

DEPARTMENT OF PARKS

BOROUGH OF MANHATTAN

ANNUAL REPORT

1929

ANNUAL REPORT

OF THE

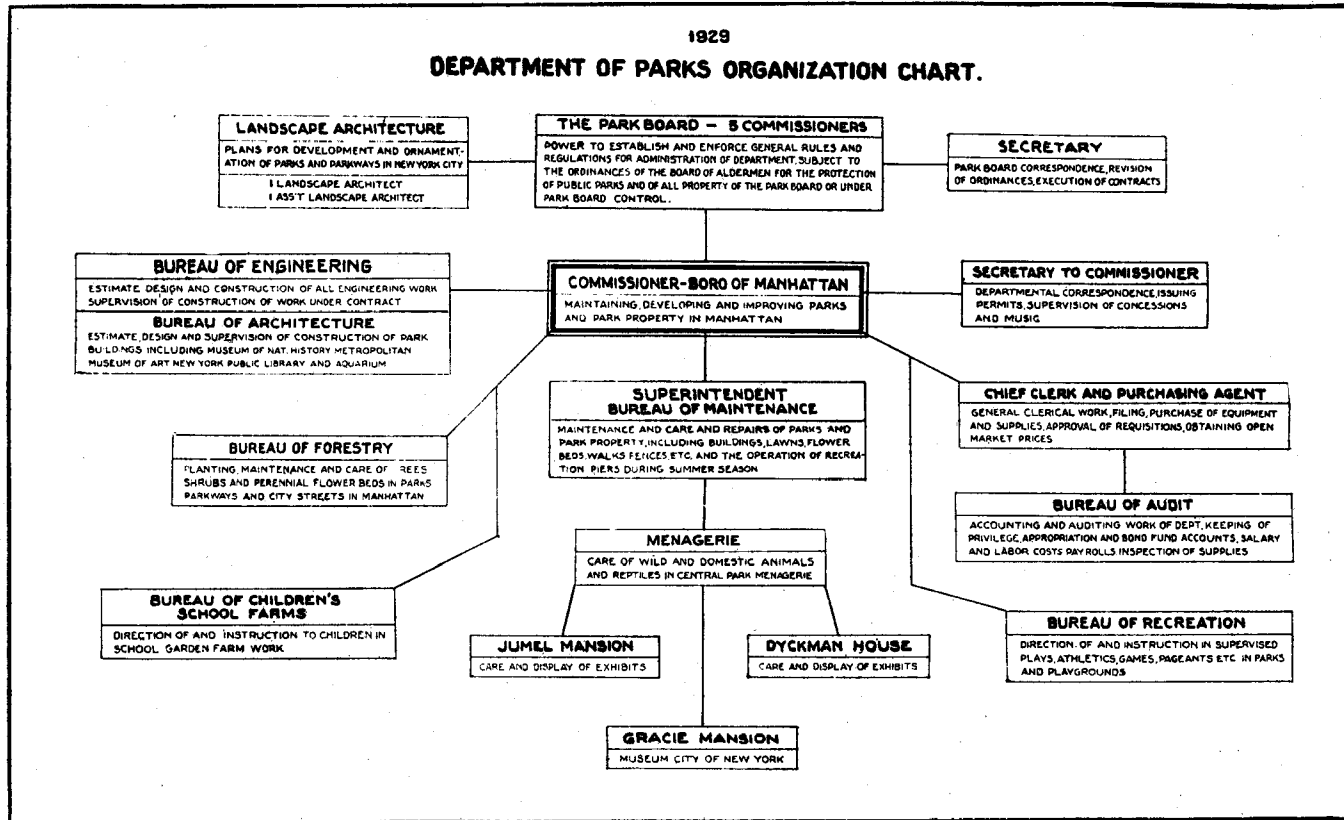
DEPARTMENT OF PARKS

BOROUGH OF MANHATTAN



For the Year

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HON. JAMES J. WALKER,
Mayor of The City of New York.

Dear Sir:

I respectfully submit herewith the Annual Report of the Department of Parks, Borough of Manhattan, for the year ending December 31, 1929.

Yours respectfully,

WALTER R. HERRICK,
Commissioner of Parks,
Borough of Manhattan.

THE PARK BOARD

The Park Board, consisting of five commissioners, has jurisdiction over the park system of New York City. This Board establishes and enforces the general rules and regulations for the administration of the Department, and subject to the ordinances of the Board of Aldermen, establishes and enforces rules and regulations for the government and protection of public parks and of all property in charge of the said Board or under its control, which rules and regulations so far as is practicable are uniform in all of the boroughs. Any person violating such ordinances is guilty of a misdemeanor. The Park Board advertises for and receives bids for work and supplies, lets contracts and has general power over all matters relating to the parks of the city, taken as a whole.

Each Commissioner of Parks, subject to the general rules and regulations established by the Board, has administrative jurisdiction over the parks within the borough to which he was appointed by the Mayor. The Commissioner of Parks for the Borough of Manhattan is President of the Park Board.

The offices of the Park Board are located in the Arsenal Building, Central Park, Borough of Manhattan.

The City of New York is divided for purposes of maintaining parks and parkways into the following borough divisions:

1. Borough of Manhattan
2. Borough of Brooklyn
3. Borough of The Bronx
4. Borough of Queens
5. Borough of Richmond.

The assent of the Landscape Architect of the Park Board is requisite to all plans and works or changes thereof, respecting the confirmation, development or ornamentation of any of the parks, squares or public places of the city. It is the duty of the Landscape Architect, from time to time, to prepare and submit to the Park Board plans for works or changes respecting the parks and parkways of the City.

REPORT OF THE COMMISSIONER.

The year 1929 was most satisfactory in that it showed marked progress in the accomplishment of the work planned in previous years.

The rehabilitation of Riverside Park was completed, and, judging from the numerous letters received from individuals and various civic organizations, commenting favorably upon the condition of this park, the result has met with general approval.

As stated in previous reports of the Park Department, the tennis courts in Central Park were in a most deplorable condition, and far from being a credit to the city. An appropriation was made for their reconstruction. The work was started in 1928 and completed in July, 1929. 32 courts are now in use, which are equal to those in any city in this country and better than those in most cities. The courts have been used by some of the ranking players of the National Lawn Tennis Association, who have expressed themselves in the highest terms as to their construction and condition.

In connection with this activity, the construction of the new tennis house adjacent to the courts was begun this year. It will contain ample locker accommodations, baths, rest rooms, and comfort facilities. When finished it will be the finest tennis house in any public park in this country, and one of which the city may well be proud. This building will be revenue-producing, an annual rental being charged for the use of the lockers.

While reporting on the work accomplished in Central Park, reference should be made to the rehabilitation schedule. This work has progressed systematically and was carried out in strict conformity with the recommendations of the Merkel Survey and Report. It is estimated that approximately 66 per cent of the rehabilitation work has been completed.

Closely connected with this rehabilitation work was the reconstruction of Conservatory Lake, east of the East Drive and north of the 72nd Street entrance to Central Park. As is well known, this lake has been used for many years by the youngsters of the city for sailing small boats. The surrounding wall had crumbled to such an extent that it was not only unsightly, but actually dangerous. The work was started and practically completed this year, and we can assure those interested in this improvement that the lake will be turned over for the use of the public in either the late spring or the early summer of 1930. When finished, it will be an example of the beauty achievable in the construction of a miniature park lake.

Previous reference has been made to the plans for installing an artificial irrigation system in Central Park. This irrigation system is more extensive

than any park irrigation system east of California. The work was completed this year. An experimental test was made in March, which was most satisfactory. The extent of its usefulness was not ascertained until the summer months, at which time it will be recalled that New York City and the surrounding portions of New Jersey, Long Island and Westchester suffered from a severe drought, the lawns being burned brown. Due to the use of the irrigation system, the lawns in Central Park presented a most refreshing sight, as we were able to keep them green and luxurious throughout the summer. This irrigation system has proven its usefulness in dry seasons and the advisability of installing similar systems in all the parks, as rapidly as money can be appropriated.

The bridle path in Central Park was resurfaced. This afforded a temporary improvement, but experience has convinced us that—in order to be satisfactory—the bridle path should be entirely reconstructed in accordance with specifications made by expert authorities. Until this is accomplished, the riding public will not be satisfied.

IMPROVEMENTS IN THE SMALLER PARKS.

I shall refer briefly to the completion of the comfort station in Colonial Park, which was erected in compliance with a demand for such a facility.

Union Square Park was entirely destroyed, due to the necessary construction of a mezzanine gallery for the new subway extension. This work was done under the supervision of the Board of Transportation. The restoration of the surface of this park is nearing completion under the supervision of that Board. It is anticipated that Union Square Park will be turned over to this Department some time in 1930, for the necessary planting and landscaping.

An appropriation was applied for and granted for the reconstruction of the Broadway plots, which had greatly deteriorated. During the year four plots have been rebuilt and rehabilitated. The improvement is very marked. The work of reconstructing the other plots will be continued from year to year.

I feel that I can justifiably report that great progress has been made in all the plans advocated by the Park Department, and that within a comparatively short time nearly all of the principal parks in the Borough of Manhattan will have been restored to a satisfactory condition.

BUREAU OF LANDSCAPE ARCHITECTURE.

MANHATTAN.

General supervision over the rehabilitation work of Central Park. The area thus far completed covers from 59th Street and Fifth Avenue and 59th Street and Central Park West, and it is now in the hands of the Bureau of Maintenance and Forestry. Great and efficient care must be exercised to maintain the park as the rehabilitation forces leave it. The irrigation system has proven a wonderful success during the past dry summer, and were it not for the fact that we had the use of this system, much of the valued work done in rehabilitating the park would have been lost.

During the planting seasons of 1929, we set out 643 trees, 12,705 shrubs and 13,600 ground cover plants. All the lawns were fertilized and are in a very healthy condition. All existing shrubbery plantations in the above mentioned areas were properly pruned, cultivated, replanted and fertilized.

The pools and waterway running through the Ramble were practically rebuilt, cleaned and edged with boulders so as to give them an attractive outline. The large lake at 72nd Street has also been treated in the same manner; the shores of this lake were badly eroded and in need of the boulder edging. Since the completion of this work it has made a wonderful change in the outline of the lake and has added great beauty to the landscape, on which many favorable comments have been made by the public.

PREPARATION OF PLANS FOR NEW WALK SYSTEM IN CENTRAL PARK.

1. South of Transverse Road No. 2, opposite The Belvedere.
2. Leading to proposed observation point in the Ramble, opposite Bethesda Fountain.
3. Along 110th Street, East of Lenox Avenue.
4. Along 110th Street, between 7th and 8th Avenues.
5. West of the Loch.
6. Across the East Drive, opposite 100th Street.
7. North of Fort Fish, running south.
8. Opposite East 76th Street Entrance.
9. In westerly part of park between 102nd and 107th Streets.
10. Opposite East 104th Street.
11. Two new walks in Ramble.
12. Entrance at East 97th Street.
13. Entrance at West 102nd Street.
14. New walk leading to Obelisk.
15. New walk north of Museum of Art.

Prepared tentative plan on lower reservoir improvement.

RIVERSIDE PARK AND DRIVE.

Plan for rearrangement of paths between 103rd and 120th Streets.

Design for shelter underpasses for pedestrians.

Design for entrances and exits to and from express highway and the river front, 72nd, 79th and 96th Streets.

HIGHBRIDGE PARK.

Design for playfield opposite 180th Street.

Design for new layout of path system north of 190th Street.

Plan for playfield 170th Street and Edgecomb Avenue.

MOUNT MORRIS PARK.

New plan for playgrounds along Madison Avenue side of park.

ST. NICHOLAS PARK.

Sketch for reconstructing entrance at 130th Street.

Examination of, and report on, contract plans for new approach to McCombs Dam Bridge, at 7th Avenue, Harlem Lane Park.

BROOKLYN.

Plan for improvement of McKinley Park. Design for picnic grounds in Prospect Park; Design for Canarsie Park; Layout of tennis courts, Marine Park.

RICHMOND.

Tentative plan for a portion of Clove Lakes Park showing swimming pool. Design of Willow Brook Park.

BRONX

Prepared plan for World War Memorial Grove, Pelham Bay Park.

