Shore Road, between 94th Street and Fort Hamilton Avenue, was begun during June, 1915. The work of filling in has been more than 50 per cent. completed this year.

DREAMLAND PARK.

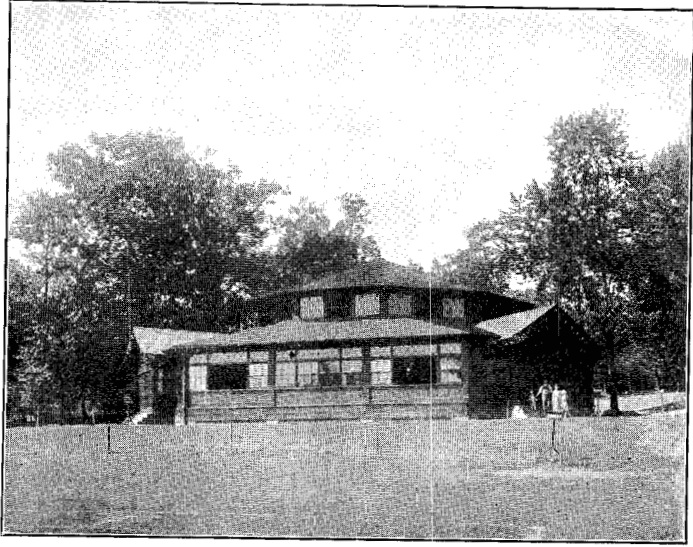
The contract for the construction of seven timber groynes along the beach front of Dreamland Park was completed during May, 1915. The cost of the work was \$11,688.60. The purpose has been to stop the washing away of the beach. Records show that since 1874 more than 30 acres of public beach at Coney Island has been lost in this way. At one point, near the foot of the Ocean Boulevard, the Shore line has receded 1,100 feet. Since these groynes have been completed they have protected the beach from erosion and have also reclaimed considerable beach lands. In the spring they will be built up further and more land reclaimed. The contract for the removal of the old timber steamboat pier in front of Dreamland Park was begun during May, 1915. This work has been approximately 70 per cent. completed this year.

PROSPECT PARK.

The contract for the construction of an addition to the irrigation system in Prospect Park was completed during June, 1915. This addition to the water system will provide additional water supply at the entrances to Prospect Park and on the meadows. The cost of the work was \$5,873.55. The contract for constructing sanitary sewers from the Menagerie and three sewage pumping stations at the Boat House, Tennis House and Well House, Prospect Park, was completed during October, 1915. The cost of the work was \$15,303.01. The sanitary sewers and sewage pumping stations constructed under this contract will eliminate the use of cesspools in Prospect Park.

15TH STREET PLAZA.

The contract for the improvement of 15th Street Plaza, comprising the entire rearrangement of this plaza, the relocation of the railroad tracks, construction of a large circular plot in the centre of the plaza and paving of the roadway with sheet asphalt, was completed during October, 1915. The cost of the work was \$14,387.92.



New Carousel Building—Prospect Park.



New Zoo Building—Prospect Park.

PARK CIRCLE.

The contract for the construction of a sheet asphalt traffic road, thirty feet in width, around the perimeter of the Park Circle at Coney Island Avenue and Park-side Avenue, was completed during October, 1915, at a cost of \$4,722.51.

BETSY HEAD MEMORIAL PLAYGROUND.

The work on the various contracts for the Betsy Head Memorial Playground is practically completed at the end of 1915. Jurisdiction over the construction work on this playground was turned over to the Department of Parks on the 1st of October, 1915, owing to the fact that the Public Recreation Commission went out of existence on that date. These contracts involved an expenditure of \$195,470.

BROOKLYN INSTITUTE.

The contract for the erection and completion of the superstructure of additions F and G, 4th section of the Central Museum Building, which had been considerably delayed owing to the abandonment of the work by the original Contractors, was completed during January, 1915; the contract for the installation of a portion of the permanent steam heating system for this building was also completed early in the year.

BROOKLYN BOTANIC GARDEN.

The contract for the construction of bituminous walks in the southerly addition to the Brooklyn Botanic Garden was completed during July, 1915. The cost of the work was \$3,988.28. The contracts for the completion of the Laboratory Building and Greenhouses have been awarded and the work will be begun as soon as weather conditions permit. The cost of the work involved amounts to \$164,725.

MAINTENANCE OPERATIONS AND IMPROVEMENTS

Paid For Out Of Yearly Budget

The regular maintenance and operation of Park properties require a large part of the available forces of the Department. With increases in the area and the greatly increased use of the Park properties by the Public, a corresponding increase in expenditure might be expected, but such has not resulted during the past two years. In spite of a reduction of about 20 per cent. in the funds available for this work, the operations of the Department have been greatly extended and the maintenance and care of them considerably improved. This result has been made possible only by the truly splendid manner in which the men in the Department have responded to and supported the administration in putting into effect a number of somewhat radical changes in organization and method.

During the year we maintained, cleaned and repaired thirty-six miles of Park roads and boulevards, with an area of 1,301,804 square yards; fifty-five miles of park walks, with an area of 564,048 square yards, eight miles of bridle paths; mowed and kept in condition 545 acres of lawn; operated forty-six comfort stations and six athletic field houses; maintained a "Zoo" with over 400 live exhibits; repaired and kept in condition 70 buildings, about the same number of tool houses, a large number of public monuments and twenty-six miles of park fences; cared for some 80,000 trees on city streets, in addition to the hundreds-of-thousands of trees and shrubs in the parks and playgrounds; operated a stable with from thirty to forty horses, a shop complete with mechanical organization and equipment to do any kind of construction work in the Department, and maintained greenhouses (about one acre under glass) where a continual flower show is open to the public, and where thousands of plants are grown for bedding.

The demands on the Department this year for co-operation in various celebrations, by the building and decorating of grand stands, were slightly increased. Some additional grand stands were furnished for Children's Anniversary Day, as well as the regular facilities for the Spring Festival of the Public School Girls' Athletic League, the National Holidays and the Christmas Tree Celebrations. In addition the department co-operated with the South Brooklyn Board of Trade in building a grand stand and speakers' stand for the exercises at the Bay Ridge Parkway, in connection with the opening of the Fourth Avenue Subway.

In addition to the regular work connected with maintenance and operation, the Department forces made a number of improvements of a permanent character, some of the more important of which are the following:

BEDFORD PARK.

Extensive repairs to the Children's Museum; repainting exterior of the building and roof; installation of irrigating boxes; planting of eight Oriental Plane trees; resodding of 6,100 square feet of lawn.

BOROUGH HALL PARK.

The flagstone pavement around the park was reset and in parts replaced. Studies were made of the arrangement of flower beds and certain changes made which will improve their attractiveness.

BROOKLYN HEIGHTS PARKS.

Installation of permanent benches on the sidewalk facing these parks; repainting and overhauling of fountains; installation of irrigation boxes; repainting of fences.

BENSONHURST PARK.

Building a pavilion on the beach affording comfortable seats and shelter; enlarging and repairing toilets; installation of irrigation boxes.

BETSY HEAD PLAYGROUND.

This property was turned over to us during the year by the Recreation Commission and we took possession of part of the property at the end of April in time to plant the farm garden. In connection with this it was necessary for us to supplement the work of the contractor by the installation of a very considerable amount of equipment, building of fences, etc. Around the children's building we planted flower beds and vines and did everything that was practicable at that season. Later in the year we attended to the installation of complete playground apparatus in the playfield adjoining the farm garden and took charge of the maintenance and operation of the children's house and the wading pool. On the larger field we organized from Department forces the help necessary to operate the bath house, installed a temporary pond for skating rink and covered the sides and the bottom of the swimming pool with straw and tar paper to protect the tile from frost.

BUSHWICK PARK.

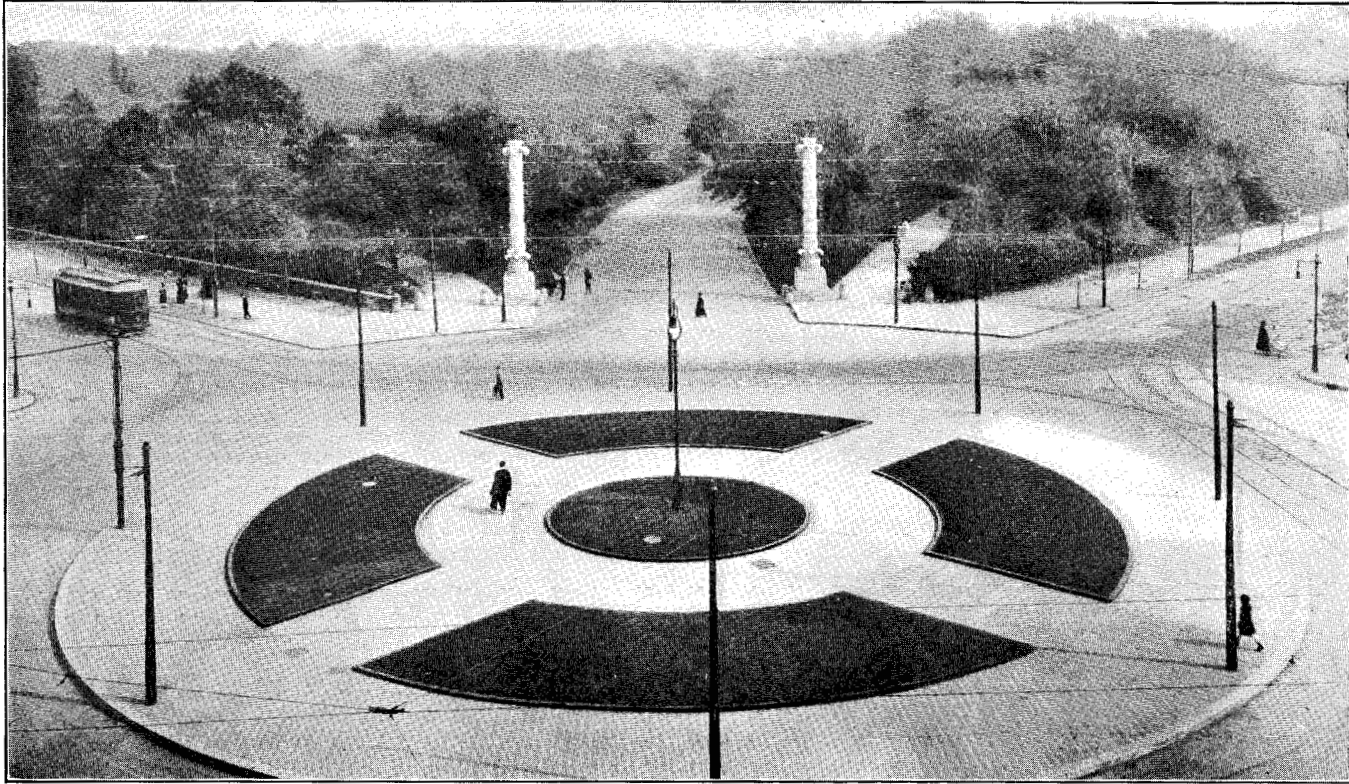
The closed shelter received a general overhauling and repairing. It was also painted outside and inside. Irrigation boxes were installed. Eight Oriental Plane trees were planted.

BUSHWICK PLAYGROUND.