The duties of the Landscape Architect are arduous and many, covering the five boroughs of the Greater City of New York, which necessitates his visiting each borough when called upon by the commissioners having jurisdiction, for the purpose of preparing plans for new layout of parks, and discussion and conferences as to the proper procedure in making the parks useful as well as ornamental. For the selection of sites for memorials, buildings, etc., and passing on same before submission to the Art Commission for final approval; also acting in an advisory capacity as to the best possible means for the preservation of trees, shrubs and lawns, their care and upkeep, which embraces the maintenance and forestry bureaus of each of the five boroughs of the Department of Parks.

Further, rendering advice as to how to combat the insect pest and fungus diseases which have become so prevalent in the past few years. The Bureau has met with wonderful success along those lines, and as time

goes on we will eradicate the pests and bring back the vegetation to a natural and flourishing condition. With constant care and vigilance we will have accomplished a great work.

BUREAU OF FORESTRY.

The successful growing of trees in the Borough of Manhattan is something considerably more than a question of ordinary planting and care. It is a problem which is without question one of the most difficult ones which beset city foresters or park authorities in this country. In addition to the ordinary difficulties which complicate tree growth under city conditions, such as pavement which shuts out water and air from the roots, trunk injury due to vandalism and careless automobile driving, and weakened growth due to smoke and dust burdened air, we have in Manhattan many additional hazards to overcome. For example, above the ground the general presence of high buildings causes a serious lack of sunshine, light and air and produces a general diffusion of tearing, swirling winds. Below the surface we have additional abnormal conditions in the extensive use of the area beneath the streets for subways, sewer conduits, and vaults, which contribute to the drying of the soil. As a result of all these factors the problem of growing trees on the majority of the streets, and in the parks of the Borough of Manhattan becomes an artificial one.

The entire soil which contains the roots, together with all food, air and water for the tree, must be supplied artificially, much as they are supplied to plants grown in conservatories. A tree, therefore, must be planted in a large pit with specially prepared soil, much as a plant grown in a flower pot.

Notwithstanding all these difficulties in the care of trees the following report will show a great amount of work accomplished this year, due to the additional men in our force.

The outstanding features of this year's work have been the scientific work done in tree-surgery, entomology and the fertilization of trees. Our report will also show great improvement in the arboricultural and horticultural activities of the Bureau.

METHODS OF OPERATION.

Chief Forester—Head of the Bureau—of both the technical and field activities.

1 Arboriculturist—In charge of arboriculture, entomology, and tree-surgery.

1 Head Gardener—In charge of the nursery, planting, pruning of shrubs, and the disciplining of the Bureau.

REGULAR WORKING FIELD FORCE

5 Gardeners in charge
43 Gardeners

41 Climbers and Pruners
39 Laborers

FINANCIAL STATEMENT OF ORGANIZATION.

Chief Forester	\$3,500.00
Arboriculturist	3,000.00
Head Gardener in Charge	2,160.00
Field Force:	
5 Gardeners in Charge @ \$2,000 per annum	10,000.00
Gardeners @ \$6.00 per day—11,264 days, 7 hrs.	67,589.25
Climbers and Pruners @ \$6.00 per day—10,622 days, 4 hours	63,735.00
Laborers @ \$5.50 per day—10,647 days, 4 hrs.	58,561.25

Total \$208,545.50

TOTAL PARK ACTIVITIES FOR THE YEAR 1929.

Kind of Work	Number	Days	Cost
Trees pruned	11,678	4,073	\$23,708.36
Trees planted	1,002	646	3,759.75
Trees transplanted	319	282½	1,644.00
Trees sprayed for control of insect pests	67,070	1,118	6,507.00
Trees cleaned of egg masses	4,609	407½	2,372.40
Trees dead and damaged	1,298	1,494	8,694.87
Trees cavities and large scars, treated	1,274	614½	3,576.75
Trees cultivated and weeded	24,389	1,548½	9,012.33
Trees mulched with manure	7,251	387½	2,254.75
Trees fertilized with inoculation	3,384	278½	1,620.00
Trees staked for protection	1,286	95½	556.50
Trees binders repaired	2,005	121½	707.50
Trees removed for transplanting	137	167½	975.50
Trees resoiled over tree roots	33	8	47.00
Trees—surgery, cabling weak limbs	40	106½	619.50
Trees—large spruce planted	1	14	80.00
Planted large privet (Pyramids)	5	12	69.50
Treated small cavities on trees	313	119	693.50
Shrubs pruned	29,437	1,842	10,722.00
Shrubs planted	12,746	516	3,001.50
Shrubs transplanted	3,791	493	2,871.75
Shrubs sprayed to control insect pests	48,978	362	2,108.25
Shrubs cleaned of diseased wood	17,714	311	1,811.18
Shrubs remove large dead	916	127½	743.00
Shrubs cultivated	62,860	1,527	8,888.30
Shrubs mulched with manure	23,358	495	2,880.85
Shrubs fertilized large	5,340	131½	765.00
Shrubs removed for transplanting	3,303	39	228.50
Vines and ground cover plants planted and trans- planted	34,807	188½	1,094.50
Shrubs, pruned, cultivated and weeded	2,805	54	312.50
Planted tulip bulbs	16,200	33	194.00

HERBACEOUS BEDS.

Cleaned flower beds	561	3,264.50
Planted flower beds	105½	614.50
Mulched flower beds	23	133.50
Cultivated flower beds	476	2,722.35

MISCELLANEOUS WORK.

Fertilized lawns	220	1,280.00
Removal of snow from walks	1,592	9,267.42
Watering trees, shrubs, lawns and beds	1,443	8,400.12
Restoration work of lawns, etc.	1,176½	6,846.75
Grading and filling in erosions	577½	3,360.22
Mixing fertilizers	285½	1,661.25
Mixing compost soil	108	627.50
Protection of park property, trees, etc.	533½	3,099.00
Clerical work in nursery, checking up on nursery stock and		

keeping time	414	2,407.50
Taking inventory of tools and supervision of planting by contractors	53½	312.50
Propagation of plants in greenhouses	88	514.50
Repairing tools and mixing insecticides	112	651.50
Sowing grass seed in small areas	24½	143.00
Loading and storing fertilizers	61½	358.00
Cleaned and repairing spraying machines	36	209.50
Mowing weeds around plantations and digging drain for water pipes	57	334.75
Inspection of topsoil delivered by contractor	33	198.00
Removal of poison ivy	9½	55.50
Erecting bird and squirrel houses	20	117.00
Erecting, repairing and removing tree guards	12	66.50
Removed dead trees, 64th and 97th Street Nurseries	14	83.00
Burlapped trees	2	12.00
Total cost of labor		\$149,310.40
Total days worked	25,652	

TOTAL STREET ACTIVITIES FOR THE YEAR 1929, INCLUDING PARK AVENUE AND BROADWAY LOTS.

<i>Kind of Work</i>	<i>Number</i>	<i>Days</i>	<i>Cost</i>
Pruned trees	2,939	1,013	\$5,895.75
Pruned shrubs	4,069	120	698.00
Pruned Polygonum vines	60	2	12.00
Removed dead trees	478	560	3,255.75
Removed dead shrubs	18	2½	13.00
Sprayed trees	15,464	289	1,679.75
Sprayed shrubs	4,066	15	87.00
Cleaned trees of egg masses	673	57½	336.00
Cleaned shrubs of egg masses	300	2	11.50
Cleaned flower beds .....	...	66½	399.00
Planted trees	132	114½	667.75
Planted shrubs	2,086	254	1,480.50
Planted vines and ground cover	145	10	58.50
Planted flowers	5,725	81	469.50
Planted pyramids (Privet)	2	6	36.00
Planted flower beds .....	...	57	333.00
Transplanted trees	39	35½	208.25
Transplanted shrubs	237	57½	335.00
Cavities treated	95	36	212.50
Mulched trees with manure	635	38	221.50
Mulched shrubs with manure	880	21	122.00
Mulched flower beds with manure .....	...	18	104.00
Fertilized trees	102	14	80.25
Cultivated trees	3,497	228	1,327.25
Cultivated shrubs	3,426	59½	346.50
Cultivated flower beds .....	...	81½	475.00
Resoiled around roots of trees	31	2	12.00
Staked trees	210	22½	130.00
Repairing and putting binders on trees	948	52½	305.50
Repairing large scars on trees	62	28½	165.00
Erected tree guards	29	5	30.00
Repaired tree guards	30	6	35.75
Removed tree guards for repair	52	7½	42.00
Removed trees for transplanting	124	70	407.50
Removed shrubs for transplanting	10	5	30.00
Mowed and cleaned lawns in plots .....	...	1,561½	8,589.50
Dug up and seeded lawns .....	...	117	681.25
Taking census of trees .....	...	12	66.00
Removal of snow from walks .....	...	270	1,565.08
Watering trees, shrubs, lawns and beds .....	...	361½	2,099.50
Total cost of labor			\$33,024.33
Total days worked		5,760	



TREE SURGERY ON ORIENTAL PLANE.
7th AVE ENTRANCE E. 59th ST. CENTRAL PARK.
FORESTRY BUREAU.

TREE-SURGERY.

A broken limb or a wound which penetrates as far as the inner bark may become the point of entrance of active plant or animal parasites or rot producing organisms unless these injuries are promptly and properly treated. The Bureau has endeavored to cope with this situation as far as it is possible to do so. Over 1,274 cavities and scars on trees in the parks and on the city streets and parkways of the Borough of Manhattan have been treated this year. The cavities were cleaned out, sterilized, treated with an anti-septic dressing, and filled with cement fillings. The finest work in tree surgery done by the Bureau this year was on some very fine specimens of Oriental Plane in the Ramble in Central Park, and on several English Elms and Oriental Planes in Washington Square Park.

SPRAYING OF TREES.

We have five power spraying outfits which are kept continually in operation when weather permits. An arboriculturist is assigned to this activity, to check up on material used and as to whether or not the fungicide or insecticide used is effective. Examinations are made of the trees from time to time in order to discover any new insect or disease that might require immediate attention. The spraying of trees and shrubs is one of the most important and expensive operations in the care of trees. To be done effectively it must be the work of experienced men, and all applications must be thorough. In addition to their use for the control and elimination of insect pests, the spraying machines are used to syringe down the trees with clear water to wash off the soot and dust. Over 82,000 trees and 53,000 shrubs were sprayed several times this year, besides the many thousand plants and vines growing in the plantations. As a result of this treatment there has been very little defoliation of the trees from the ravages of the chewing insects. Since the acquisition of additional spraying outfits two years ago, we have been able to go extensively into the spraying of trees when in their dormant state for the elimination of insect egg masses secreted in the fissures of the bark, and also for the control and elimination of the many forms of scale insects which infest the trees.

FUNGIOUS DISEASES.

Many diseases of trees are caused by low forms of vegetable life, known as fungi, which live upon and within the tissues of trees. They are parasites, which obtain their nourishment by breaking down the cells of the trees. Nearly all these fungi gain lodgment in wounds, grow, and rot the wood. The fungous diseases are being closely watched, and treated by practical tree surgery. Leaf and bark diseases are forms of fungi. Lindens, Oriental plane trees, horse-chestnuts, oak trees, and maples suffer especially, and every effort is being made to combat these types of fungi.



TREE SURGERY
OPERATING AN AIR COMPRESSOR CHISEL
IN CUTTING OUT A CAVITY IN A TREE
FORESTRY BUREAU

MATERIALS USED FOR TREE SURGERY WORK DURING THE YEAR 1929.

- 75 gallons Creosote, for antiseptic dressing of cavities in trees.
- 18 gallons Special tree paint for treating scars on trees.
- 5 gallons Shellac (pure white).
- 15 gallons Black Asphaltum.
- 25 lbs. Paraffin.
- 105 bags of Cement for filling cavities in trees.
- 1,000 feet of Cable, $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " sizes.
- 500 Clamps (Galvanized) $\frac{1}{4}$ ", $\frac{3}{8}$ " and $\frac{1}{2}$ " for clamping cables in tree work.
- 500 Eye Bolts, $\frac{1}{4}$ " to $\frac{5}{8}$ " x 10" to 30" in size, other material used in such work, iron for anchors, tie rods, bracing rods, for trussing trees, etc., was made in the shops of the Department.

MATERIAL USED BY THE BUREAU DURING THE YEAR 1929 IN THE WORK OF INSECT CONTROL AND DISEASES OF TREES THE FOLLOWING AMOUNT OF FUNGICIDES AND INSECTICIDES WERE USED.

- 15,000 lbs. Arsenate of Lead.
- 250 lbs. Calcium Arsenate.
- 2,400 lbs. Fish Oil Soap (Test Purse).
- 3,674 lbs. Bordeaux Mixture.
- 10 lbs. Carbon Bisulphides.
- 10 lbs. Carbon Tetra Chlorides.
- 850 gallons Kerosene Emulsion.
- 125 gallons Nicotine.
- 150 gallons Volck and Miscible Oil.
- 1,162 gallons Sulcho V. B. (Soluble fish and vegetable oil).

PRUNING.

A methodical removal of parts of a tree is necessary, in order to improve its form, the proper pruning of trees comprises removing interfering branches, thinning dense growth to give light and air to the trunk, and removing all dead and disease affected parts.

48,122 trees and shrubs were pruned this year.

A booklet of instructions on pruning and spraying trees and shrubs was published and a copy was given to each gardener and each climber and pruner.

CULTIVATION.

The keeping of the soil around the trees and shrubs cultivated and free from weeds is one of the most important aids to their growth. The ground must be kept loose to allow air to reach the roots and prevent the rapid evaporation of moisture. Therefore, great attention has been given to cultivation this year, and 94,172 trees and shrubs, besides a great many large plantations and flower beds, have been cultivated.

FERTILIZATION.

It is generally found in parks in this city that it is not deficiency of the nutritive elements in the soil that causes the decline of the trees, but rather the physical condition of the soil, which makes it impossible for the trees to perform their normal function. One of the ways in which we are im-

proving the condition of the soil around trees and shrubs is by putting a mulch of manure around them in the fall, and 41,950 were so mulched this year. The manure is allowed to remain all winter, and is dug into the soil the following spring. It not only enriches the soil chemically, but also improves its physical condition by making it more porous and less liable to become packed and impervious to air and moisture. We have also used very extensively this year commercial fertilizers, principally steamed bone meal and pulverized sheep manure. The method used with these materials is that of fertilizing the soil by boring a great many holes, one and a half to two feet deep, at the base of the trees and radiating to points directly under the end of the branches, where most of the feeding roots are located, and placing the fertilizer in them. 8,734 trees were fertilized in this way. Broadcast distribution of fertilizer over all the lawns in Central Park and Riverside Park was made this year.

The following table represents the total amount of fertilizer used:

127,000 lbs. of steamed bone meal.
336,400 lbs. of pulverized sheep manure.
5,000 lbs. of hydrate of lime.
4,000 lbs. of urea (highly concentrated fertilizer, 46% available nitrogen).
355 cubic yards of cow manure.

WATERING:

Artificial watering of the trees, shrubs, flower beds, and herbaceous plantations was very necessary this year, owing to the severe drought. During July, August and September, all available equipment was put into service. The Fire Department supplied us with extra hose, and large Boston sprinklers were used where practical. Over 100,000 trees and shrubs were kept watered during these months.

RIVERSIDE PARK REHABILITATION.

A good deal of the rehabilitation work done last year in Riverside Park had to be repeated, due to vandalism on the part of the public.

This year, with an additional force of ten gardeners and ten laborers, the Bureau continued with the work of restoration. In the spring 307 large trees were planted along the Drive. 524 trees of various species, such as Oaks, Elms, Oriental Planes, Acacia Locusts, Catalpas, Japanese Ginkgo, and Norway Maples were planted in the park in locations recommended by the Landscape Architect of the Department. 76 trees were transplanted from one part of the park to better locations along the walks.

This park has many slopes, which required resoiling and grading before planting could be contemplated. These areas were also fertilized, and were then planted with 3,855 vines and ground cover plants. In the shady places on these slopes 2,450 English Ivy plants were set out. Also, 5,325 vines were transplanted from other parts of the park to the slopes. 11,168 new shrubs and 43,450 transplanted shrubs were planted on the other lawns throughout the park.

7,129 shrubs and 69 trees were pruned this year.

Trees, shrubs and plants were sprayed for the elimination of insect pests, fungi, and other diseases. The summer spraying for the elimination of the leaf eating insects was also carried on extensively. 5,318 trees were sprayed several times for the control of the Elm leaf beetle. Tussock moth, Tent and Spiny Elm Caterpillars, and as a result there was very little defoliation.

During the year 3,531 trees were cultivated and cleaned of all weeds, and 29,940 shrubs were also cultivated. 2,285 trees were fertilized with commercial fertilizer, and mulched in the fall with well decomposed stable manure. All the shrub plantations in the park and along the parkway were dug up and heavily fertilized and mulched with manure in the fall. 10,768 shrubs were so treated. All the lawns on the parkway and within the park were fertilized with a mixture of bone meal and pulverized sheep manure. By using a large horse-drawn fertilizer distributor we were able to do all the large lawns in a comparatively short time. On the areas that we could not reach with the distributor it was necessary to fertilize by hand.

This year, almost one-third of the time was spent in digging up lawns, resoiling depressions and erosions, sowing grass seed, and putting up temporary fences for the protection of newly seeded and planted areas. 100 bird houses were erected, 405 cavities in trees were treated, 500 trees were staked, and many small jobs—such as weed mowing—were done.

It was necessary to assign six men and sometimes eight to the watering of newly planted trees and shrubs, due to the severe drought.

The following is an itemized account of work done in Riverside Park and along Riverside Drive during the year 1929:

THE FOLLOWING IS AN ITEMIZED ACCOUNT OF WORK DONE IN
RIVERSIDE PARK AND ALONG RIVERSIDE DRIVE
DURING THE YEAR 1929.

<i>Kind of Work</i>	<i>Number</i>	<i>Days</i>
Planted trees	831	369
Planted shrubs	11,168	384½
Planted vines	3,855	42
Planted English ivy plants	2,450	22½
Transplanted large trees	76	26
Transplanted large shrubs	6,345	397
Transplanted vines on slopes	5,325	49
Transplanted English ivy plants	200	3
Pruned large trees	69	19
Pruned large shrubs	7,128	580½
Removed trees damaged by autos	56	76
Removed shrubs (large overgrown)	174	39½
Sprayed trees for control of insects	5,318	66½
Sprayed shrubs for control of insects	1,500	10

<i>Kind of Work</i>	<i>Number</i>	<i>Days</i>
Sprayed English ivy plants for Aphis	1,000	11½
Cleaned shrubs of dead and diseased wood	10,449	188½
Cleaned trees of egg masses	85	3
Cleaned herbaceous flower beds .....	...	12½
Cultivated trees	3,446	262
Cultivated shrubs	19,491	466½
Cultivated herbaceous flower beds .....	...	8
Fertilized trees	2,015	196½
Fertilized shrubs	9,050	238
Fertilized lawns (100 acres) .....	...	151
Mulched trees with manure	270	9
Mulched shrubs with manure	1,718	37
Treated scars on trees	63	19
Resoiled over roots of large trees	33	8
Staked trees	500	32
Repaired binders on trees	230	14
Cavities treated	405	78
Erected bird houses in trees	100	12
Erected and repaired temporary fences around plantations .....	...	17½
Watering trees, shrubs, lawns, herbaceous beds, etc. ....	...	463½
Restoration, grading and preparing lawns .....	...	2,009
Removal of snow from park walks .....	...	9
Seeded with grass in lawns .....	...	29½
Mowing weeds around plantations .....	...	17½
Total number of days	6,367	

MATERIALS USED IN RIVERSIDE PARK.

Bone meal fertilizer	48,600 lbs.
Sheep manure pulverized	57,800 lbs.
Top soil for planting trees and shrubs	3,209 cubic yards
Grass sods for borders of lawns	3,000 square feet
Grass seed for seeding lawns	3,000 lbs.

CENTRAL PARK.

A great deal of attention was given to the cultivation of the trees and shrub plantations, especially the new plantations made under the rehabilitation of this park. 16,555 trees and 63,698 shrubs, vines and herbaceous plants were cultivated and cleaned of weeds.

The Bureau's force, whenever it was possible, assisted the special force employed for the rehabilitation of Central Park in planting, grading, etc. 216 trees and 6,848 shrubs, vines and herbaceous plants were planted.

7,847 trees were pruned and 20,842 large shrubs and vines.

The spraying of trees and shrubs for the control and elimination of insect pests was carried on with great care. 42,727 trees were sprayed for the control of insect pests, and 35,069 shrubs and many thousand small vines and ground cover plants were sprayed for plant lice and aphids.

150 large cavities in trees and 59 scars and small cavities were treated. A large European Linden tree near the Arsenal Building that was half decayed at the base was treated, braced and cabled.

1,963 trees were fertilized with bone meal and sheep manure, and 8,318 by mulching with decomposed stable manure. All the shrub plantations and herbaceous flower beds were heavily mulched in the fall. All lawns were fertilized with the following mixture of commercial fertilizer, recommended by the Landscape Architect of the Department.

Muriate of Potash	100 lbs.
Ammonium Sulphate	100 lbs.
Shredded Cattle Manure	500 lbs.
Pulverized Sheep Manure	400 lbs.
Tankage	100 lbs.
Bone Meal	200 lbs.
Sand	600 lbs.
Total	2,000 lbs.

The Plaza at Fifth Avenue between 58th and 60th Streets received continual care from early spring, when 12,000 tulips were in bloom in the flower beds, until fall. After the bulbs bloomed the beds were replanted with 12,000 bedding plants, which require a great deal of care. Therefore, it was necessary to assign a gardener to this area to attend to watering, cultivation and weeding of flower beds, and cutting the grass. In the fall 12,300 tulip bulbs were planted and covered with a compost mulch to protect them for the winter.

THE FOLLOWING IS AN ITEMIZED ACCOUNT OF WORK DONE IN
CENTRAL PARK DURING THE YEAR 1929.

<i>Kind of Work</i>	<i>Number</i>	<i>Days</i>
Pruned trees	7,847	2,955
Pruned shrubs	19,377	1,104½
Pruned vines	1,105	40
Removed trees	851	1,098
Sprayed trees for control of insects	42,727	754
Sprayed shrubs for control of insects	35,069	270½
Removed shrubs	629	80½
Cleaned trees of egg masses	3,267	250
Cleaned shrubs of dead wood and weeds	13,344	236½
Cleaned vines of overgrown weeds	475	9
Cleaned herbaceous flower beds .....	...	531
Planted large trees	98	233½
Planted large shrubs	1,459	144½
Planted English ivy plants	1,725	20
Planted vines	2,470	35½
Planted tulip bulbs at the Plaza	13,200	24½
Planted herbaceous flower beds .....	...	89
Transplanted trees within the park	118	82½
Transplanted shrubs within the park	1,032	149
Transplanted vines within the park	162	8
Cavities treated in tree surgery work	747	485½
Mulched trees with decomposed manure	5,240	273½
Mulched shrubs with decomposed manure	19,607	402½
Mulched herbaceous flower beds	52	17½
Cultivated trees	16,555	1,043½
Cultivated shrubs	49,679	1,236

<i>Kind of Work</i>	<i>Number</i>	<i>Days</i>
Cultivated vines	200	2½
Cultivated herbaceous flower beds	52	439½
Fertilized trees by inoculation process	1,963	133
Fertilized shrubs by lateral distribution	140	6½
Fertilized lawns .....	...	101
Rehabilitation work .....	...	577½
Mixing fertilizers .....	...	285½
MISCELLANEOUS WORK.		
Staked trees with 2 stakes each	215	14½
Repaired binders on trees	870	54
Cabled trees for protection (tree surgery)	33	85½
Tree scars treated with antiseptic dressing	231	86½
Restoration of lawns, borders of shrubs .....	...	243
Protection of park property from vandals .....	...	533½
Clerical work, recording time, nursery stock, etc. ....	...	414
Watering trees, shrubs, herbaceous flower beds, etc. ....	...	1,056
Mixing insecticides and fungicides .....	...	82
Mixing compost for potting perennials .....	...	108
Removal of snow from walks .....	...	150
Seventeen small jobs too numerous to itemize, such as removing trees for transplanting, erecting squirrel houses, repairing fences, care of small Greenhouse in 79th Street at nursery, sharpening tools, etc. ....	...	335½
Grading and resoiling areas .....	...	208
Total days worked	16,490	

ST. NICHOLAS PARK.

The subway construction along St. Nicholas Avenue destroyed most of the vegetation on the east side of this park. The restoration attempted by the contractor has not been satisfactory. Therefore, no trees or shrubs were cared for in this area.

All the trees and shrubs in the other plots of this park were sprayed three times for the control of insect pests. 675 trees were pruned. The binders on 40 trees were repaired. Egg-masses were cleaned from 85 trees. Scars were treated on 20 trees. 735 trees and 485 shrubs were cultivated.