A backstop for the baseball diamond was installed; two temporary ponds for skating rinks were made; a new wading pool, 25 x 65 feet, was built by department mechanics and put into operation; eight Oriental Plane trees were planted, also five hundred and seventy shrubs and vines.

CANARSIE PARK.

Essential repairs were made to the roof of the old Schenck Mansion—one of the oldest and most interesting of the old Dutch houses remaining on Long Island.



Improvement of Plaza, 15th Street and 9th Avenue, Brooklyn.

The building is of great interest to architects and to all persons interested in Colonial times, and, if necessary restoration could be secured in the next few years, it should remain as a valuable historic monument.

CARROLL PARK.

Installation of pipe rail fence, painting of fences; installation of irrigation boxes; relaying of 3,885 square feet of sod.

CITY PARK.

The following improvements were made: Building of an artificial pond for skating; painting of fences; building of concrete walk and curb around wading pool; installation of irrigation boxes; installation of Giant Stride and other playground apparatus; planting of thirty Sycamore trees and three hundred shrubs and relaying of 4,825 square feet of sod.

DYKER BEACH PARK.

Extensive drainage was done in an effort to prevent breeding of mosquitoes; the grove at the northwestern end of the park was cleared of brush and stone and made available for picnic grounds; extension was made to the sluiceway; irrigation boxes were installed.

DREAMLAND BEACH.

The boardwalk was extended and the three shelter buildings were painted inside and out; two hundred and three trees were planted along the northern border, mostly Oriental Plane, Lombardy Poplars and Willows. Entrance signs were installed.

FORT GREENE PARK.

The Society of Old Brooklynites erected a handsome granite tablet on the Martyrs' Monument; all fences were painted as well as all the ironwork on the interior of the monument; all walls, steps and other masonry were pointed up and generally repaired; several hundred shrubs were transplanted to make more effective groupings of plantations; also about three hundred new shrubs were planted, and 6,640 square feet of sod relaid. Entrance signs were put up.

FORT HAMILTON PARK.

Irrigation boxes were installed, the bank and beach on the southerly side of the Shore Drive, opposite Fort Hamilton Park, was cleared of rubbish and put in condition for picnic parties.

HIGHLAND PARK.

Last year the extensive use of the tennis courts had made it impossible to maintain the turf in satisfactory condition and, early in the season of 1915, the sod and top soil were removed and replaced with clay. As there were twenty-eight courts thus treated, this made an important piece of work.

We used a light dust-laying oil on these courts with most satisfactory results. At the northwesterly corner of the park one hundred granite steps with ramps were placed, leading from the lower level to Highland Boulevard. This improvement had been very much needed, and appears to be greatly appreciated. Irrigation boxes were installed. The old Dutch Mansion was thoroughly repaired, renovated and painted, and was used during the season as a club house and lunch room in connection with the tennis field. The easterly end of the Park, which had never been improved, was graded and seeded. We also used here a large amount of sod cut from the tennis courts—24,650 square feet being relaid. We succeeded in developing all that portion of the park adjacent to the new comfort station. Farther to the East the grading was such that we were able to flood a portion of it for skating purposes, giving us a pond about 400 feet long by 250 feet in width. The water main in Jamaica Avenue was tapped and connected to flood this pond. Along the upper level, adjacent to Highland Boulevard, a large amount of filling was placed

along the bank for the purpose of widening the walk between the park and the roadway and where this work of building out the bank was completed a rustic fence was built; this work should be completed during the coming year. Extensive additions were made to the flower garden around the Dutch Mansion; forty Plane trees were planted along Jamaica Avenue, and 5,000 seedlings were planted on the banks of the park and the bank of the Ridgewood Reservoir, north of Highland Boulevard. These seedlings had been secured from the State Conservation Department at nominal cost.

We were able to do the very extensive amount of grading and improving of lawns around the comfort station and the easterly end of the park owing to the fact that there was a large amount of building in this section of the city and that it was possible to secure high-grade top soil as a gift, or at a merely nominal price.

IRVING SQUARE PARK.

Wiring for electric lights was installed in the shelter house; fences and the shelter houses were painted; interior pipe rail fences erected.

After the installation of the pipe rail fence it was possible to maintain the lawns and shrubbery in this park in perfect condition. In the fall a study was made of the landscape features of the Park and a number of important changes were made in the regrouping of shrubbery plantations and in the arrangement of flower beds. If results of these changes turn out as well as we hope them to, much more work will be done in other small parks and squares along the same lines.

LEE AVENUE GORE.

This small triangle was turned over to the Department last year unimproved except for the trees that were planted at that time. During the year we enclosed the plot with pipe rail fence; installed a bubble drinking fountain; placed permanent benches inside the open space and parallel to the sides, and planted out the border with shrubbery. The department was glad to secure this small breathing space. It is in the Williamsburg section, which is more in need of additional park and playground space than any other section of Brooklyn.

LINCOLN TERRACE PARK.

Extensions were made to pipe rail fence. The shelter house was painted inside and out. This Park is used extensively and a great deal of difficulty is experienced on account of the indifference of the people visiting it toward proper treatment of the trees and shrubs. During the year we have made a careful study of methods of improving conditions in this connection and have arrived at a plan that will enable us to handle increasingly large crowds and at the same time very greatly enhance the landscape features of the park. Work on regrading and preparing for this change was commenced late in the season but cold weather prevented our carrying it very far. The department has taken a lively interest in the project now pending for extending the area of this picturesque park, by adding land to the East and South.

MCCARREN PARK AND PLAYGROUND.

At the close of 1914 the operation of the Farm Garden in connection with the children's playground at McCarren Park had been so successful that we were desirous to very greatly increase the size of the Garden and improve the conditions surrounding it. The first year's work had been carried on in a frame building which had formerly been used as a temporary shelter for the children in the playground—the building had not been suitable, nor adequate, for this purpose, and when the Farm Garden activities were added it required a great deal of skill and good nature to carry on the work.

The old temporary building was 50 x 20 feet with a flat roof. We prepared a plan for improving this building and increasing its size by building two wings, one at each end, and including porches on each side of the original building, and pro-



Bushwick Playground—New Wading Pool.



Recreation Pier, Metropolitan Avenue.

vided in the elevation plans for the changing of the roof from a flat to a gambrel roof with dormer windows. All the rooms on the first floor were furnished with large and attractive windows and all the windows in the building provided with flower boxes. The exterior of the building was covered with white stucco and all exterior woodwork, including the shutters, painted green.

The new addition at the Driggs Avenue end was designed for a play room and for use of neighborhood clubs. A large brick fire place was installed in this room and in the addition at the other end of the building we arranged three rooms, the largest for use as a kitchen, another for an office for the Farm Garden Director and assistants, and another for nature study and Farm Garden exhibits.

The space in the old original building was divided to provide rooms for a toilet, entrance and stairway hall and a room for garden tools and equipment.

The complete building is 90 feet long and 28 feet wide and it stands between the playground and the farm garden. Along the sides are porches, each 10 x 50 feet, offering additional shelter. The entire upper floor is one large garret and is used as a children's play room in bad weather.

The entire plot, including both the playground and farm garden, was enclosed by wire mesh fence, supported by ornamental brick and limestone piers.

Ten clay tennis courts were prepared and put into operation early in the season. Light dust-laying oil was used on the surface as has been described in connection with Highland Park. After the contractors had completed the alterations in the children's house at the playground and farm garden, it was necessary for the Department to do a large amount of work in the way of installing equipment and making the buildings complete and in every way suitable for the carrying on of the activities. A large amount of top soil was hauled to increase the size of the farm garden from 125 to 425 plots. The farm garden and children's playground was enclosed on three sides with a pipe rail and woven wire fence with ornamental brick and limestone piers; the low pipe rail fence was removed from the remainder of the block around that part of the field used for baseball diamonds, and this entire field was graded and put in proper condition. All fences were repaired and repainted. A new shelter was built at the boys' playground near North Twelfth Street; all the exterior sidewalks that had not formerly been improved were graded and filled with ashes or limestone screening. All of the playground apparatus in the girls' playground adjacent to the farm garden was removed and replaced with modern steel equipment; an extensive planting of flowers and vines was made around the farm garden; several hundred feet of privet hedge was planted; twelve Poplar trees and thirty Oriental Plane trees were planted. To replace trees killed by gas twenty-six additional Plane trees were planted.

McKIBBEN PLAYGROUND.

Artificial pond for skating was made on the baseball field adjoining this playground. The fence along the westerly side of the boys' playground, which was destroyed in the storm during the winter, was rebuilt during the spring; the slate roof on the children's house was removed and replaced with asphalt composition shingles; this change was made on account of the very great expense called for each year in the replacement of slate shingles broken during the season by baseballs. Twelve Oriental Plane trees were planted and one hundred and eighty-five shrubs.

McKINLEY PARK.

Improvements and extensions were made to the pond on the westerly side of the park. This considerably increased its value for skating purposes. Two artificial rock piles were removed, and large quantities of other rock and stone were hauled from Dyker Beach Park for the purpose of building a stone retaining wall across the northerly end of the park. 4,380 seedlings were planted in the groves for re-foresting and 972 square feet of sod relaid.

McLAUGHLIN PLAYGROUND.

All fences were painted; irrigation boxes installed; concrete wall built along a portion of Cathedral Place; all steps and masonry were repointed; concrete sidewalks were repaired.

NEW LOTS PLAYGROUND.

A new double handball court to replace single court was installed; all of the playground apparatus was removed and replaced by new modern equipment in such manner as to practically double the available play space. This work was done according to carefully prepared plan, and results were very pleasing. An artificial pond for skating was made in the fall, and is very popular. Forty Plane trees were planted. Interior pipe rail fence was installed.

PARADE GROUNDS.

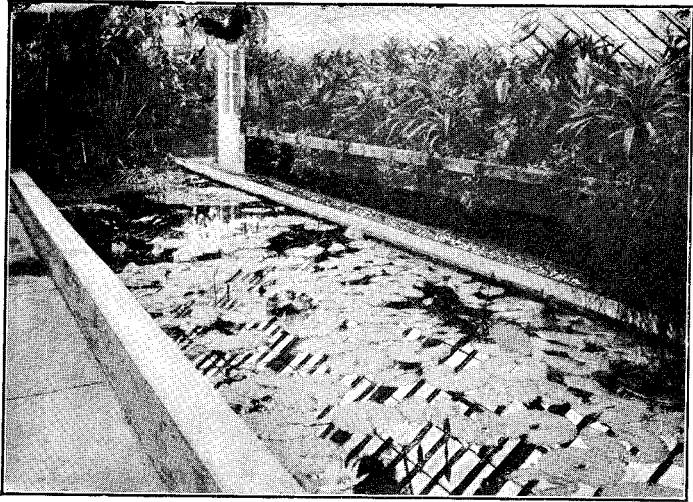
One of the baseball backstops was removed and replaced by a new and larger backstop, which considerably improved conditions along Caton Avenue. All of the backstops on the field should be renewed and an effort must be made to secure funds to do this work at an early date. A number of baseball diamonds were regraded and resodded and the whole field was kept in better condition than has been the custom. Extensive plantations of shrubs were made around the field house. On the Bowling Green 2,000 square feet of sods were relaid.

PROSPECT PARK.

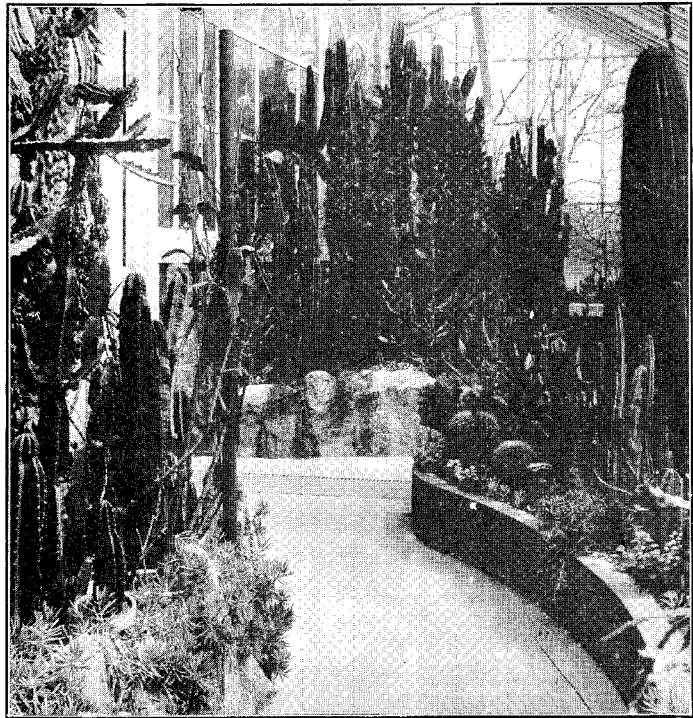
New Boat House.—Through an arrangement with the concessionaires holding the privilege for operating boats on the lake, we secured the building of a light pavilion in front of the boat house giving much needed shade and protection to the landing station in front of the boat house. By the same means we also secured the erection of a second boat house below the terrace bridge. This is an attractive rustic building about eighty feet long by thirty feet wide, with a suitable platform for boat landing. It affords a much needed shelter in this part of the park and is convenient for use of picnic parties.

Menagerie Building.—In connection with the improvement at the menagerie and the new building that is being built by funds derived from a popular subscription, it has been necessary for the Department to do a substantial amount of work supplementing that of the contractors. The old stable was removed, a new temporary animal house and sheep fold built. Sewer and water connections were made to the new building and all cages and painting in new building was done by departmental forces. Funds should be made available for the completion of the animal house now under construction, so that all the temporary quarters may be abandoned and the large expense incurred by their maintenance done away with. It is interesting to note that through changes and economies the cost of forage and labor has not been increased through the addition of nearly one hundred animals.

Greenhouses.—After the completion of the new propagating houses last year, it was necessary to enlarge and improve the potting sheds adjoining. This work was done during the year, and this part of the plant is now open to the public on Sundays and holidays and makes an interesting and highly useful addition to the plant. The boiler under the Palm House had to be replaced on account of a number of sections becoming cracked. This replacement has been a great improvement and with the insulation of all of the feed pipes from it and the other boilers, make a pronounced reduction in the expense of heating. During the fall we occupied the new Cactii house, and the house vacated made room for the building of a pool, forty feet long and ten feet wide, for aquatic plants, making an attractive and novel addition to the display. Practically all of the houses were repainted inside and outside, and nearly all of the old wooden plant benches were replaced with permanent concrete benches. The old benches had been constructed by placing a board or plank bottom in angle iron running longitudinally on the front and back,



New Aquatic House, Prospect Park.



New Cactus House, Prospect Park.

supported by tubular legs from the floor. The angle iron edges had become badly rusted and disintegrated. Instead of removing and replacing the angle iron, we removed the plank, and by using ordinary woven chicken wire for reinforcement, together with what remained of the angle iron, we moulded around the edges and bottom concrete, making benches permanent in character and attractive in appearance.

The old propagating houses were in bad condition and it was necessary to partly rebuild them.

The cold house was practically rebuilt, including the foundation. We also built an extension to it about twenty feet long and it now makes one of the most attractive and useful houses in the entire range.

A new entrance vestibule was built to replace the old one, making an important improvement in appearance as well as in convenience for handling crowds. Twenty-seven thousand people passed through the greenhouses on Easter Sunday.

The area of the cold frame was increased by about 2,000 square feet and, with the above improvement, together with changes in the organization, we expect to greatly increase the number of plants grown and make a corresponding reduction in our purchases.

Stables.—During the year careful study has been made of the stables and it appears that, in order to have the stables a profitable undertaking, it will be necessary to slightly increase the size, to remove some of the obstacles to economical management and to provide shelter for the vehicles of the Department. It had been the custom to leave practically all of the rolling stock of the Department exposed to the weather throughout the year. Plans have been prepared during the year which will enable us to improve these conditions and at the same time make the stable yards, which occupy a very conspicuous place in the Park adjacent to the conservatories, present a more attractive appearance. Work on this improvement was commenced the latter part of the year and will be finished during the early part of 1916.

Shops.—Those sections of the boiler removed from the Palm House that were intact were installed in the basement of the shops and as soon as material is available will be used for heating of this building, doing away with the necessity of using several stoves. The ceiling of the blacksmith shop was sheathed with sheet iron and a ventilator installed from the roof for the purpose of relieving the men who work there from the dense smoke that formerly attended their operations. At one end of the shop a room was built for the use of the men as a reading room or place for meetings; the interior was carefully designed and makes a very attractive appearance, and is much appreciated. All of the accumulated debris in the carpenter shop was removed and new benches and individual lockers for the men were built, including new toilets and wash bowls. A number of new machines were acquired and put into operation, and the organization of the shops was strengthened and improved in many particulars.

New Equipment.—A number of additions were made to equipment. The following were manufactured at the shops:

- One large Drop-Platform Truck.
- Six Tool Box Carts.
- Three Snow Plows.
- Twelve Push Carts.
- Seven Arboriculturists' Wagons (rebuilt).
- One Stone Boat.
- Three Business Wagons.
- Three Double Trucks (rebuilt).
- Twenty-five Steel Garden Swings.
- Seven Portable Band Stands.

The Drop Platform Truck has been very useful in hauling boulders, tree stumps, etc. The Steel Garden Swings are similar in design to wooden swings

which have been used in the playgrounds heretofore but which have been very expensive to maintain on account of frequent breakage. Our experience with the steel swings leads us to believe that repairs on them will be nominal. The portable band stands are hexagonal and made in sections so that they may be set up in one-half hour's time by the laborers or other help in the various parks without calling upon the mechanics; this has very materially reduced the expense attending the giving of band concerts in small parks by saving mechanic's time and cartage.

The principal items of equipment purchased during the year are the following:

One 2½ Ton Automobile Truck.

Three Ford Cars.

Sixteen Dozen Rubbish Cans with Wrought Iron Standards.

Two Drill Presses.

The Automobile Truck greatly improved conditions of delivery and made material reduction in expenses of hauling, and another truck, slightly larger in capacity, is to be added in 1916. The three additional Ford Cars have enabled us to do away with light driving carriages and enable the General Foreman, Head Gardeners and Engineers to cover their work in much better shape and with greater economy of time.

Skate House.—In connection with the building of the new rustic boat house, it was part of the plan to keep away from the necessity of building each year a temporary skate house at an annual expense of from \$2,500 to \$3,000 as has been the custom in the past. By using the new rustic boat house as a shelter, check house and refreshment room, we were enabled to use the regular boat house for the accommodation of the rest of the crowd by building a small portable check house adjoining it. As indicated above, this check house is portable, made in interchangeable units, and can be used year after year and set up with very little expense in twenty-four hours' time. By increasing the number of service windows and by subdividing the numbers of the checks according to the several sections of the building, we have been able to give much better service than heretofore and to handle the crowds much better and more comfortably. This improvement will not only make a substantial saving of expense but will enable us much more expeditiously to make the necessary arrangements each year for the skating season.

New Signs.—All signs in the Park were renewed. Many of the "KEEP OFF" signs were done away with entirely and where it was necessary to use a sign of this character the new sign reads: "Please KEEP OFF" or "NEW PLANTATIONS." "PLEASE DO NOT CROSS HERE." Fewer signs were destroyed than formerly, possibly because their language was not so imperative.

At each entrance to the more important parks a sign indicating the name of the entrance was placed, mounted in wrought iron standard, bearing the following inscription:

PROSPECT PARK.

This Park is for the pleasure of the Public. To preserve its beauty and usefulness certain rules have been made. These are posted in all shelter houses.

YOU ARE ESPECIALLY REQUESTED

- To protect the shrubs and flowers;
- Not to walk on banks where plants are growing;
- To respect the KEEP OFF signs;
- Not to climb fences or walls;
- To keep lawns and walks free from paper and rubbish.

Careful study was given to the style and coloring of these signs and when they were placed early in the season they gave rise to much agreeable comment.

A considerable number of signs of direction were also placed, the same attention being given to design; these signs supplied a long-felt need.

Litchfield Mansion.—Alterations made on the first floor made suitable accommodation for the letter files and telephone switchboard in a small room adjoining the rotunda opposite the entrance. This is enclosed by glass partition and counter. It is used as an information desk and enables us to dispense with the constant service of a door man. Another room on this floor was connected with the corridor leading to the Secretary's office and fitted up as a waiting room for visitors. In the general office adjacent to the Superintendent's office a railing and seats for visitors were installed. In the stenographers' room adjoining, the entire room was repaired and steam radiators and office rail was installed. In the basement the former kitchen was thoroughly renovated and repaired and is now used as a sitting and lunch room by the men employed in the building.

Swan Boat House.—The floor of this building was renewed and extended and the building was covered with a new corrugated galvanized iron roof. The entire building was repainted.

Dairy Cottage.—With the removal of the old barn at the Menagerie, the men's toilets, formerly located there, were replaced in the basement of the Dairy Cottage and a new entrance walk constructed.

Improvements to Lawns.—In the spring 46,000 square feet of lawns were resodded. At the same time we removed remnants of the lawns along Ninth Avenue, from Plaza to Fifteenth Street entrance, between the curb and sidewalk. The conclusion had been reached that it was impossible to maintain grass plots along the sidewalk on account of the heavy shade and excessive use and consequently we removed the top soil and resurfaced with trap rock screenings.

Around the lake a number of small bays which had become objectionable in the Summer on account of low water conditions were filled, graded, surfaced with top soil and seeded, and in one place near the pump house two small islands were connected with the mainland for the same reason.

Tennis Courts.—The use of the tennis courts was very great all during the season and since we have extended the season of play it has not been possible to secure satisfactory results by resodding in the spring. Last fall, after the close of the season, we resodded 19,340 square feet, using sods cut from lawns in other parts of the park, and finished the work before the frost, so that by next season the new sods should be thoroughly established and ready for use before the tennis season opens. The lawns from which the sods were cut will be reseeded.

Care of the Shore Line Around the Lake.—The building up of the shore line along the lake was continued and very greatly extended. When this work is complete it is believed that it will make a material reduction in maintenance charges.

Coasting.—Although there has always been some unauthorized coasting in Prospect Park, it has not been customary to make any special provision for it. This year, however, a fine slide was made on the hillside, west of the menagerie, beginning at the Payne Monument and ending near the carousel; the snow was banked up on each side and the runway sprinkled with water to form an ice foundation and frequently during the season five and six thousand sleds per hour were counted descending the slide.