442 trees and 989 shrubs were sprayed for the control of insect pests.

All the trees and shrubs were cultivated.

STRAUS PARK.

This park was in poor condition. The whole south end required digging
ST. GABRIEL'S PARK.

up, and 12 trees and 100 shrubs were planted. All the trees and shrubs were cultivated and watered throughout the summer.

SEWARD PARK.

This park is being disturbed on account of the erection of a building. Therefore, it was necessary to remove 663 shrubs to the nursery in Central

Park until restoration of the park is undertaken. The remaining trees and shrubs were cultivated and sprayed throughout the year.

THOMAS SMITH PARK.

This small park is in very fine condition. The trees and shrubs were cultivated and sprayed for insect pests from time to time.

JOHN J. MURPHY PARK.

The trees in this small park were cultivated and sprayed and 15 trees were pruned.

RUTGERS SQUARE AND SCHIFF PARKWAY are small areas and the only work necessary was cultivating and spraying.

ST. CATHERINE'S PARK.

67 trees and 62 large shrubs were pruned. 156 trees and 30 large shrubs were sprayed for insect pests. 77 trees and 100 shrubs were cultivated. All the trees were mulched with manure. 4 trees and 29 large shrubs were planted. The binders on 10 trees were repaired.

BATTERY PARK.

There are 305 trees in this park, all of which were cultivated, pruned, and fertilized. Egg-masses were cleaned from 9 trees. The binders on 119 trees were repaired and adjusted. All the trees and shrubs were sprayed three times during the year for insect pests. 130 shrubs were planted. Due to the severe drought a great deal of time was spent in watering the trees, shrubs, and herbaceous flower beds. All shrubs were pruned, fertilized, and cultivated.

BOWLING GREEN, AHEARN PARK AND BEACH PARK are small plots and triangles.

The trees and shrubs were cultivated, fertilized, and sprayed.

BENNETT PARK.

The trees in this area were trimmed of dead branches. One tree was cabled, and cavities were cleaned out and treated in two trees.

BRYANT PARK.

The trees and shrubs in this park were cultivated, sprayed, and mulched with manure in the fall. 80 trees and 615 shrubs were pruned.

CITY HALL PARK.

All the trees in this park were sprayed three times. All the trees and shrubs and ivy plantations were cultivated twice during the season. The binders on 32 trees were repaired. Scars and cavities were treated, and two trees were cabled. 1,350 English ivy vines were planted.

The outstanding work done by the Bureau in this park was the planting of a beautiful large Japanese Ginkgo tree on March 21st. The first shovel of soil was put around the roots by the Honorable James J. Walker, Mayor of the City of New York. This history of this famous tree follows:

"This Ginkgo tree (*Salisburnia Adiantifolia*) is one of five seedlings brought from China about seventy-five years ago by an American sailing master engaged in Oriental trade.

"They were distributed by the Captain to friends in the vicinity of his home in Portchester, New York. This particular tree was given to Colonel Thomas Mead, who planted it on his farm on the old Boston Post Road in what was then the aristocratic part of Greenwich, Connecticut. Some years later the tree was moved to the farm of his son, Simon Mead. This farm has since been divided into building sites. The property on which the tree stood, fronting on Field Point Road, was purchased by Dr. William A. Hillis of Greenwich. As the tree was an exceptionally fine specimen, and in view of its interesting history, Dr. Hillis wished to insure its preservation and accordingly consulted Dr. Albert Wadley of the Bronxville Nurseries, with a view to placing it in appropriate surroundings. Commissioner Herrick and his staff have certainly succeeded in giving it a prominent location in our City Hall Park."

COLUMBUS PARK.

All the trees were sprayed three times. 83 trees were pruned, and 79 trees were cultivated.

COOPER SQUARE PARK.

All the trees and shrubs were cultivated. 12 trees and 420 shrubs were pruned.

COURT HOUSE SQUARE.

This park was resoiled, graded and planted with trees and shrubs, under the direction of the Borough President of Manhattan, and then turned over this year to the Park Department for maintenance. All the trees and shrubs were sprayed. 131 trees and 45 shrubs were cultivated and pruned. Some of the lawns were reseeded, and the binders on the trees were repaired.

CORLEAR'S HOOK PARK.

32 trees and 340 shrubs were pruned. 9 dead trees were removed. 79 large privets were planted on the Jackson Street side of the park. 32 trees and 107 shrubs were cultivated. All the trees and shrubs were sprayed three times during the year. All the trees and shrubs were mulched with manure.

HAMILTON FISH PARK.

All the trees in this park were pruned and cultivated.

HERALD SQUARE TRIANGLE, HUDSON PARK, DUANE STREET TRIANGLE, DYCKMAN STREET PARK, AND GREELEY SQUARE TRIANGLE.

All the trees and shrubs in these small parks were cultivated, pruned, fertilized, and sprayed.

DEWEY SQUARE.

This Square was fenced this year. The lawns were redug, raked, fertilized, and seeded with grass. Five large trees were pruned. Egg-masses were cleaned from 15 trees.

ABINGDON SQUARE PARK.

The 35 trees growing in this park and along the curb were cultivated and sprayed. Planted a large oval bed of tulip bulbs in the fall, which was mulched with manure and protected with a wire network.

CHRISTOPHER STREET PARK.

Planted 264 shrubs, donated by Mr. Stokes, who lives opposite this park. 265 shrubs and 20 trees were cultivated, pruned, and sprayed.

CHELSEA PARK.

All the trees and shrubs in this park were cultivated, sprayed, and watered.

FORT WASHINGTON PARK.

964 trees were sprayed for the control of insect pests.

FORT GEORGE PARK.

Pruned one tree and removed 15 dead trees.

HANCOCK SQUARE.

This park was totally destroyed by the subway construction. It has since been partially restored, but the contractor still has to regrade and reseed as agreed.

HAMILTON PLACE PLAYGROUND.

Several years ago we planted a fine group of Ginkgo trees around this playground. These trees were cultivated and mulched with manure in the fall.

JEANNETTE PARK.

All the trees and shrubs were pruned and cultivated, sprayed three times during the season, and mulched with manure in the fall. Two cavities in trees were treated.

JOHN JAY PARK.

All the trees in this park were cultivated and watered, and were sprayed several times for the control of the Leopard Moth caterpillar. The interfering branches were trimmed out from 57 trees. Egg-masses were cleaned from 77 trees.

WASHINGTON SQUARE PARK.

Transplanted 17 trees. Pruned 160 trees and 230 large shrubs. Culti-

vated 718 trees and 654 shrubs. Sprayed 241 trees three times during the season. Repaired the binders on 92 trees. Cleaned the egg-masses from 49 trees. All trees and shrubs were mulched with manure in the fall. All trees and shrubs were kept watered throughout the season. In the fall a large flower bed was laid out in one of the plots on the west side of the park and 2,200 tulip bulbs were planted. The bed was mulched with compost for the winter.

The outstanding work of the year in this park was the planting of a Norway Spruce forty feet high. This tree was presented to the City by the Washington Square Association, after it had been used as a community Christmas tree during the holiday season.

STUYVESANT PARK.

25 trees were transplanted from Union Square Park to this park. 35 large privet shrubs were planted. 162 trees and 1,208 shrubs were cultivated and sprayed. Fertilized 275 shrubs. Pruned 68 trees. All the trees and shrubs were mulched with manure in the fall.

UNION SQUARE PARK.

Before this park was dismantled in the spring of this year our force transplanted 32 large trees to other parks. We also transplanted 312 shrubs. The contractors, under the direction of the Board of Transportation, then erected a wall around the park and started filling to the new level. In November the contractors reached the point when top soil was to be spread. A gardener was assigned to inspect the soil as it was delivered, and he reports that, between November 22 and December 31, 1,598 cubic yards were delivered.

MADISON SQUARE PARK.

Several large English Elms were pruned, as well as 90 smaller trees and 252 shrubs. 437 trees and 1,166 shrubs were cultivated. Egg-masses were cleaned from 86 trees. 16 large Oriental Plane trees were transplanted from Union Square Park. Small cavities in three trees were cleaned out and treated. All trees were watered during the entire season, and were sprayed three times for the control of insect pests.

KILPATRICK, KENMARE, AND KUYTER PARKS, AND THE GROUNDS AROUND JUMEL MANSION.

All trees and shrubs in these areas were cultivated, pruned, and sprayed. The trees and shrubs on the City College grounds were also sprayed.

MONTIFIORE AND MITCHEL SQUARE PARKS.

Both of these parks, which are merely small squares, are in very good condition. All the trees and shrubs were cultivated and sprayed.

DANTE PARK OR TRIANGLE.

This park was in very bad condition. This year it was fenced, dug up, fertilized, and seeded. Planted 225 privet bushes. A large flower bed was laid out, planted with bedding plants, and kept cultivated and watered throughout the season.

MANHATTAN SQUARE PARK.

All the trees were sprayed several times. They were also syringed down with soap and water to wash off the soot and dirt. 75 trees and 91 large shrubs were pruned. 200 trees and 125 shrubs were cultivated. 108 trees and 87 shrubs were mulched with manure. The binders on 25 trees were repaired.

Two large trees, which were obstructing the construction of a new wing of the Museum of Natural History, were transplanted. The trees, with a 16 foot ball of earth, were moved by the Bronxville Nursery Company, and replanted in the park near the corner of 81st Street and Central Park West.

CARL SCHURZ PARK.

The trees and shrubs in this park and on the avenue and streets adjacent thereto were cultivated, sprayed, and mulched with manure in the fall. 59 trees and 97 shrubs were pruned. Watered all the trees throughout the season.

LINCOLN PARK AND CARMANSVILLE PLAYGROUND.

All trees and shrubs in these areas were pruned, cultivated, and sprayed throughout the season.

THOMAS JEFFERSON PARK.

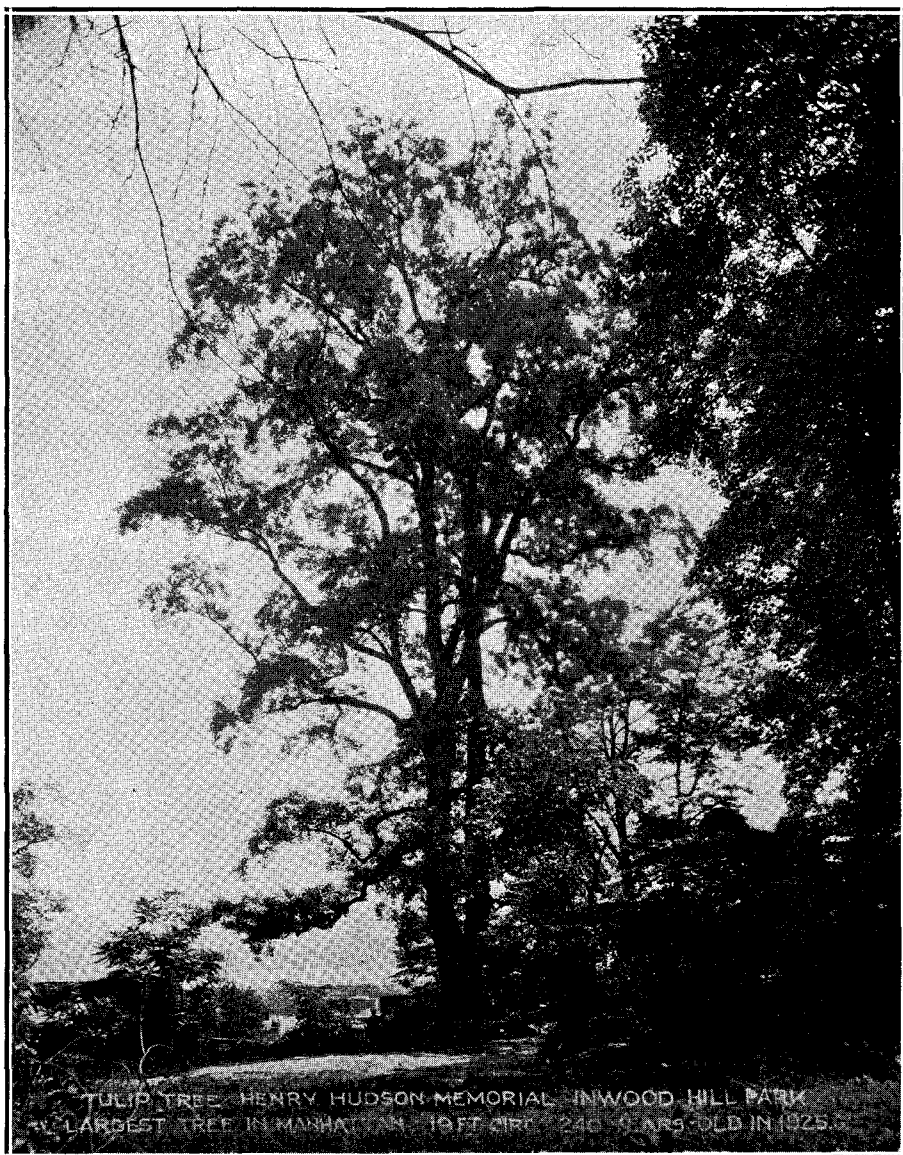
All the trees and shrubs in this park were cultivated and sprayed. 92 poplar trees were planted around the School Farm. The binders and stakes on 195 trees were repaired. 325 trees and 136 large shrubs were mulched with manure in the fall.

ISHAM PARK.

On the west side of this park the roots of many trees were exposed because of the lack of curbs along the edge of the walks, which caused the water from rainfalls to make deep erosions on the slopes and around the trees. This section of the park was resoiled, fertilized, and sodded and seeded. Dry retaining walls were built. All trees were sprayed for insects. 219 trees and 60 shrubs were pruned. 75 large shrubs were transplanted. 75 bird houses, which had been presented by school children, were put up.

MORNINGSIDE PARK.

A great deal of extra work was needed in this park because of van-



TULIP TREE (*Liriodendron Tulipifera*)

Circumference 20 feet 8 inches, age about 244 years. Hendrik Hudson Memorial, Inwood Hill Park. Largest tree on Manhattan Island; located close to the inlet on the northeast side of park coming in from 207th Street.

Hendrik Hudson entered this inlet in 1609 and may have met the Indians here. The many years' accumulation of oyster shells, arrow heads and other relics which have been dug up at this location lead us to believe that this was a favorite camping ground of the Indians.

dalism during the winter. 515 trees and 599 shrubs were pruned. Removed 100 dead trees and 87 large shrubs damaged by vandals. Cultivated 495 trees and 235 shrubs. Repaired binders and stakes on 125 trees. Cleaned egg-masses from 82 trees. The large hill in the north end of the park, at the intersection of Amsterdam Avenue and Morningside Drive, was in such bad condition that it was necessary to dig up the whole area, fill in the erosion, grade, and plant 12 trees, 331 shrubs and 850 vines on the slopes. The whole area was heavily fertilized and mulched with manure to protect it for the winter.

COLONIAL PARK.

This park suffers a great deal from vandalism, although most of the plots are fenced. Due to this fact, it was necessary to prune 251 trees and 147 large shrubs, and to remove 10 trees. Egg-masses were cleaned from 181 trees. 451 trees and 415 shrubs were cultivated. The stakes and binders on 45 trees were repaired.

MOUNT MORRIS PARK.

All the trees and shrubs in this park were cultivated and sprayed. 97 trees and 900 shrubs were pruned. Egg-masses were cleaned from 165 trees. A general rehabilitation of this park is needed.

HIGHBRIDGE PARK.

95 trees and damaged shrubs were pruned. Removed 14 trees which had been blown down. 65 large trees affected with scale insects were sprayed. All hanging limbs were removed from the trees.

TOMPKINS SQUARE PARK.

All trees and shrubs in this park were sprayed, cultivated, and mulched with manure in the fall. 359 trees were pruned. 36 small dead trees were removed. Egg-masses were removed from 100 trees. The binders and stakes on 117 trees were repaired. New stakes were put on 115 trees. 4 perennial flower beds were cultivated and weeded.

ISHAM NURSERY.

Transplanted 83 trees to check growth. Transplanted 73 trees to Riverside Park.

J. HOOD WRIGHT PARK.

This park has been recently acquired by the City and there is much work to be done. We were only able to do what was most important, such as pruning the dead and dangerous limbs from 12 trees, and tree surgery to save 6 trees. All trees were sprayed.

INWOOD HILL PARK.

This park is still in the natural state of wild growth. There are a great

many tulip trees and sassafras trees, which have sprung from seeds from the older trees. At the southeast side of this park is the largest tree on Manhattan Island, a tulip tree, known as the Hendrik Hudson Tree. The only work that was done in this park was cultivating, pruning, and spraying this tree.

CARE OF TREES, ON CITY STREETS.

2,939 trees were pruned of dead wood and interfering branches. 673 trees were cleaned of egg-masses. 478 dead and dangerous trees were removed. 132 trees were planted on parkways and on streets adjacent to parks. 3,497 trees were cultivated and watered during the summer. 635 trees were mulched in the fall with decomposed stable manure.

INSPECTIONS.

Investigation was made of 1,163 requests from citizens, corporations, builders, etc., for attention to trees abutting on their property.

Examinations were made of 1,386 trees and shrubs on city streets and in parks which had been injured or destroyed through carelessness on the part of those erecting buildings or driving vehicles. Proper charges were filed through official channels and damages assessed for recovery or replacement.

1,163 trees were inspected for repair, trimming, spraying, removal on account of disease, unsightliness, etc.

The following herbaceous plants were grown in 79th Street Nursery and Greenhouses in Central Park and planted in the following parks:

	<i>Number of Plants</i>
Central Park—English Ivy plants	3,000
Lonicera Halleana	710
Polygonum	1,220
Park Avenue Plots—Polygonum and Begonia	1,400
Morningside Park—Lonicera and Polygonum	570
City Hall Park—English Ivy plants	1,350
Carl Schurz Park—Begonias	200
Battery Park—Calliopsis and Marigold	460
Total planted	8,910

Perennials grown during the year in 79th Street Nursery in Central Park:

	<i>Number of Plants</i>
Alyssum Saxatalis	500
Aqualegia	250
Arabis	250
Cerastium Tomentosum	250
Chrysanthemums	1,000
Hardy Pea	750
Honeysuckle (Lonicera Halleana)	1,800
English Ivy	7,500
English Ivy Cuttings	5,000

Plumbago	500
Phlox Subulato	500
Polygonum vines	1,000
Privet—Ligustrum Ovalifolium	700
Sedum Acra	500
Sedum Siboldi	500
Sedum Spectabilis	500
Total	21,500

A list of stock grown in Greenhouses and in cold frames and still on hand in Isham Park:

	<i>Number of Plants</i>
English Ivy	6,000
Honeysuckle	3,000
Polygonum	1,500
Boston Ivy	800
Enonymons	600
Aralia	600
Pachysandra	2,000
Myrtle	2,000
Myrtle	2,000
Pachysandra	1,000
English Ivy	1,500
Aralia	500
Honeysuckle	1,700
Enonymous	2,000
Total	25,200

BUREAU OF RECREATION.

PURPOSE.

The aim of the Bureau of Recreation, Department of Parks, is to provide wholesome recreation for the child, youth and adult. It is our motto that "every new playground means fewer street accidents, and less juvenile delinquency; better children and a better citizenship.

A special effort is made in all of our park playgrounds to conduct activities, tournaments and contests, so interesting to the child that he or she will prefer to play in the park playgrounds rather than on the streets. It is of interest to note that during the year 1929 there were fewer street accidents than during the year 1928. The work of the Bureau of Recreation and of our Playground Directors is largely responsible for this decrease in the number of street accidents.

Our public gymnasiums which have been conducted for a number of years past as places where the young people may take part in athletic games and gymnastic work, have been made real community centers. They are places where the young people have met and organized themselves into groups and clubs. This work has been both recreational and educational. The idea of the organization of mother's clubs is also being impressed upon our Playground Directors, and many of them have been very successful in organizing Mothers' clubs within their respective playgrounds.

It was our aim to cooperate with the various athletic leagues of the mercantile establishments, and from the records we find a greater interest on the part of young men and adults in recreational activities on Saturdays, Sundays and Holidays, between the hours of 5.30 and 8.30 P.M.

This Bureau has aimed to extend the use of its facilities, and permits were issued to some of the public schools to use our gymnasiums, when not in use by the general public. This was only done in those cases where there were no facilities for the physical instruction of the child in the school building.

Character building is a very important aim of the Bureau of Recreation. For the park playground, it can be said that it offers to the children of New York the priceless gift of a place to play where they can have fresh air, sunshine and outdoor exercise, of which they are sorely in need. The trees and lawns about some of our playgrounds and athletic fields have a peaceful and restful effect on the minds of the children and adults using them.

Opportunity is offered to the child to mingle in an animated, stimulating, miniature society, which presents many of the situations one encounters later in adult life. The playground develops the cooperator, the competitor, the rival, the leader, the follower, the friend. The game fosters loyalty to one's fellows, to one's team, and to one's playground. It accustoms one to obey the captain and to work for the good of the whole rather than one's self. It develops facility in concerted action. This is a quickening of sense perceptions and the child not only learns to be alert, but he learns the value of alertness and inhibition.

In being required to abide by the rules of the game under circumstances which sorely try the temper, one acquires self-control. In short, it can be said that the children of New York City are better mentally, morally and physically as a result of attending our park playgrounds.

The well known psychologist, E. D. Angell, well describes the value of play when he says, "Play is an education and it is an education that gives to the young pupil strength, health, alertness, aggressiveness, sympathy, friendship and courage, and better than all, it paves the way for a deeper morality that would come in no other way."

FACILITIES.

The Bureau of Recreation has under its supervision 58 park playgrounds and 9 public gymnasiums open the year round. There are 30 tennis courts in Central Park, with field house, lockers and showers. There are 12 tennis courts at Ft. Washington Park; 4 recreation piers; 16 athletic fields; 28 baseball diamonds. 58 park playgrounds are under supervision from June 1st to October 15th. 26 park playgrounds are supervised the year

round, together with 9 public gymnasiums. The recreation piers are open from June 1st to October 15th.

ACTIVITIES AND PROGRAM OF WORK.

The program of recreational activities conducted during the year 1929 was as follows: baseball, basketball, soccer football, tennis, handball, volley ball, swimming, skating, hockey, captain ball, punch ball, athletic meets, swimming meets, tournaments, club work, social gatherings, moving pictures, concerts, celebration of July Fourth, and other holidays, excursions, boat rides, roller skating contests, marble shooting contests, coasting, ice-skating, winter sports carnival, exhibitions by experts in sport lines, baseball league for men, cooperation with all recreational agencies, and cooperation with Mayor's Committee on Municipal Athletic Activities.

PLAYGROUND ORGANIZATION.

Club organization and the cooperation of adults and the various social agencies were some of the principles followed out in the organization of the individual playgrounds. As far as possible, the plan of self government was worked out in all of our playgrounds. The children were invited to join sanitary and health squads, the captains of which were called "Health Commissioners." A monitorial system also proved very popular and relieved a great deal of the strain of constant supervision on the part of the playground director. After consultation with the Assistant Supervisors and Field Staff it was decided that each Playground Director should make out a definite program which could be followed throughout the season. Each Director was required to make provision in his program for the following activities:

BOYS' ACTIVITIES.

BASEBALL—INTER-PLAYGROUND TOURNAMENT AND INTRA-PLAYGROUND LEAGUES.

This league organized within each playground proved most successful and popular with the smaller boys. Each playground was represented by at least eight teams.

BASKETBALL AND RELATED GAMES.

Overhead Pass—Combination—Pass Ball—Three, Two-One, etc.

ATHLETICS.

Two athletic events were held each day. The children were given points and prizes were awarded to those having the highest number of points at the end of the season.

NOVELTY EVENTS.

Elephant Walk—Penny Placing—Nose and Ear Tag—Chicken Fight—Blind Boxing—Hand Wrestling, etc.

QUIET GAMES.

Checker Games proved most popular and quiet games are now a part of the program of all outdoor playgrounds.

PLAYGROUND EQUIPMENT.

Gymnasium Work—Slides—Swings—Jungle Gym, See-saws.

SOCCER AND ASSOCIATION FOOTBALL.

GIRLS' ACTIVITIES.

DANCING—National and Folk.

QUIET GAMES—Checkers—Dominoes—Parchesi.

STORY TELLING.

HANDICRAFT.

PLAYGROUND EQUIPMENT.

ATHLETICS.

In the matter of athletics for girls, it was agreed that those athletic activities which prepare for life by developing the girl mentally, morally and physically are best. Girls should have good lungs, a good digestion and a good heart, and activities for girls were selected which were interesting and which would produce results. Leadership, courage, self-reliance, good judgment and will power were aims in girls' athletics as well as the athletic activities for the boys. Some of the athletic activities for the girls were: All-up Relay, Pass Ball Relay, Short Dashes, Basketball Throw for Distance, Relay Races, Punch Ball, etc.