NEW BRIDLE PATH.

Work of grading and filling for the entrance of the proposed new Bridle Road, from Flatbush Avenue at the "Blind Gate," proceeded during the year and instead of paying for fill we were able to secure what we needed for this improvement, receiving forty cents a load from the contractors delivering the soil. We were able to do this by taking advantage of the fact that excavations were going on in the neighborhood for new buildings and a dump with a short haul was valuable. The rough work of building and grading is now practically finished and the finishing of this section of the park will be completed next year. Owing to the necessity for using part of the Bridle Path for hauling material to and from the new building at

the menagerie, conditions on the Bridle Path were difficult during the larger part of the year, but in the Fall, after the building operations neared completion, we were able to restore the surface on the Bridle Path and give it a new top dressing of fine gravel throughout its entire length.

Manufacture of Fertilizer.—The Brookline and the ponds above the lake have been receiving the wash of top soil within the water shed of that part of the park for a number of years. This, together with accumulations of leaves and other vegetable matter, caused a great deal of fermentation and discolored the water. During the Spring we drained the water and removed about 1,800 cubic yards of muck. This was hauled to the work yard and used as the foundation for a compost bed made of layers of muck, leaves, horse manure and slacked lime. This work was carried on during the summer months and by the use of the lime, and by covering the horse manure as it was put down, we were not bothered with flies, nor with an offensive odor. It is estimated that the value of the compost made by this method is from twelve to fifteen thousand dollars. The leaves used in making this valuable fertilizer had formerly been burned.

Planting.—Two thousand shrubs were planted on the banks along Ninth Avenue; additional plantations were made around the granite steps and around the several entrances; several thousand vines, such as English Ivy, Virginia Creeper and Honeysuckle were planted for ground cover on banks where, because of shade, it was difficult or impossible to maintain lawns. A considerable number of large trees were transplanted from the nursery back of the Flower Garden to various points in the Park and this nursery is being very materially increased and will become an important source of supply for ornamental shrubs, ground covering vines, etc. Several thousand seedlings were planted along the bank adjacent to Flatbush Avenue, and three hundred trees were planted along the lake shore and on the hillside throughout the park.

RED HOOK PARK AND PLAYGROUND.

The iron picket fence surrounding this park was very old and the bottom rail and many of the pickets were so badly rusted that in many places it had become disintegrated. It was at first thought that it would be necessary to build a new fence. It was found, however, that by building a concrete coping along the line of and under the fence the lower and rusted parts of the fence acted as a reinforcement for the concrete and after the job was finished we had the equivalent of a new fence in a concrete coping. The appearance is better than the original and it is easier to trim the grass against the coping or curbing than against the picket fence. We find that old iron picket fences can be restored by this method for something less than thirty cents per lineal foot. All fences in the park were repainted, the open shelter thoroughly repaired, reshingled and repainted.

SARATOGA SQUARE.

Extensive repairs were made to the shelter house and comfort station. We installed irrigation boxes; plowed, regraded and reseeded the lawns; made extensive changes in transplanting and rearranging shrubbery and flower beds similar to the work carried on in Irving Square Park. In connection with this work 10,615 sods cut from the tennis courts at Highland Park were relaid here.

SEASIDE PARK.

The storms and high tides during the winter destroyed the steps and part of the bulkhead along the walk from Ocean Parkway toward Brighton Beach, thus requiring extensive repairs and rebuilding. The restaurant and brick shelter were thoroughly repaired and repainted and the windows to the brick shelter were enlarged to improve ventilation and air. Irrigation boxes were installed. The small stand on the ocean side of the shelter had been destroyed by storm, and was rebuilt. The upper part of the comfort station adjoining the open pavilion which was



Ice Skating Rink, Red Hook Playground.

formerly used as a band stand, but which had not been used for a number of years, was made accessible to the public by building a wide flight of steps from the beach and by placing of permanent seats around the rail and in the centre of the shelter. Additional board walks were laid around the open shelter. The toilet of open shelter was connected with sewer and the old cesspool filled and abandoned. Entrance signs were installed.

The central lawn was opened to women and children early in the Spring. There had always been a superstition to the effect that the lawns in this park could not stand much use but we found that at the end of the season they were unharmed and, during the Fall, we permitted local football teams to use the field for practice and games. We also attempted to make an artificial pond for skating but were unsuccessful, because of the sandy character of the ground.

The crowds at Seaside and Dreamland beaches during the summer were unprecedented but, profiting by our experience of last year, we have arranged to have a number of selected men on hand in uniform on Saturdays, Sundays and holidays. By this means we were able to maintain much more satisfactory conditions and increase the opportunity for pleasurable enjoyment of the beach. There was some slight improvement in the attitude of the people visiting the beach in reference to throwing waste paper and rubbish about, but conditions in this respect are still far from satisfactory. We handled the problem of removing the rubbish by commencing the work at midnight and working until morning. After inaugurating this program we had no difficulty in having the beach cleaned and in proper condition to receive the crowd next morning. We are now contemplating the installation of a small incinerator for the purpose of destroying rubbish and very materially reducing the cartage. In the Spring, 2,174 square feet of lawns were resodded and flower beds improved and extended.

SUNSET PARK.

Paved the court between the two wings of the shelter house, making a large plaza for use in connection with the band concerts and other public meetings. Installed irrigation boxes; extended pipe rail fence; installed counter and enclosure for lunch room; made three tennis courts and maintained them throughout the season involving considerable addition to the drainage system of the park; reset the flag pole; planted forty-four trees, 2,543 seedlings and 4,230 shrubs. About an acre of this park had never been top-soiled or graded, but this work was completed during the year and together with the very extensive plantation of shrubbery, practically complete the work of development along this line.

TOMPKINS PARK.

Built pipe rail fence enclosing walk around shelter; painted fences; cleared open space for plaza in front of shelter house for the purpose of handling large crowds at band concerts and other meetings. The shade at this part of the park was very dense, making it impossible to preserve the lawn, and the large crowds frequenting the park made it necessary to secure additional open space for their accommodation. After removing the top soil the space, which was about two hundred and twenty-five feet in diameter, was covered with limestone screenings. Entrance signs were installed. At the end of the year, through an arrangement with the Library Board, work was commenced on alteration and extension to the shelter house. The upper floor of this building is occupied as a branch library and the expense of the improvement is to be shared by this Department and the Library Board. Lawns were restored by laying of 10,802 square feet of sod.

UNDERHILL PARK.

An old fountain at this location had fallen into disrepute on account of improper use and abuse given it by the boys in the neighborhood. As the place is so small as not to warrant the constant attendance of a representative of the Depart-

ment, we decided to remove the fountain, to regrade the lawn and to turn practically the entire area into an open play space, leaving marginal plantations on which 2,050 square feet of sod was laid. This work was carried on during the Fall and as soon as the planting scheme is carried out and pipe rail fences are installed, the results will show a valuable improvement.

VANDERVEER PARK.

Extensive planting of the streets surrounding the banks inside the enclosures were made and the appearance of this small plot was transformed by the planting of forty-eight Plane trees and nine hundred sixty shrubs.

WILLIAMSBURG BRIDGE PARK.

The playground in this park was reopened at the beginning of the summer season and very extensive repairs were necessary to the playhouse and to most of the apparatus. It was necessary to relocate some of the apparatus; irrigation boxes were installed, and covered passageways were made connecting various parts of the playground as a protection from objects which might fall from the bridge.

WINTHROP PARK.

Fences were painted and the large shelter and comfort station was completely overhauled, repaired and repainted inside and outside; irrigation boxes were installed.

BAY PARKWAY.

We used a light and dust-laying oil on Bay Parkway, from Ocean Parkway to 20th Street; from 80th Street to Cropsey Avenue we resurfaced the roadway with light asphalt binder.

BAY RIDGE PARKWAY.

During the past year a great deal of attention has been given to the further improvement and embellishment of this parkway, part of which had heretofore been improved. At the end of the season considerable plowing was done adjacent to the Fort Hamilton Parkway entrance preparatory to commencing a program of cultivation and planting in the Spring.

EASTERN PARKWAY.

The operations of the contractors building the subway through the Central Roadway of Eastern Parkway have made conditions resemble a mining camp rather than a handsome boulevard. The increased roadway business on the traffic road caused by the closing of the Central Roadway, together with the increased volume on account of the extraordinary business attending the building of the subway, has tested the capacity of the traffic roads to the maximum. As a result of this extra and very intense use, the pavements and traffic roads are rapidly going to pieces, and as it is impracticable to close them for repairs while the subway work is going on, it will probably be necessary to replace the pavement as soon as the state of the work of the subway contractors makes it possible.

The methods adopted for saving the Elm trees along this parkway from destruction have been outlined in the first part of this report.

FORT HAMILTON PARKWAY.

No funds were provided for the maintenance and care of Fort Hamilton Parkway by this department. The amount formerly needed for this purpose was deducted from our budget allowance and we were informed that the street would be transferred to the jurisdiction of the Highway Department. However, this transfer was not accomplished, the Board of Aldermen failing to approve of the recommendation of the Board of Estimate. As a result the control of the street has remained in this Department and we have had no funds with which to do the work. Through economies and savings in other operations we were able to do a certain amount of

work along the street, but conditions for people living there are intolerable. It is feared that unless this condition is improved it may become necessary to close this important thoroughfare.

OCEAN PARKWAY.

Extensive repairs were made to the abutments and planking of the bridge over Coney Island Creek. This bridge requires extensive repairs each year and will be a constant source of expense until it is replaced by a permanent structure. Hand-rails were built along both sides of the fence and continued along the sidewalk for several hundred feet on both sides of the bridge in order to guard against accidents to pedestrians.

That portion of the main drive, from Avenue "X" to Coney Island Creek, which requires rebuilding on account of the foundation of the roadway being at times below tide water, was constantly a source of annoyance and trouble. During the Fall we improved conditions materially by hauling 150 yards of gravel from Dyker Beach, filling in this part of the roadway and rolling it with a steam roller. It is not expected, however, that we can maintain this part of the drive in a satisfactory condition until a permanent improvement is made and the grading of the entire section raised and properly surfaced.

Pavements and curbs at the foot of the Boulevard were rearranged so as to give more space and lessen the congestion of automobiles where the Boulevard joins the Coney Island Concourse.

We adopted the method of using a light dust-laying oil on the Speedway instead of sprinkling by water and found this very satisfactory. It is considerably cheaper than the former method and the dust is laid for twenty-four hours a day. Two treatments of the oil were used, one in April and one in August. The first application required one-quarter gallon per square yard of surface, the second application an average of one-sixteenth of a gallon. The expense of the oil laid was six and four-tenth cents per gallon, or one and six-tenth cents per square yard for the first application and two cents per square yard for the entire year. We followed the same method with similar results on the traffic road, from Kings Highway to Coney Island.

SHORE ROAD.

As the work of completing the sea wall along the Shore Road was finished and the rough filling was deposited by the contractor, it left an uneven and unattractive appearance. In the Fall it was decided to plow and grade that part of the field surface extending from 69th Street, and to seed it with a winter crop of rye. This work was carried on with great efficiency and was practically all finished before cold weather came. The small part remaining will be finished early in the Spring. It is believed that the result of this work will be a very great improvement in the appearance and we shall be able to develop a considerable amount of top soil by successive seeding operations. It is the intention to bring this large area of more than seventy acres into immediate use for recreation purposes.

PROJECTS FOR IMMEDIATE FUTURE.

An extensive work program has been laid out for 1916. The most significant planting operations will be in Prospect Park, on the Bay Ridge Parkway, on the streets and at Betsy Head Playground. In Prospect Park the provision of ground covering vines for bare and heavily shaded ground will be further extended. Important planting will be done in the old duck pond section, in the neighborhood of the proposed new Bridle Path entrance. Rose vines will be planted along the banks near the Third Street entrance. In the Fall it is planned to construct a large circular grass plot at the Circle entrance at the head of the Ocean Parkway and to plant ornamental trees. A large quantity of trees and shrubs from the nurseries of the Queens Department will be set out on the Bay Ridge Parkway near Fort Hamilton Parkway, around the large gas tanks just beyond that point and on the

picturesque banks surrounding the Bay Ridge High School. Much needed trees and shrubs will be planted at Betsy Head Playground and in the central parking space along Pennsylvania Avenue.

The large plaza in front of the steps at Fort Greene Park is now a waste space. It is proposed as soon as weather permits to regrade the surface and rearrange walks so as to make possible an attractive playground for children, also to plant ornamental poplars, horse chestnuts and gingkos to give shade and to partly screen the elevated railroad structure on Myrtle Avenue.

A new Bridle Path will be constructed from Prospect Park Plaza along Flatbush Avenue to an entrance opposite Menagerie Hill. This will be continued in a curve around the old duck pond, carried under the East Drive through an archway and over the hill. By this means the present dangerous congestion of automobiles and horseback riders along the East Drive and at the main entrance will be obviated. At the same time the last remaining unfinished section of the park will be developed, a pathway under the East Drive secured for pedestrians and the building of a much needed automobile approach to the menagerie made possible through abandonment of one end of the present Bridle Path.

A rustic observatory, commanding an extensive view, will be built in the late summer on Lookout Hill.

The stables will be enlarged and re-arranged and sheds built so that all rolling stock can be put under cover, also a number of small local storeyards constructed to save exposure of equipment and to lessen length of haul.

Extensive road repairs will be made, especially on the roadways of Prospect Park. The high crown on the East Drive will be removed and a new surface put in place.

Pipe rail fence will be made in the shops and set up along the walks in Fort Greene and Bushwick parks. These will offer better protection to the lawns than do the present crude wire fences, will be a great improvement in looks and will result in considerable saving in maintenance both of fences and of lawns.

A much needed shelter and comfort station will be built on the banks of the Shore Drive near Fort Hamilton. Between the banks and the sea wall at this point tennis courts, baseball diamonds and other recreation features will be installed and the demands for use of this section for outings and picnics will be recognized and encouraged. There will be further grading and development of the two and a half mile strip between the Shore Road and the sea wall. Now that the Fourth Avenue subway is being operated there will be an important new addition to the outdoor life of Brooklyn. Aside from Prospect Park no other section offers so attractive an opportunity for an afternoon walk.

PROTECTION OF PERSONS AND PROPERTY.

Trouble with vandalism in the small parks, especially at night, has not been entirely done away with. At many points, however, these evils have been minimized by improving the lighting system and by better co-operation from the Police Department. Appeals to the children have been made systematically through the schools and through appeals printed on 250,000 band concert programs. We have continued to find it helpful to assign two employes with special police powers to specialize on the checking of vandalism and wilful disorder. During the summer months two police detectives in civilian clothes did effective work on this line in Prospect Park.

For general police protection in Prospect Park reliance is placed mainly upon the regular force of the 173rd Precinct. The precinct headquarters are in the Field House on the Parade Grounds and the force of sixty-eight men is assigned to duty exclusively in and around Prospect Park. By this regular force three hundred eighty (380) arrests were made during the year, mostly for petty offences. There were three hundred twenty-one convictions or an average of over eighty per cent. Two

hundred ninety-four (294) persons were aided in various ways by the Prospect Park police.

CONCESSIONS.

In the management of concessions the chief emphasis has been placed upon service rather than upon rentals. Thus, a very slight reduction was made in the amount charged for the boating concession in Prospect Park but a reduction of nearly fifty per cent. in charges made to the public was insisted upon. This resulted in more than doubling the service. A new service was established on the public beaches at Coney Island in the renting of reclining canvas chairs with canopy tops. These rent for ten cents each for a period of three hours and still bring in a small revenue to the City without any expense or risk. The chairs have proved to be very popular. From some points of view it might be advantageous for the City to operate the Park restaurants and refreshment stands directly, but it seems doubtful whether Municipal conditions are yet sufficiently settled to warrant this step. In the meantime good quality of service and generally lower prices to the public have been insisted upon.

The Brooklyn Park concessions brought in a net revenue in 1915 amounting to \$13,040.92. These revenues were turned into the general fund for reduction of taxation. In addition a new Carousel building, costing \$12,000; a rustic boat house, costing \$2,000, and a new open pavilion, costing about \$800, were erected by holders of concessions and turned over to the city.

GREENHOUSES.

The greenhouses and conservatories in Prospect Park consist of large show houses with very handsome exhibits of ferns, orchids, palms, cacti, and other tropical plants, in addition to a continuous show of a very large assortment of flowering plants in bloom. These exhibits are housed in the following buildings:

	Square Feet of Floor.
Cactus House	1,000
Aquatic House	1,323
Orchid House	2,025
Orchid House	1,323
Tropical House	1,323
Fern House	1,890
Show House	3,840
Palm House	5,000
Four Small Propagating Houses, each	2,640
Old Potting House	1,248
New Potting House	768
New Potting House	396
Potting House	132
Three Large Propagating Houses	8,379
Cold House and Cold House Extension	2,556
Cold Frame—Pit—Century Plants	700
New Cold Frame House Century Plants	528
Center	759
Vestibule, Main Entrance	176
Cold Frame Sash	11,610
Total	47,616

There were grown at the greenhouses, cold frames, and nurseries of the Department, during the year the following plants:

At the Greenhouses.

Bedding Plants, Pansies—Geraniums, Coleus, etc.	65,000	
Greenhouse Plants, Show or Exhibition	56,000	
Vines for Ground Cover—Ivy	12,000	
Vinca	2,000	
		14,000

At the Flower Garden.

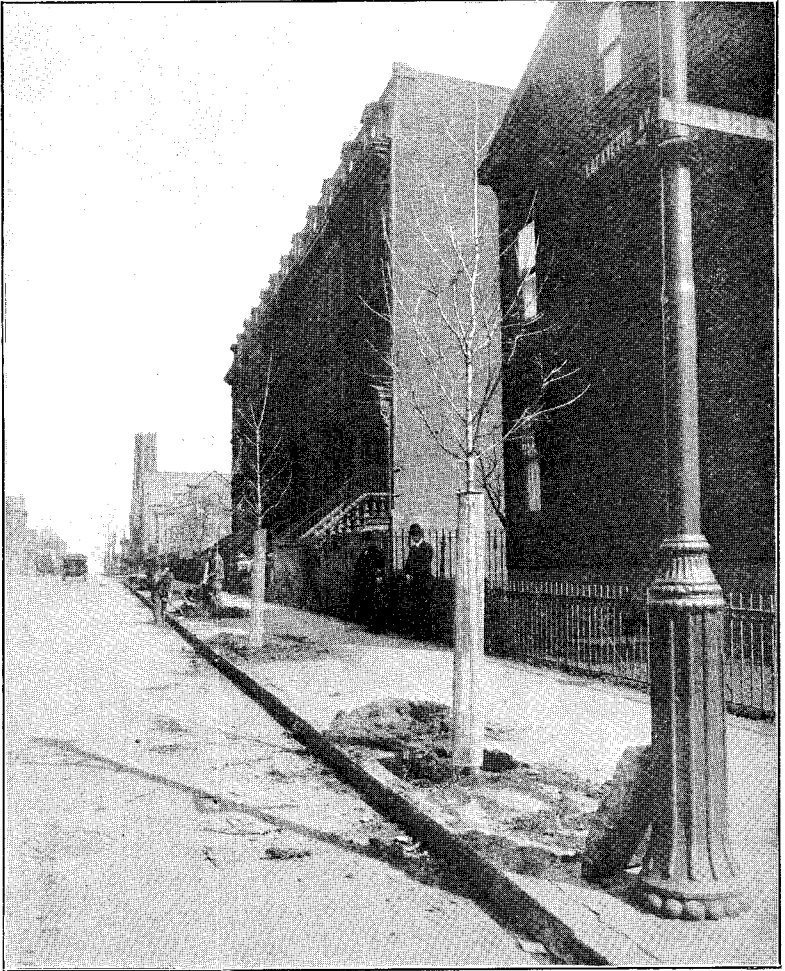
Vines for Ground Cover—Ivy	4,000	
Pachysandra	1,000	
		5,000
Shrubs—Ligustrum	1,000	
Axalea	600	
		1,600
Herbaceous Plants for Children's Gardents, etc.	4,000	
Miscellaneous Plants	500	
		146,100
Total Number of Plants Grown		146,100

ARBORICULTURAL WORK.

During the winter dead and diseased trees which had been marked for removal the previous fall were taken down, cut up and given to the Bureau of Charities. In the Spring all efforts were concentrated on planting. Simultaneous with the planting also came spraying for sucking insects. There are a number of these pests common to the trees of this Borough. The oyster shell scale, the cottony maple scale, scurfy scale, San Jose scale, sugar maple phenacoccus, golden oak scale, tulip tree scale, pine leaf scale and plant lice are some of the most important ones. Spraying for caterpillars and the elm leaf beetle was commenced in the latter part of May and carried on for over six weeks in the entire Borough, both on the streets and in the parks.

During the hot summer all the young trees were cultivated and watered, and in the late Fall they were fertilized with manure and leaf mold taken from a compost prepared in Prospect Park. In August commenced the season for pruning superfluous, dead and diseased branches. This is a hazardous work and the men engaged in it must often take great risks. The men must also observe fundamental principles in connection with this work, such as close cuts, under-cuts, wound dressing, etc. Fall is the season when attention is given to insects that bore into the wood of trees. The most important species of these insects are the leopard moth—a serious enemy of our silver maples and elms; the elm borer, the bronze birch borer, the hickory bark borer, the linden saperda and the two-lined chestnut borer. The removal of fungous growths, dressing of wounds, attention to slime flux and similar diseases, loosening tree guards, treating and filling cavities, fastening trees that have a tendency to split, and placing labels on the prominent trees along the walks in all the parks, inspecting trees on City streets, issuing permits, and controlling pruning done by private owners, are other forms of attention which devolve upon those in charge of municipal trees.

Under the direction of the three Arboriculturists, 670 trees, 7,307 shrubs and 5,629 ground covering vines were planted during the year in the parks. 1,321 trees were planted in City streets. 29,216 trees were trimmed in the parks, and 26,177 in the streets; 19,518 trees were sprayed in the parks, and 36,097 in City streets. 6,578 complaints in regard to street trees were received and attended to. Largely owing to the purchase of a high power sprayer, nearly twice as many trees were sprayed as in 1914. There was an increased activity in all these lines without corresponding increase in cost.