PLAYGROUND EQUIPMENT FOR GIRLS.

Swings, Slides, Bagatelle Board, Balancing Beam, Rope Skipping, Club Work.

KINDERGARTEN CHILDREN.

Free Play, Swings, Hammocks, Marching, Quiet Games, Blocks, Scrap Books, Kindergarten Games, Singing Games, Story Handiwork.

GYMNASIUM ORGANIZATION.

Our gymnasiums might more fittingly be called "Community Centers" of the Department of Parks. Not only do the young men and women take part in athletics, tournaments and contests, but also conduct meetings and social activities. There were demonstrations of gymnastics and community center work in all of the gymnasiums last year. No effort was made on the part of the Gymnasium Directors to produce prodigies of strength or to induce men to perform difficult feats, but an effort was made to organize the boys and young men using the gymnasiums into clubs, to interest them in

different forms of athletics and gymnastics and to give to each individual using the gymnasium an opportunity to obtain a harmonious development.

The creed of our gymnasiums was that each person using them should be trust-worthy, loyal, helpful, friendly, courteous, respectful, cheerful, brave and clean of mind and body. These were the laws of conduct and they were insisted upon by all directors. An effort was made to accommodate not only neighborhood clubs and individuals, but also all individuals and industrial groups employed in the neighborhood of the gymnasium.

The activities in the gymnasiums included: Basketball, volley ball, boxing, wrestling, track athletics, dancing, heavy and light apparatus work, club meetings, etc. Emphasis was placed on informal work and although no experiment was carried out the director believed that harmonious development could just as well be obtained through informal as formal work. Tournaments and point contests were held at different times during the year to discover the best basketball teams and the best athletes. The locations of our gymnasiums follows:

East 54th Street, near First Avenue.
West 28th Street, near Ninth Avenue.
West 59th Street, near Tenth Avenue.
Carmine Street, near Clarkson Street.
Cherry and Oliver Streets.
134th Street, near Lenox Avenue.
Hamilton Fish—Houston and Pitt Streets.
John Jay—77th Street and East River.
Rutger Place, near Jefferson Street.

PLAYGROUND TOURNAMENTS AND CONTESTS.

BASEBALL.

Baseball, our national game, was more popular than ever before with the boys of the park playgrounds. Each playground organized its own baseball league and league games were held every afternoon at 3 P. M. Club organization was necessary and emphasis was placed on loyalty to the team and playground. A loyal following was always found cheering their teams to victory. A round robin inter-playground baseball tournament was also organized for boys 5' 2" in height. Hundreds of children often traveled with their teams and evidence of friendly rivalry and good sportsmanship were always apparent. The boys were taught to fight hard to the end of each game and many victories were won in the 9th inning. PLAYGROUND LAWN, Central Park, won the title of Manhattan Champions with HAMILTON FISH, second, and QUEENSBORO, third.

BASKETBALL.

The skill and accuracy required in basketball appeals not only to the large boy but also to the small boy. Wherever possible basketball leagues

were organized within the playground and a definite schedule was posted. An inter-playground tournament was organized for boys 5' 2" in height.

HANDBALL.

Handball is becoming more and more popular every day. Here the emphasis is placed on intra-playground tournaments, inasmuch as, it was impossible to arrange an inter-playground tournament because many of the playgrounds were not equipped with handball courts. Wherever possible, however, the large stone pavilions in our parks were used for this purpose. It is hoped that during the coming year it will be possible to have additional courts constructed in all of our playgrounds.

MARBLE SHOOTING CONTESTS.

Marble shooting reached the peak of its popularity with the boys of the park playgrounds last year. Contests were held weekly in all park playgrounds and a championship was planned to bring out the best marble-shooters of New York City. This took place at Heckscher Playground, Central Park. Gerald Slattery, thirteen, of 1484 Amsterdam Avenue from Jasper Oval won the championship for the Borough of Manhattan. The championship of the Greater City was held at City Hall Park on June 7th with the following results:

First—Jack Meshirer, 46 Robinson Street, Flushing—Age, 13 years.

Second—Saul Soperstein, 827 East Trinity Avenue, Bronx—Age, 11 years.

Third—Vincent Randazzo, 189 Ashford Street, Brooklyn—Age, 11 years.

TENNIS.

During the year 1929 the tennis courts of Central Park and Ft. Washington Park were resurfaced and laid out according to regulation. Heretofore, there was not sufficient area between the base line of the tennis courts and the tennis backstop. All of the courts were rearranged so that they faced north and south and have a distance of 20 feet between the base line and the tennis backstop, as per regulations. In order to accomplish this it was necessary for this Department to obtain an appropriation of \$20,000.

The fee for the tennis permit was increased from \$1.00 to \$2.00 and the argument that the tennis court was a revenue producing agency, was adduced in requesting an appropriation for a field house with lockers and showers. This appropriation was received, and a splendid field house with lockers and showers is now under course of construction.

Tournaments were arranged for men, women, boys and girls, singles and doubles and the entries totalled about 1,500. The winners of the tournament were as follows:

CENTRAL PARK TENNIS CHAMPIONSHIP.

MEN—SINGLES

- 1st —Raymond Stone—29 West 46th Street.
- 2nd—Gabriel Lyons—105 Haven Avenue.

MEN—DOUBLES

- 1st —Raymond Stone—29 West 46th Street.
- 1st —Jack Gleiber—929 45th Street, Brooklyn.
- 2nd—Moe Redner, 1857 Walton Avenue, Bronx.
- 2nd—Gabriel Lyons—105 Haven Avenue.

WOMEN—SINGLES

- 1st —Helen Germain—309 East 71st Street.
- 2nd—Mrs. A. Shapiro—235 East 25th Street.

ATHLETIC MEETS.

Athletic meets were held regularly in all park playgrounds. Points were given for first, second and third places and these were tallied at the end of the season to discover the best athletes of the playground. The program of a weekly athletic meet included such events as potato races, relay races, 50-yard dashes, obstacle races, flag races, sack races, roller skating contests, running broad jump, high jump, etc.

MINIATURE SAIL BOAT CONTEST.

For the fifth consecutive year a Sail Boat Contest was conducted for the children who sail their boats at the Conservatory Lake, Central Park, on Saturday, May 25th. There was an attendance of 2,000 spectators and about 325 entries. The boys and girls from Park Avenue rubbed elbows with the boy and girl from the East Side. Equal excitement made them brothers and sisters as they hopped around praying that their boats would catch an advantageous wind or avoid collision. The winners were as follows:

15-inch Class—

- 1. John Koppunek, 1341 York Avenue.
- 2. John Adamsick, 315 East 71th Street.
- 3. Karl Kultti, 411 West 128th Street.
- 4. Martin J. Duddy, 282 Manhattan Avenue.

25-inch Class—

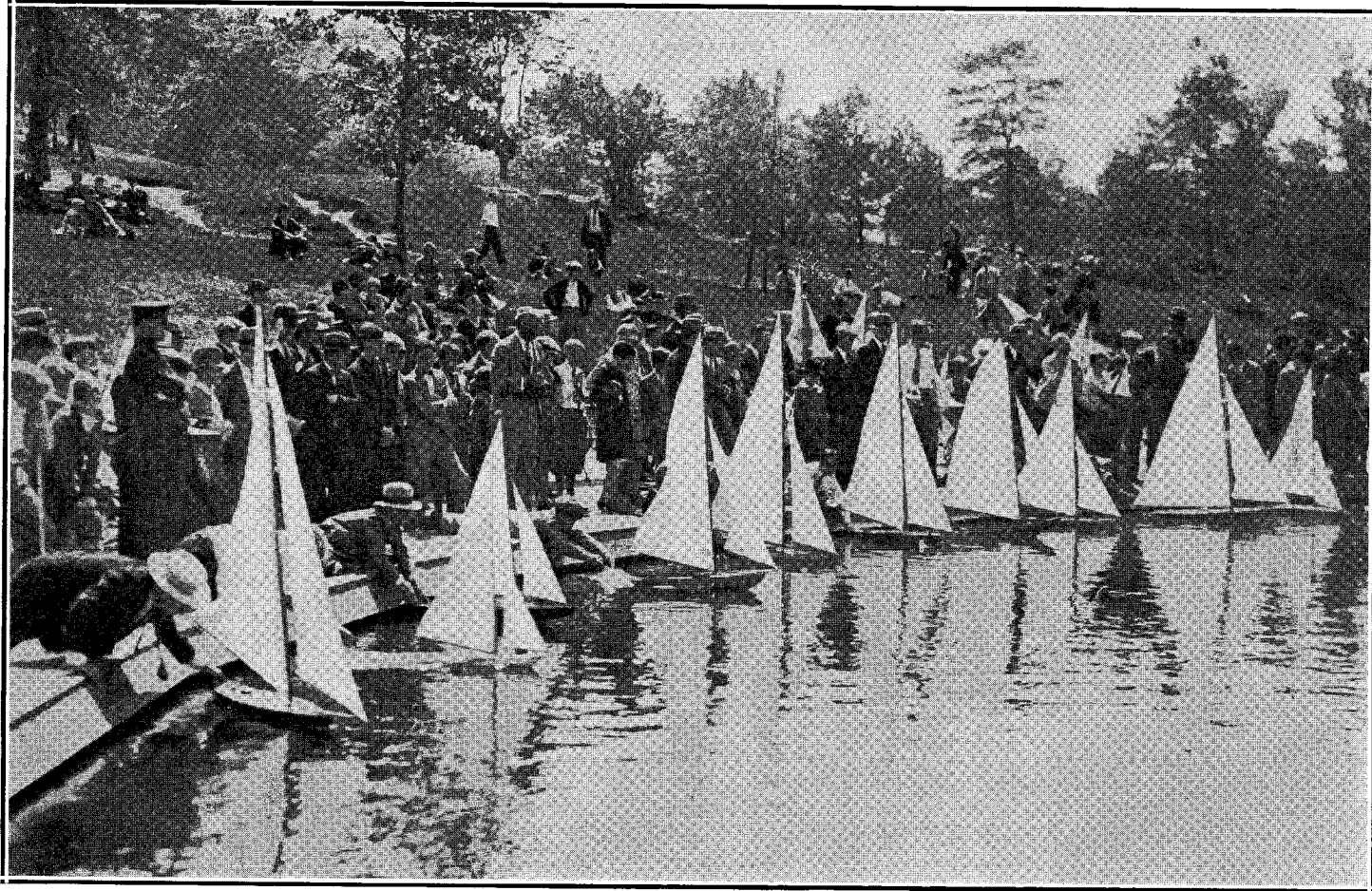
- 1. Robert Conrad, 120 Floral Boulevard, Floral Park, L. I.
- 2. Richard Speier, 131 East 83rd Street.
- 3. Arthur Weyhe, 794 Lexington Avenue.
- 4. Carl Letsch, 225 Central Park West.

40-inch Class—

- 1. James Mackey, 1281 3rd Avenue.
- 2. Lewis Shanes, 205 East 66th Street.
- 3. Emil Nebel, 144 East 22nd Street.

55-inch Class—

- 1. William Mackey, 1281 3rd Avenue.
- 2. Vincent Rutherford, 235 East 74th Street.
- 3. Alex. Barker, 120 East 79th Street.



SAIL BOAT CONTEST—CONSERVATORY LAKE—CENTRAL PARK

70-inch Class—

1. B. Fuhrman, 410 East 148th Street.
2. Ed. Olsen, 326 East 65th Street.
3. Theodore Okelmann, 125 West 110th Street.
4. John Mackey, 1281 3rd Avenue.

Power Boats—

1. Michael Joseph, Jr., 285 Central Park West.
2. Fred Smith, Jr., 179 West 166th Street.
3. Sanford Granoqitz, 345 West 89th Street.
4. John Perrault, 503 East 78th Street.

Home Made Class—

1. Albert Heiter, 255 Nelson Avenue, Scarsdale.
2. John Mickvas, 332 East 73rd Street.
3. Nicholas Salzano, 1487 Park Avenue.
4. Gasbaro Vucas, 436 East 76th Street.

During the year 1929 a wall was constructed around the Conservatory Lake together with a walk. This walk will serve the purpose of keeping the children from falling into the lake and will also aid in conducting the Skating Championships held during the winter months. This wall was so constructed that the children can kneel on the wall and push their boats from the edge of the Conservatory Lake.