Planting Trees on Lafayette Avenue.

FARM GARDENS.

The Children's Farm Gardens, inaugurated in Brooklyn in 1914, at McCarren Park, were greatly extended and similar gardens were established at the new Betsy Head Playground in Brownsville.

The work had been taken up with so much enthusiasm the previous year by the children of McCarren Park that the number of individual plots was increased from 120 to 400. The Betsy Head Farm Garden was opened for the first time this year and contains 315 individual plots. As there are two plantings each season, 1,430 children had the opportunity to cultivate individual plots and take away the results of their harvest. In addition, about 40,000 school children visited the gardens for nature lessons. The work has proved to be one of vital interest to the children. The new Farm House at McCarren Park Gardens, described elsewhere in this report, has become one of the most picturesque points of interests in Brooklyn.

At each planting season the children who make application are registered and each is assigned an individual plot, which is numbered, and to which he gives individual attention under the direction of the school farm director and attendants. These plots are each four feet wide and eight feet long.

Each plot was seeded with radish, bean, beet, carrot, corn, lettuce and turnip. The School Farm Directors and Attendants instructed the children in fertilizing, spading, raking, sowing the seed, in planting, cultivating, weeding, thinning, transplanting, watering, picking insects from plants, spraying with insecticides and harvesting. They were also taught to care for the paths, flower beds and observation plots.

The average yield of each plot in the gardens was 400 radishes, 2 quarts of beans, 5 ears of corn, 40 beets, 1 peck beet greens, 60 carrots, 15 heads of lettuce and 20 turnips.

STREET TREE PLANTING.

As has already been set forth in the first part of this report, 1,146 street trees have been paid for this year and set out by the Brooklyn Park Department. 780 trees have already been ordered for planting next Spring. One difficulty with securing orders is in the fact that early Spring is the best time for planting and many citizens do not become interested until they see the trees going in and the time for ordering is over. This condition emphasizes the importance of having the subject taken up in the Fall by organizations and pushed along systematic and persistent lines.

Many street trees are injured through the carelessness of drivers in allowing their horses to stand near trees. This is contrary to a city ordinance and where it occurs it should be called to the attention of the driver or tradesman involved or the police should be notified.

Care must be exercised to select a suitable species for planting. Among those that thrive best on City streets are the Oriental Sycamore, the Norway Maple and the Red Oak. For suburban sections the American Elm, Ginkgo, European Linden, Scotch Elm, Pin Oak and Red Maple are suitable. The Poplars, Silver Maple, Catalpa and Willow are undesirable and should not be used. The trees should not be less than $1\frac{3}{4}$ inches in diameter; ($2\frac{1}{2}$ inches is better). The trunk should be straight and free from branches to a height of at least seven feet, and the first branch not over nine feet from the ground. The tree should be free from insect pests and disease and have a compact fibrous root system and a well-balanced head. A cloudy day is preferable to a sunny day for planting.

It is advisable to plant street trees at least twenty-five feet apart so as to give them proper space for development and so as to avoid too dense shade. The Spring is preferable to the Fall as a season for planting. The opening in the sidewalk should be at least three feet square, larger if possible, say five by four feet, especially where the sidewalk is of concrete and the roadway of asphalt. Dig the hole at least three feet square and three feet deep and fill it with good rich soil. Do not let manure

come in direct contact with the roots. Plant the tree at the same depth at which it stood before transplanting, sprinkling fine earth among the roots and tamping it down firmly to exclude air spaces.

After planting, a guard must be placed around the tree. A cheap and serviceable one is made of wire netting of one-half inch mesh. Protect the tree from coming in contact with the guard by using a piece of burlap or rubber hose between the tree and guard.

A newly planted tree should be watered once a week if the weather is dry. At least six gallons (two pailsful) should be given at a time. This will moisten the ground thoroughly down to the roots. Watering every day is unnecessary and often proves injurious.

On the day after watering, the soil should be stirred for two or three inches in depth in order to conserve moisture, permit aeration, and allow the rain to enter. This stirring of soil is also advisable after every rain. When cultivating trees the surface should be left level or inclined slightly toward the tree.

During the Fall season manure should be placed around the tree in mixture with the upper six inches of soil. The application should be made to a distance equal to the spread of the branches, or as nearly so as the sidewalk opening will allow, and, if possible, should not come into contact with the trunk of the tree.

Street trees must not be watered by means of a garden hose unless the owner has procured a permit from the Department of Water Supply, Gas and Electricity.

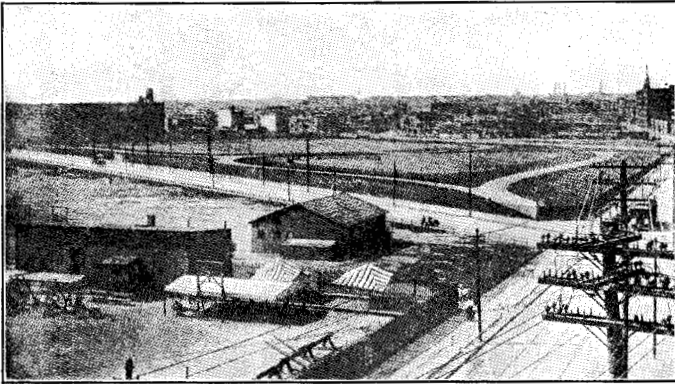
WILD LIFE.

The efforts to encourage wild life in Prospect Park have continued. The squirrels are so well protected that they are very tame and afford much amusement to the public. The squirrels are carefully fed in winter. Efforts to accumulate a flock of wild ducks on the lake are meeting with success. The number and variety will be increased each year. Donations of a pair of swans and of several pair of wild geese have been promised for next Spring. An experiment will also be tried with pheasants.

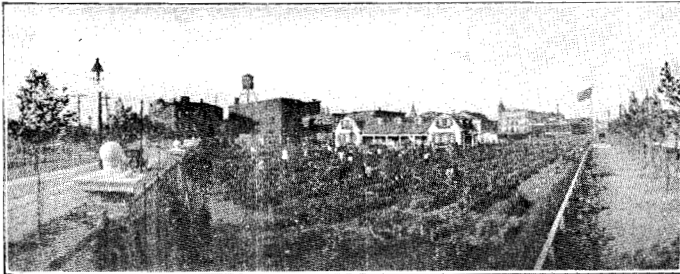
The importance of developing a bird sanctuary in Prospect Park is appreciated both from the point of view of their inherent attractiveness and from the point of view of their great usefulness in destroying caterpillars and boring insects. Trees and shrubs attractive to birds have been planted and many bird houses have been put up. One need which has been partly met is the provision of bird houses with small openings, safe and suitable for wrens and small song birds. It is expected that this Winter and Spring more than a hundred bird boxes will be built for us by the boys of the Manual Training High School. Another Winter we expect to take steps for providing the birds with accessible food, such as grain and suet. Most of the migratory birds go south not to avoid the cold but to make sure of a food supply. It will be interesting to determine how many can be kept here during the Winter. About 160 varieties of birds have been observed at various times in Prospect Park. The number of varieties seen during one year is about 110, these being most numerous in Spring and Fall. The Brooklyn Bird Lovers' Club and the new Brooklyn Zoological Association are co-operating most helpfully in carrying out the policy here described.

MUSEUMS OF THE BROOKLYN INSTITUTE OF ARTS AND SCIENCES.

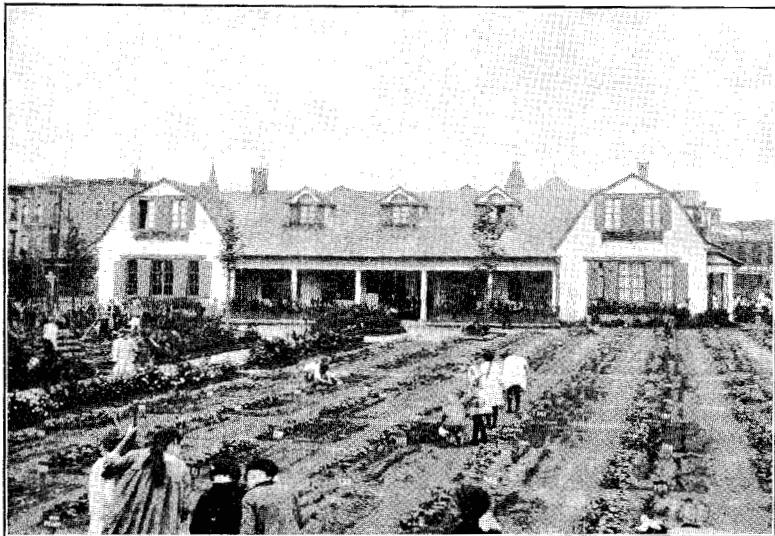
The Central Museum on Eastern Parkway, the Children's Museum in Bedford Park and the Brooklyn Botanic Garden are under the general management of the Trustees of the Brooklyn Institute of Arts and Sciences. They receive appropriations from the City for maintenance and their collections are provided for entirely from private sources. The construction work is done through the Department of Parks and the bills are audited through this department.



McCarren Park, 1913.



McCarren Park, Same Section With Farm Gardens, 1915.



New Farm House and Social Centre.

Central Museum.—The collections of the Museum have increased to such an extent that all of the passages, hallways and stairways have been utilized for exhibition purposes.

The attendance in 1915 increased 99,657 over 1914, so that the total number of visitors registered during this year was 355,318, an extraordinary percentage of increase. The increase will be still larger when the Eastern Parkway is completed.

The Docent services for the benefit of the children of the public schools and for visitors have also become an important part of Museum activity. The attendance of children with teachers for instruction in the galleries was 7,740; attendance at the Museum lectures, 20,469.

Two very important exhibitions of paintings were held in the picture galleries; an invited exhibition of 101 paintings and 41 miniatures by Contemporary American Artists from April 4th to May 3rd, attended by a public numbering 34,547; also an exhibit of the loan collection of 69 water colors by one of the great leaders in American Art—Winslow Homer—between the dates of October 16th and November 17th.

The formal opening of the Print Gallery occurred on April 26th, the occasion being the first view of 50 Whistler lithographs, the gift of the Rembrandt Club of Brooklyn. Another notable print exhibition was the etchings and lithographs of Joseph Pennell, the distinguished American artist, who was present, and who gave a lecture on the "Making of An Etching" on December 21st in the auditorium of the Museum to an audience of 753.

The following accessions of paintings have been received:

41 paintings from the Bequest of Charles A. Schieren.

18 paintings from the Bequest of Robert B. Woodward.

6 other gifts have been received from various individual donors.

8 paintings have been obtained by purchase from the Museum funds, including a Portrait by John Singleton Copley, and a Portrait by John Wesley Jarvis,—and 6 paintings by contemporary American artists.

There have been 10 accessions of drawings: 9 of gifts from individual donors and one by purchase.

In the Department of Sculpture there have been three accessions of modern work. Two of these were presented by George D. Pratt, and one was obtained by bequest from Charles A. Schieren.

The accessions in glass include a stained glass window by John La Farge, obtained by gift,—and 35 specimens of ancient Graeco-Roman glass by bequest from Robert B. Woodward.

In the Department of Egyptian Antiquities the British School of Archaeology in Egypt has presented the Museum with 34 pieces, in recognition of the Museum's subscription to the work of this Society, and the Egypt Exploration Fund Society has presented the Museum with 80 lots and pieces, in return for a subscription to its archaeological work.

In the field of Oriental art the Museum has installed 218 carvings in jade and other hard stones, mainly Chinese, obtained from the bequest of Robert B. Woodward, and 200 specimens of Chinese cloisonne as additions to the Avery Collection, from the donor of this collection.

In the Department of Natural Science the principal accessions include an unusually large number of gifts from the Zoological Parks of New York and Brooklyn, purchases of about 125 rare and interesting sea birds of the South Atlantic Ocean; and collections of mammals, birds, fishes, reptiles and invertebrates made on Museum expeditions to the Far West and elsewhere. Numerous specimens of mammals, including animals as large as the eland and antelope, have been mounted and placed on exhibition. Among important and striking new special exhibits are the habitat group of Virginia deer, the coral reef group which is the result of the Bahama expedition, and several groups of Subantarctic birds which were collected during 1912-1913 on the Museum's expedition into the South Atlantic.

Notable changes and improvements have been made in the Hall of Invertebrate Zoology, the Long Island Bird Room and elsewhere on the natural history floor.

Children's Museum.—The total attendance at the Children's Museum for 1915 was 185,764. The number of lectures given was 312, and the attendance at lectures was 29,340. There were 1,101 visits from teachers and 1,398 loans were sent to the schools. The number of children studying and handling these loans is innumerable, perhaps 600,000.

The most important event of the year was the presentation of a geographical model by the Brooklyn Women's Club, for the purpose of interesting the club women of Brooklyn in a project to raise funds for completing the geographical exhibit. The significance of this act lies in the fact that the club women of Brooklyn have recognized the influence of the Museum upon children.

Brooklyn Botanic Garden.—On June 18 the Board of Estimate and Apportionment passed a resolution appropriating \$100,000 for the completion of the Botanic Garden buildings, and for other permanent improvements. This appropriation was voted in consideration of an offer made on behalf of the Board of Trustees of the Brooklyn Institute of Arts and Sciences by the Chairman of the Governing Committee of the Garden, Mr. Alfred T. White, to secure a like sum by private subscription. A check for this amount was deposited with the Comptroller on May 26.

The contract for General Construction was awarded in the sum of \$140,228; for heating, in the sum of \$16,928; and for plumbing, in the sum of \$7,569—a total, including Architects' and Engineers' fees (\$7,500) of \$172,225.

During the Spring new walks of bituminous macadam were constructed on the new (south) addition opposite the Willinck entrance to Prospect Park. This new addition extending to the Brighton Beach cut near Malbone Street was formerly waste land, but was turned over last year by agreement with the Park Department.

In addition to the above expenditures, private funds to a total of \$15,309.06 were expended for maintenance and other Garden purposes.

The total attendance for the year was 71,600, notwithstanding the fact that the grounds had to be closed to the public from January 1 to May 1.

During the year the collection of native wild flowers was considerably enlarged and about 25,000 children attended the various courses of instruction, including children's gardens.

At the close of the year the library contained over 3,800 books and nearly 5,900 pamphlets, of which 771 books and 2,235 pamphlets were added during the year. All publications for the library are purchased with private funds. The library is open free daily to the public for reference.

Over 11,900 specimens were added to the Garden herbarium, making the total number over 135,000.

During April over 85,000 penny packets of seeds were distributed to school children of the Borough, as a means of stimulating the planting of home gardens. Over 300 home gardens were started and supervised.

The carrying out of the plans now under way for improvement of the Botanic Garden, besides increasing the value of the Botanic Garden, will result in a marked beautification of the public lands in the Prospect Park section.

MUSIC.

Continued efforts have been made to secure a better quality of music. This has been accomplished by care in selection of leaders and by prescribing instrumentation.

Considerable attention has been given to working out the programs. A schedule for the entire season was made early in the year. This enabled each leader to know when his concerts would come up so that he could make suitable arrangements in advance. In past years much of the music had been let out from week to week. This new method also makes it possible to print the entire summer schedule on each of the band programs, so that persons taking them home one week can tell where

there will be a concert the following week. Care is taken not to have two concerts on the same Sunday in small parks close to each other, but to have them alternate.

Parks.	Total Number of Concerts.	Average Attendance at Each Concert.
Betsy Head	2	about 15,000
Prospect	29	" 11,000
Sunset	10	" 4,000
Winthrop	9	" 4,000
Ft. Greene	6	" 3,000
Saratoga	3	" 2,500
Irving Square	3	" 1,500
Red Hook	2	" 750
Lincoln Terrace	2	" 3,000
Bensonhurst	2	" 600
Cooper	3	" 1,500
Tompkins	3	" 2,000
Carroll	1	" 4,000
Bushwick	2	" 1,000
Metropolitan Avenue Pier	9	" 3,000
Dancing Concerts on Pier	11

In addition to the band concerts listed above, the United German Singing Societies gave a chorus concert in Prospect Park on September 12th. Through the efforts of the Brooklyn Parks and Playgrounds Committee three evening concerts were given by volunteer vocal talent. One was given in Winthrop Park, one in Tompkins and one in Sunset. These proved to be decidedly successful and it is hoped that the method can be extended another season.

ACTIVE RECREATION.

Preliminary.—During the year a study of each playground was made in which particular attention was directed to the supplies on hand, equipment and the arrangement thereof. New closets for storing material were placed in several playgrounds and many others were renovated. Apparatus that had not been used for a long period, such as travelling rings, horizontal bars, see-saws, horses and bucks have all been repaired and placed in operation. Additional swings have been placed in each playground to be used while broken swings are at the shops being repaired. Our permanent playgrounds are now in good physical condition.

Administration.—During the year efforts were made to bring the playgrounds up to the highest standard of efficiency. A new system of tabulating the attendance was put into operation by having the Play Leaders record the weekly attendance as well as the daily attendance, relieving the office of this work. Requisitions for supplies were received the first of each month, except in emergency cases. A semi-annual inventory was received from each Play Leader showing the supplies, apparatus and equipment on hand in each playground. All apparatus is inspected each morning. Requisition for repairs is made as soon as the need appears and, by the prompt return of this apparatus from the Department shops, the equipment in the playground is kept in constant use.

Staff.—The permanent Staff of Play Leaders in this Department consists of eight men and eight women Play Leaders, each employed for three hundred days. By the appointment of temporary Play Leaders for the Summer season this force was increased to twenty-four men and nineteen women Play Leaders, each of whom received \$3 per diem and worked six hours each day. In the absence of a Civil Service List from which to appoint Play Leaders in the beginning of the Summer season it was necessary to make non-competitive temporary appointments. In the middle of the Summer a new list for Play Leaders was promulgated by the Civil

Service Commission. This retarded our organization of tournaments and Summer festivals and made it necessary for the new Play Leaders to adapt themselves to the work in our busiest season. Play Leaders appointed from the new list proved themselves, however, to be very capable for the short period they were in the Department and we look forward to some excellent results from them next year. Play Leaders while on duty wear uniform prescribed for them by the Department.

PERMITS.

(Issued in order of application.)

Baseball, Season permits to teams	1,281
Tennis, Season permits	7,419
Football, Season permits to teams	223
Soccer, Season permits	18
Croquet, Season permits	143
Hockey, Season permits	13
Cross-Country Course	10
Picnics	1,071
Athletic Meets	14
Field Days	2
Cricket, Season permits	8

Parade Grounds.—This Department is very fortunate in having at the Parade Grounds a centrally located field of 39.50 acres set aside for athletic sports which can not be played in the crowded sections of the City and in the smaller playgrounds. This splendid recreation field is provided with a well-equipped athletic house. The building contains sixty-four rooms. Forty-seven are locker rooms, each equipped with twelve lockers. An individual room is assigned to each manager or captain for his team, providing privacy and protection of property for all teams using the building. Four rooms are equipped with shower baths. These are used extensively by the players.

Twenty-five baseball diamonds are distributed over the grass area of the Parade Grounds. About one-half are of regulation size and have base lines and pitcher's box cut out on each diamond. These diamonds are maintained in excellent condition and are equivalent to any to be found in the big professional baseball parks. Diamonds are distributed along the side lines of the field, the players batting toward the centre. Between the outfield of the diamond there is a large area on which there are seven cricket fields. In another section of the ground a space is used for seven lawns for bowling on the green.

In the Fall and Winter this field is converted into six rugby fields and four soccer football fields.

All the facilities at the Parade Grounds were used to capacity and it was not an unusual sight to see twenty thousand people watching the games on Saturday and Sunday afternoons.

Play Lots.—The inadequate number of playgrounds in this borough made it impossible for this Department to provide sufficient play space for the large number of children who are on the streets during the school vacation period. To alleviate this condition as far as possible, the owners of vacant lots were appealed to for the use of their property during the vacation period. A number of interested citizens generously loaned to this Department their property to be used for playground purposes. We installed in these vacant properties sand bins, swings, basketball courts and other equipment according to the area of the ground and the needs of the neighboring sections. Play Leaders were placed in charge to direct the activities of the children and preserve discipline and order on the grounds. These Play Lots were in sections far distant from our regular playgrounds. The majority proved to be very successful and would warrant their opening again until such time as the City may be in a position to build permanent playgrounds in these sections.



Cricket and Baseball Field, Parade Grounds, Prospect Park.

Ice Skating.—During the past year ice skating was one of the most popular sports in parks and playgrounds. The ten skating rinks built in the small parks and playgrounds were used to capacity whenever the ice was thick enough to hold the skaters. Thousands of adults as well as children took advantage of the opportunity to take part in this invigorating and healthful exercise. The depth of these ice skating rinks ranges from four inches to twelve inches, according to the grade of the surface. The shallow water in these rinks and ponds permits skating with absolutely no danger of serious accidents, and affords skating on many days when it is not possible to open the lakes in Prospect Park because of the depth of water and the scores of thousands who come there in one day.

Coasting.—In Prospect Park the coasting hill built by the Department was unusually popular. Children and adults enjoyed the sport to their hearts' content. The space selected for coasting was banked with snow on both sides to keep the coasters coming down the hill away from the people ascending. The slide down the hill was from the Payne Monument down into the Tennis grounds and was about one-quarter of a mile long. Many other hills in Prospect Park were used for coasting during the heavy snow storms. School children used the large hill in the afternoons and adults participated in the sport on evenings until 10 o'clock. On moonlight evenings this hill presented a beautiful spectacle. Provisions for coasting were also made at McKinley Park, Sunset Park, Highland Park and Fore Greene Park.

Social Centre.—A new form of activity was inaugurated in the late Fall of the year when a Social Centre was started at McCarren Park. The field house which had been renovated in the Spring of the year and used in connection with the school farm garden work when the garden was in operation, offered an excellent opportunity to experiment with work of this nature. An advisory committee composed of people prominent in church, social, educational and settlement work in the neighborhood of McCarren Park was selected and a meeting of this committee in conjunction with the Department officials was held at the Farm House to decide on questions of policy.

The Farm House was well adapted for the use of a Social Centre, a number of small games were furnished, an open fire place was installed to provide sufficient heat, chairs, tables and benches were made at the Department shops and electric lights were placed in each room. A graphophone and a number of folk and social dance records were placed at the disposal of those desiring to use them.