CANOE REGATTA.

The Canoe Championship was held on the 72nd Street Lake, Central Park, July 4th, and was witnessed by approximately 5,000 persons. Co-operation was received from the Canoe Association in conducting this championship. Prizes were awarded to the winners who were as follows:

EVENT	WON BY	CLUB
One Man Single Junior Cruising	Ollie Schmidt	Black Hawk
One Man Single Senior Racing	Bill Gaehler	Pendleton
One Man Double Junior Cruising	Ellsworth Kunz	Knickerbocker
One Man Double Racing Senior	Ernest Reidel	Pendleton
Fours Singles Junior	.....	Island
Tandem Singles Senior Racing	Kalden—Knesnik	Yonkers
Tandem Singles Junior Cruising	Lindahl—Cacelin	Inwood
Tandem Double Senior Racing	Robinson—Reidel	Pendleton
Fours Singles Senior	.....	Pendleton
Tandem Doubles Junior Cruising	Kunz—Pihl	Knickerbocker
One Lady Double	Helen Hahn	Island
Fours Doubles Senior	.....	Island
NOVELTIES.		
Tail End Race	Al. Baxter	Pendleton
Gunwale and Overboard	Harold Bruns	Yonkers
Rescue Race	W. Bruns—K. Bruns	Yonkers
Tilting	W. Krauer—J. Krayner	Island

The Pendleton Canoe Club won the Lipton Point Trophy. This is the second time they have won; if won the third time the cup will go to this club permanently.

Among the Clubs competing in the Canoe Regatta were:

Yonkers Canoe Club, Foot of Point Street, Yonkers, N. Y.	Pendleton Canoe Club of N. J., River Road, Edgewater, N. J.
Black Hawk Canoe Club, c/o Ossining Boat & Canoe Club, Ossining, N. Y.	Tuscarora Canoe Club, Belleville, N. J.
Island Canoe Club, City Island-on-the-Sound, City Island, N. Y.	Von Dohln's Boat Club, River Road, Edgewater, N. J.
Knickerbocker Canoe Club, 183rd Street & Hudson River, New York City.	Interstate Boat Club, Dyckman Street & North River, New York City.
Inwood Canoe Club, 204th Street & Hudson River, New York City.	De Georges Boat House, 204th Street & North River, New York City.
Pendleton Canoe Club of N. Y., c/o Union Boat Club, Speedway, New York City.	Sheepshead Bay Canoe Club, 1636 Emmons Avenue, Brooklyn, N. Y.
Indian Head Canoe Club, Riverdale-on-the-Hudson, N. Y.	Metropolitan Canoe Club, 260 E. Northern Boulevard, Corona, L. I.
Wanda Canoe Club, River Road, Edgewater, N. J.	West's Boat House, 204th Street & Hudson River, New York City.

MINIATURE AIRPLANE CONTEST.

A Miniature Airplane Contest was held during August at the Sheep Meadow, Central Park, and was attended by approximately 2,000 persons. As a result of the interest and enthusiasm displayed the Playground Directors decided to conduct miniature airplane contests in all of our park playgrounds.

CHILDREN'S DAY—JUNE 18TH.

In order to focus attention on the needs of the children and the play facilities provided by the City of New York, it was decided that a Children's Day should be held on June 18th. This date was selected because within a week or two the children would be released from school without restraint of any kind. Exercises were held in all of the park playgrounds and the cooperation of civic organizations and mothers' clubs was sought. A speech on the value of play for the children and the importance of adequate playgrounds was delivered over the radio—Station W.E.A.F. Toys and hair ribbons were received from the merchant associations and these were presented to the winners of the playground tournaments and contests.

EXCURSIONS.

It has been the policy of the Bureau of Recreation, Department of Parks to encourage the Playground Directors to take the children on excursions at least once a month. It is most beneficial to the children from a

health, social and civic standpoint to take them away from their immediate environment on an outing to some one of the distant parks or beaches.

The Playground Directors at Carmansville and Columbus Park Playgrounds were very successful in organizing outings and excursions for the children of their playgrounds. No child was permitted to go on an outing unless he or she obtained the written permission of his or her parents. Additional supervision was provided by having some of the mothers of the children attend the outings.

MOTHERS CLUBS AND PARENT ORGANIZATIONS.

For a number of years past the importance of the organization of Mothers Clubs and Parent Organizations has been stressed and in 1929 greater emphasis was placed on the value of organizing such clubs. Carmansville and Columbus Park Playgrounds were very successful in this matter and held special meetings for the Mothers of the respective neighborhoods from time to time. At the Recreation Conference held at the Hotel Commodore in October, 1929, the organizing of Mothers Clubs was again stressed, and it is quite possible that the year 1930 will see a Mothers Club attached to each one of the park playgrounds.

PARENTS EXHIBIT—GRAND CENTRAL PALACE.

At the request of the United Parents Association that the Bureau of Recreation, Department of Parks, takes part in its exhibit at the Grand Central Palace, permission was obtained to install a booth for the Department of Parks. In this booth there was exhibited a model of a Children's Farm School, various playground exhibits, and an exhibit of the work of the Forestry Bureau, together with a stereomograph machine showing slides of the park playground activities, in motion.

Many complimentary remarks were passed concerning the exhibit of the Department of Parks, and a study of the various booths will bring out the fact that the Department of Parks had a very fine exhibit of its work which was of educational and civic value.

MAY DAY—CENTRAL PARK.

Each year the Department of Health requests the cooperation of the Bureau of Recreation, Department of Parks, in the matter of arranging a May Day celebration in Central Park. May 1st was designated last year and this Department took part in the celebration at the Mall, to the extent of having the children dance various folk dances. A basket of flowers was presented to His Honor the Mayor by the child selected by the Health Commissioner as "Queen of May." A program of folk dances was also given under the auspices of the Public Schools Athletic League.

JULY FOURTH CELEBRATION.

For the past nineteen years the Bureau of Recreation, Department of Parks, has made arrangements for the celebration of July Fourth in the



TRICYCLE RACE—TOMPKINS SQUARE PARK PLAYGROUND

five boroughs and an appropriation amounting to \$6,500 is provided in the budget for this celebration. The medals, badges, flags and bunting, printing of entry blanks and programs, arrangements for officials and the acceptance of entries are all arranged by the Bureau of Recreation, Department of Parks, Manhattan.

Athletic meets and band concerts are held throughout the Greater City. The total number competing last year was 30,000. Approximately 1,600 officials volunteered their services and the various athletic clubs cooperated to make the celebration a success. Spirited competition featured all the meets and it can be said that the youngsters showed as much interest and enthusiasm in winning their prizes as they did in the days of old when the day was celebrated with dangerous fireworks, resulting, too often, in loss of life and limb.

1,000 sets of prizes, three to a set, were offered in competition, making 3,000 individual prizes awarded for the athletes. These prizes were offered for athletic events, folk dancing, festivals and patriotic pageants which combined to provide the day's activities.

SWIMMING MEET—CENTRAL PARK.

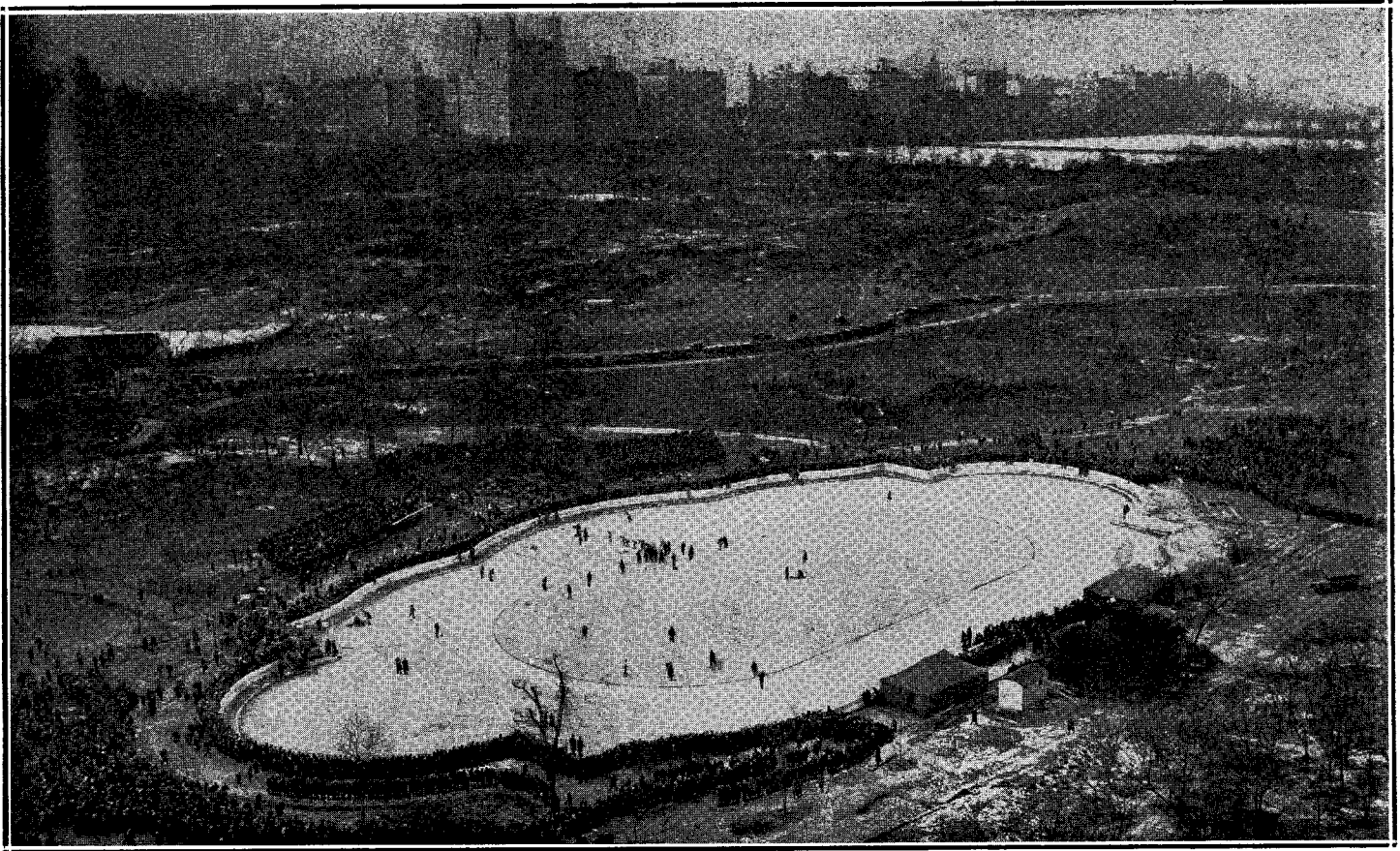
A swimming meet sanctioned by the Amateur Athletic Union and sponsored by the Daily News, was held at the large lake, 72nd Street, Central Park, on August 4th. This was the third year that this swimming meet was held. All arrangements and details were checked carefully by the Bureau of Recreation. The portion of the lake used was sterilized and every sanitary precaution was taken before the meet was conducted. Inspections and a test of the water were made by the Department of Health.

JACKS CONTEST.

The girls of our park playgrounds have shown a great interest in our tournaments and activities. Each year they look forward to any special activities that are held and one of the contests in which they are particularly interested is that of Jacks.

From a health standpoint it is advisable to provide passive forms of recreation for the children. Not even a healthy child can continue in active forms of play for a long period of time on a hot summer's day. For a weak child quiet games have great value and are very beneficial. The skill shown by some of the children in picking up jacks is really remarkable.

At Carmansville Playground the mothers took a particular interest in the contest, so much so, that the Playground Director arranged a special contest for them.



SILVER SKATES DERBY—CONSERVATORY LAKE—CENTRAL PARK

The rules of the contest and the winner of the final contest follows:

RULES FOR THE JACK CONTEST.

1. Games to be played with ten jacks and medium sized rubber ball.
2. One scramble,—Must be made with one hand.
3. Touch jack is a miss.
4. Top jack is a miss.
5. One jack on top of two jacks is a miss.
6. Drop jack is a miss.
7. Jack left in hand after making a scramble is a miss.
8. Ball must be caught in one hand.
9. Ball may not be caught against any part of person.
10. Jack is not "hang jack" when it has two feet on table.

Anna Bowman of Hamilton Place Park Playground won the Championship for the Borough of Manhattan.