The Farm House is divided into three main rooms, consisting of a kitchen, game room and meeting room. The principals of the local schools and the church settlement and other organizations interested in social, educational and recreational work were invited to make use of this Centre. Within a few weeks fifteen clubs were organized and the house was a very busy centre of social activity since its opening. A large diversity of clubs has taken advantage of the facilities provided at this centre, including clubs organized for the promotion of dramatics, dancing, literature, music and singing. A troupe of the Junior American Guards has been organized as well as a group of Camp Fire Girls. Mothers' clubs have held meetings at the centre, and supper clubs have been organized. Two clubs of working girls from factories in the vicinity of the Centre have been organized and have one night each week assigned to them. The employers of one of these factories supply refreshments and entertainment, a special dancing teacher and special music for their social evenings. This, our first Social Centre, has met with even more success than we had at first anticipated and has accomplished much for the young people in the vicinity of McCarren Park.

Festivals and Celebrations.—Throughout the year festivals and celebrations commemorating the various holidays were celebrated by the boys and girls in each playground. A program consisting of about ten numbers was usually arranged by the Play Leaders, including folk dances, games, athletics, songs, recitations, gym-

nastics, drills and a variety of other activities. The Play Leaders are usually permitted to use their own discretion and initiative in arranging programs of this nature.

Popular Activities.—The Playgrounds offer an opportunity for an unusual variety of activities. With the boys the most popular activities are baseball, basketball, track and field athletics, lawn tennis, volley ball, dodge ball, quoits, calisthenics, gymnastics, dumb-bells, Indian clubs and wand drills. The girls display most interest in volley ball, tether ball, croquet, ring games, singing games, quiet games, tag games, lawn tennis, flag drills, dumb-bell drills, rope jumping, relay racing, story telling, folk dancing and ingenuity work.

Recreation Pier.—The upper deck of the Metropolitan Avenue Pier was placed under the supervision of this Department during the past year. This pier was open from 6 A. M. to 11 P. M. during the Summer season. A Play Leader was placed in charge of the play activities and a daily average of 250 children took part in the quiet and active games held on the pier. The Parks and Playground Association assigned a special dancing teacher for two hours each afternoon.

Nine Sunday Evening concerts were held at the Pier; an average of 3,000 people each evening attended these concerts and enjoyed the music and the breezes from the river on warm evenings.

Eleven folk dance concerts were held, four musicians and a leader being provided at each concert. During the latter part of the season a graphophone was purchased and placed on the pier, and proved to be very satisfactory for folk dancing.

Betsy Head Playground.—The Betsy Head Playground in the Brownsville section of Brooklyn, transferred to this Department on September 30, 1915, by the Public Recreation Commission, was the largest acquisition to the Department's recreation facilities.

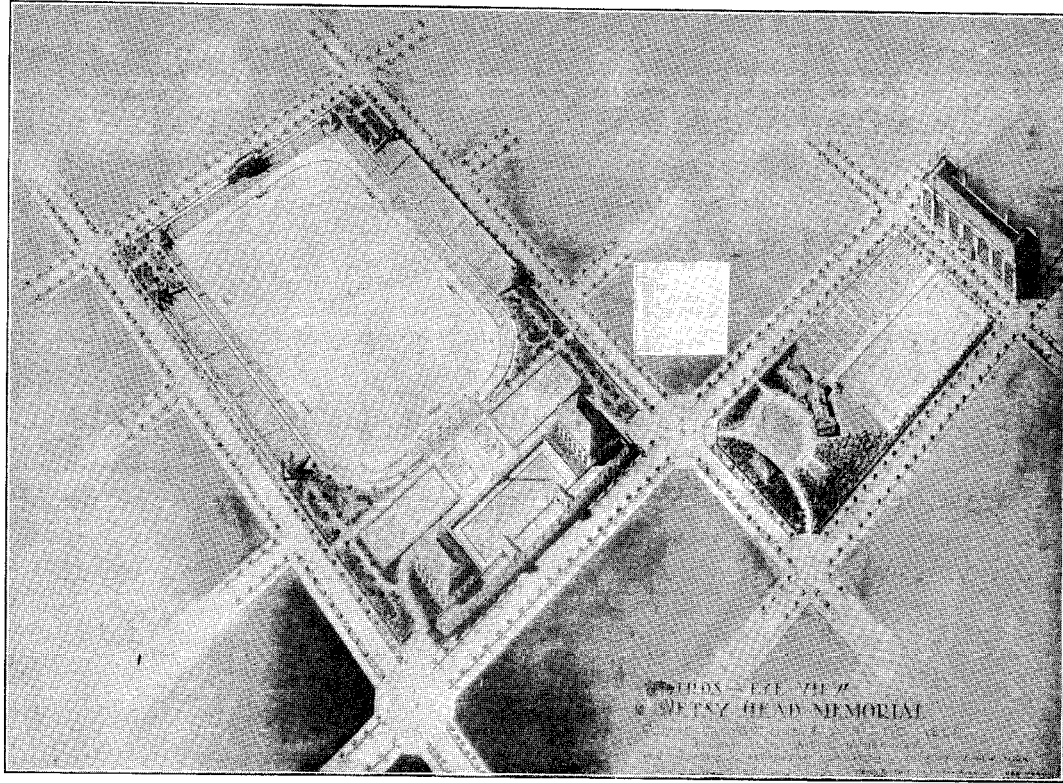
This playground covers an area of 10.50 acres and is divided into two sections. One plot contains the shelter house, rest pavilion, sand house, wading pool, playground and school farm. The adjacent plot contains a bath building with fifty shower baths and four hundred lockers, a swimming pool sixty feet wide and one hundred and fifty feet long, a field house with twenty shower baths; quarter mile running track and four tennis courts. The school farm gardens were put into operation on May 24th, 1915, and the playground was opened on July 28th, 1915. It was possible to open these sections previous to the completion of the athletic field and bath building.

The following apparatus was purchased and erected on the children's playground: 32 Baby Swings, 5 See-Saws, 1 Rock-a-Bye, 12 Large Swings, 2 Slides, 1 Giant Stride, 1 Pair of Basketball Standards, 2 Tetherpoles, 6 Iron Garden Swings. An iron shot putting circle, a running broad jump pit and a running high jump pit were dug and filled with clay loam and soccer football goals were erected; all of the above were completed before the official opening, which was held on September 30th, 1915. The attendance at the opening was estimated at 20,000.

The bath house opening was delayed until November 11th to give the contractor an opportunity to complete some miscellaneous items and in order to allow this Department to make the necessary preparations for the opening. The bath house building was open from 8 A. M. to 10 P. M. daily. During the latter half of November and during December 9,771 men and 8,374 women took advantage of the bathing facilities. In the Summer we expect to accommodate several thousand bathers each day. Bathing suits will be provided for use in the pool

First Aid Outfits.—To take care of accidents of a minor nature, which it is difficult to eliminate from a busy playground, first aid outfits have been placed in each playground so that immediate relief can be rendered when accidents occur and assistance is required.

Athletic Association.—At a conference of the Play Leaders an athletic association was organized to promote athletic sports in the park playgrounds and to develop a wider use of the facilities now provided for recreation through an association



Birdseye View, Betsy Head Playground.

organized for this purpose. Individual associations are now in the process of formation in each playground. It is the intention of the Department to hold a large number and variety of tournaments and this association will be of great help to us in carrying out our plans.

Safe and Sane Fourth of July Celebration.—On July 4th special programs were arranged for all playgrounds. On the boys' side athletic events were contested and attracted large gatherings to the playgrounds; the girls' side of the playground celebrated with festival and athletic events, which were also well attended.

Lawn Tennis.—The Tennis Courts in Prospect Park maintained their usual popularity and were open from May 30th until November 25th. During the past year 5,173 season permits were issued for the use of these courts. On week days three hundred courts provided sufficient space for all players desiring to play. The full number of assignments, however, requested for Saturday afternoons could not be fulfilled, and on many Saturdays there were enough people on line at the tennis house at the opening hour to fill all the courts. Season permits were issued from the main office. No assignments were necessary to use the courts except for Saturday, when assignments were made for two hour periods. Permits were issued and assignments made without charge to players. The three hundred and sixty-eight private lockers used for storing tennis paraphernalia, for which a charge of fifty cents per season is made, were insufficient to supply the demand. However, those unable to secure private lockers were taken care of in the six hundred and eleven general lockers for which a charge of twenty-five cents per season is made.

The twenty-eight dirt tennis courts at Highland Park and the fourteen courts at McCarren Park were conducted along the same lines, except that we had no storing facilities for nets, etc., and this Department furnishes nets on these courts. Several new courts laid out in the smaller playgrounds were used very extensively.

Use of Playgrounds by Schools.—At McLaughlin Park Playground, Public School No. 5, which is directly opposite, is experimenting with the Ettinger System. Several hundred children are sent to the playground daily during school hours to carry out the recreation part of their program. Classes from schools in the vicinity of McKibben playground and Betsy Head playground also visit the playgrounds during school hours. The Play Leaders of this Department assist the teachers accompanying these children in organizing and conducting games.

It is our hope that the school principals in the vicinity of our other playgrounds will have the pupils make more extensive use of our facilities throughout the day and that in the changes now contemplated in the organization of the schools new emphasis may be given to outdoor athletics and recreation.

NEEDS.

A separate report might be written about the needs of the Park system. With the present financial condition of the City it has seemed necessary for the past two years to concentrate effort upon the fuller development and larger use of existing properties. These efforts will be pretty substantially carried out by the end of another year.

Further steps for the completion of Brooklyn's fine parkway system are highly desirable. The building out of the banks along the Shore Road can be accomplished most cheaply while subway construction is still in progress. This also applies to the building of a Shore Road Extension in front of Fort Hamilton. No less important is the making of a semi-circular parkway along the route of the old Kings Highway in South Brooklyn, connecting the Eastern Parkway with the Ocean Boulevard and making a new route through connecting streets with the Shore Road.

It is desirable that in preparing a city plan for restriction of buildings in various districts or zones due consideration be given to the possibilities of the small parks as neighborhood centres and that their immediate surroundings be restricted accord-

ingly. We are already co-operating with the City Plan Committee of the Board of Estimate for this purpose.

The supply of small parks and playgrounds in Brooklyn, considering area and population, is conspicuously inadequate. It is hoped that the City can soon contribute something in this direction, that local property owners may help to solve the problem by consenting to assessment where the benefit would warrant and that some wealthy citizens may see the opportunity to serve the community in a broad constructive way by gifts which will add to its available open spaces. In this connection residents of Manhattan should recognize that this is all one great City and that there are opportunities in Brooklyn to contribute to the recreation facilities of the City as a whole. Some special needs are a small park and playground for the crowded Williamsburg section, playground for central Fulton Street section, filling in and development of the salt marsh at Dyker Beach, turning over of the site of the old Disciplinary Training School for a park in South Brooklyn, turning over of an abandoned school site on Carroll Street, and building of a new Municipal bath house at Dreamland Beach. It is also desirable to secure fuller use of the park playgrounds by having children come to them in groups throughout the day instead of in one rush after school hours. If anything like the Gary Plan of school organization is adopted this will doubtless follow. It is a matter of extreme importance that more emphasis be put by the Department of Education upon provisions for outdoor recreation than has been done in the past. Some schools can be accommodated on existing playgrounds. For other schools play space should be provided.

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