ROLLER SKATING CONTEST.

One of the most important Fall activities for children is roller skating. Roller Skating Contests were held by all the Playground Directors. Arrangements were made with the Captains of the local Police Precincts to have streets closed for the respective contests wherever there was not sufficient area in the park playgrounds.

The final contest was held on the Mall, Central Park. The Inter-Borough Finals were held at Hamilton Fish Park. The area used for the Inter-Borough Finals is the same area as is used during the summer months as a wading pool. When wading pools are constructed we aim to so construct them that they can be used as wading pools during the summer months, and as roller skating and ice skating areas during the Fall and Winter months; also as an area where group games and active games can be played.

The winners of the Roller Skating Contest for the Borough of Manhattan were as follows:

- 5'3"—BOYS —1st—Paul Goodwin, 2 East 70th Street—HECKSCHER.
2nd—Stanley Jabo, 141 East Broadway—SEWARD.
GIRLS—1st—Lillian Santomassimo, 429 E. 9th Street—TOMPKINS SQ.
2nd—Olga Alexander, 632 East 17th Street—E. 17TH ST.
4'8"—BOYS —1st—Victor Goscinsky, 544 W. 49th St.—DE WITT CLINTON.
2nd—Theo. Perdue, 253 Clinton Street—SEWARD.
GIRLS—1st—Eleanor O'Brien, 330 East 37th Street—ST. GABRIELS.
2nd—Gloria Silver, 683 Water Street—SEWARD.

Prizes were donated by the New York World—gold, silver and bronze medals for each event. The Samuel Winslow Skate Manfg. Co. donated roller skates.

Pushmobile and Scooter Races were held in conjunction with the Roller Skating Contest and the children were encouraged to make home-made scooters.

SOCCER FOOTBALL.

Soccer Football is becoming more popular every year as a Fall and Winter sport. A study of our statistics will show that there is a greater number of permits issued to soccer teams each year. In each of our park playgrounds an Intra-Playground Soccer Tournament is held. Permission is also given to the Public Schools Athletic League to conduct some of the soccer games in our public parks.

SILVER SKATES DERBY AND METROPOLITAN SKATING CHAMPIONSHIPS.

Eight years ago the first Winter Sports Carnival was held in Central Park at 59th Street Lake. It created such interest, and attracted such a large number of spectators that the following year it was deemed advisable to hold this Carnival on the Conservatory Lake, 72nd Street, Central Park. There was a larger attendance on the Conservatory Lake, totaling approximately 20,000 persons. Considerable publicity was given to the Skating Carnival in Central Park. The following year the New York Daily News realizing the success of the skating under the direction of the Department of Parks requested permission to hold the Silver Skates Derby on the Conservatory Lake. Heretofore, the Silver Skates Derby had been conducted at the City College Stadium.

Since 1925 this Department has been conducting the Silver Skates Derby with the cooperation of the various skating clubs and associations.

The Metropolitan Skating Championships are held for all skaters within the Metropolitan District, and the best skaters competed, because of the honor of winning the Metropolitan Championships. The prizes each year have been donated by Mr. Franklin Simon, through the cooperation of the Fifth Avenue Association.

COASTING.

The hills that were officially designated for coasting in Central Park during 1929 were as follows:

- Pigeon Hill, 74th Street and Conservatory Lake.
- 84th Street and 5th Avenue, North of Museum of Art.
- 99th Street and 5th Avenue.
- Eagle Hill, 79th Street and West Drive, west of path.
- 71st Street and West Drive.

From my observation, however, children have coasted on every available hill in Central Park. Many of these are very dangerous, owing to the number of trees within the coasting area, and also due to the amount of new trees planted by the Forestry Bureau. For this reason, it is most advisable, in 1930 and thereafter, to provide large coasting hills on the Sheep Meadow and North Meadow, and any other available areas.

The Laughing Loon Manufacturing Company of Canada makes a special slide for just such purposes, but I can see no reason why these large slides cannot be built by the mechanics of this Department. A request, therefore, will be made for the erection of six large slides in September, 1930, for use during the winter months.

ICE SKATING IN THE SMALLER PARKS.

This Department made a special effort this year to have ice skating in some of our small parks with the following success:

Heckscher	38 days skating
Hamilton Fish	16 days skating
Tompkins Square	12 days skating
St. Gabriel's	11 days skating

The foreman at Heckscher Playground and the Playground Directors are deserving of special commendation, because of their efforts to have the area sprayed for ice skating. In the future we hope to have ice skating at the following playgrounds:

Heckscher—Central Park	Thos. Jefferson
Hamilton Fish	St. Gabriel's
Tompkins Square	Tennis Courts, Central Park
Seward	Tennis Courts, Ft. Washington Park
Highbridge—169th Street	

SPECIAL ACTIVITIES.

One of the important functions of the Bureau of Recreation, Department of Parks, is to arrange and organize special activities as part of its recreational program. These activities not only receive the interest of the participants, but also are enjoyed by many spectators.

The interest of the newspapers becomes greater from year to year, and some are most anxious to cooperate with the Department in donating medals. This generosity has been gratefully accepted, as there is no special appropriation for this purpose in our budget.

Occasionally a philanthropic citizen or organization will donate prizes. For the Winter Sports Carnival and Metropolitan Championships the prizes were donated by the Fifth Avenue Association.

The following are the special activities and the respective dates on which the activities were held:

Silver Skates Derby—Conservatory Lake	Jan. 14th
Middle Atlantic Skating Championships—59th Street Lake, Central Park	Feb. 2nd
Parents' Association Exhibit	Feb. 23rd
Municipal Basketball Tournament	Feb. 23rd to Mar. 30th
Bird Day—Riverside Drive	Apr. 12th
Pet Show—Columbus Park	Apr. 14th
Marble Shooting Contest	May 6th to June 7th
Sail Boat Contest—Conservatory Lake	May 25th

Safe and Sane July Fourth Celebration	July 4th
Canoe Regatta—72nd Street Lake—Central Park	July 4th
Tennis Tournament (Central Park)	July 6th
Baseball Tournament	Aug. 2nd to Sept. 6th
Swimming Meet	Aug. 4th
Jack Contest	Aug. 5th to Aug. 22nd
Boys' Day (Polo Grounds)	Aug. 22nd
Airplane Contest—Sheep Meadow	Aug. 28th
Water Carnival—Tompkins Square	Aug. 31st
Recreation Conference—Hotel Commodore	Oct. 1, 2, 3
Roller Skating Contest	Oct. 5th to Oct. 31st
Roller Skating Contest (Inter-Boro)—Hamilton Fish	Nov. 23rd
Playground Circus—Heckscher	Oct. 2nd
Children's Holiday Festival—Palm Garden	Dec. 26th

RECREATIONAL PROGRAM.

ATHLETICS (Boys and Girls)

Active Games
Gymnastic Games
Swimming
Skating
Track and Field
Boxing
Wrestling
Coasting
Folk Dancing
Aesthetic Dancing
National Dancing

LEAGUES AND TOURNAMENTS

Baseball (small boys)
Baseball (men)
Basketball
Volley Ball
Handball
Tennis
Horse-shoe Pitching
Marble Shooting
Jacks Contests
Soccer
Checkers

QUIET GAMES AND ACTIVITIES

Checkers
Dominoes
Parchesi
Bagatelle Board
Story Telling
Handicraft
Kindergarten Activities
Swings
See-saws
Slides

FESTIVALS AND SPECIAL OCCASIONS

Concerts
Motion Pictures
Pageants
Exhibitions of Athletic Skill
Festivals
Parties
Bazaars
May Day on the Green
Get-together for Municipal Employees

CLUBS

Athletic
Civic
Camp-Fire
Community Scouts
Dramatic
Glee
Handicraft
Junior Police
Military
Philanthropic
Orchestral
Social
Mothers

ENTERTAINMENTS

Ice Skating Carnivals
Roller Skating Carnivals
Athletic Meets
July 4th Celebrations
Christmas Festivals
Baby Parades
Safety Day Exercises
Open Meetings
Water Carnivals

EQUIPMENT.

PLAYGROUNDS—Swings, Slides, See-saws, Jungle-gym, Balancing Beams, Hammocks, Blocks, and small units of play equipment.
GYMNASIUMS—All units of light and heavy apparatus.

PROGRAM OF ACTIVITIES FOR THE FOUR SEASONS OF THE YEAR.

SPRING—Marble Shooting—Top Spinning Contests—Outdoor Athletic Meets—Group Games—Folk Dancing—Volley Ball Tournaments—May Day on the Green—Safety Day Parades—Boy Scout Activities—May Parties—Baseball—Children's Pet Shows—Arbor Day Exercises—Kite Flying Contests—Model Aeroplane Contests—Miniature Boat Sailing Contests—Use of Units of Play Equipment—Bird House Building—Croquet—Field Hockey—Bowling on the Green—Roque.

SUMMER—Swimming—Wading Pool Activities—Baseball Tournaments—Tennis and Tennis Tournaments—Horse-shoe Pitching Contests—Jacks Contests for Girls—Checker Tournaments—Quiet Games (such as lottos, parchesi, dominoes, handicraft)—July 4th Celebration—Moving Pictures—Pageants—Parties—Festivals—Use of Units of Play Equipment—Story Telling—Aesthetic and National Dances—Group Games—Concerts—Punch Ball Tournaments—Paddle Tennis Tournaments—Baby Parades—Water Carnivals—Canoe Championships—Outings and Excursions.

FALL—AUTUMN—Wrestling—Roller Skating—Handball Tournaments—Basketball—Outdoor Basketball Tournaments—Boxing—Use of Play Equipment—Stunts—Mass Athletics—Soccer and Soccer Tournaments—Association—Block Parties—Scooter, Pushmobile and Bicycle Races—Group Games—Dramatic Clubs—Glee Clubs—Civic Clubs—Apparatus Work—Field Hockey for Girls.

WINTER—Christmas Festival—Christmas Tree for Birds—Coasting—Ice Slides—Snow Fort Building—Snow Baseball—Snow Dodge Ball—Bombardments—Doll Making—Group Games Involving the Large Muscle Groups—Ice Hockey—Skiing—Get Together Parties for Municipal Employees—The Program Indoors Consists of Athletic Meets—Basketball Tournaments—Social Dancing—Debates—Use of Indoor Swimming Pools—Calisthenics and Apparatus Work—Exhibitions and Demonstrations of Gymnastic Work and Athletic Skill.

It is the duty of Playground Directors to organize as many clubs as possible. Clubs train for good citizenship, respect for authority, obedience to law and loyalty. Loyalty to club name, ritual and tradition develops the background of loyalty to City, State and Nation.

Some of the clubs organized are—Athletic, Civic, Camp Fire, Community, Scouts, Community Chorus, Dramatic, Glee Club, Junior Police, Literary, Military, Orchestral, Philanthropic, Social.

The above program takes into consideration all age groups, seasonal activities and the popularity of same, also ethnical tastes.

MOTION PICTURES.

Motion Pictures may well be considered a means of education as well as recreation. It has been the desire, therefore, of the Bureau of Recreation to obtain the cooperation of the various Settlements and organizations interested in motion pictures in our smaller parks and playgrounds. No appropriation for this purpose was received from the Board of Estimate and Apportionment.

Motion Picture permits were issued to the Hudson Guild, 436 West 27th Street, The Bureau of Health Education, Department of Health, 505 Pearl Street, and the New York Edison Company (Educational Extension Bureau), 393 Seventh Avenue, to conduct these pictures which were shown throughout the Borough of Manhattan, and supervised by the Field Staff of this Bureau.

In many instances band concerts were scheduled in connection with the exhibitions of motion pictures and furnished good wholesome and educational entertainment to thousands of spectators, young and old, throughout the summer season.

COOPERATION WITH OUTSIDE AGENCIES.

Some of the organizations that this Department has been able to assist and cooperate with are:

Public School Athletic League	Metropolitan Skating Ass'n
Amateur Athletic Union	United Neighborhood Houses
City Recreation Committee	Community Councils
Women's City Club	Russell Sage Foundation
Playground and Recreation Ass'n of America	Park Ass'n of the City of New York
Boy Scouts of America	Boys' Federation
Leading Newspapers and Publications	Public—Private—Parochial Schools
Mayor's Committee on Municipal Athletic Activities	

RECREATION CONFERENCE.

For the first time in the history of the recreation movement in New York City a Conference was organized, which took place at the Hotel Commodore, October 1, 2 and 3.

The purpose of the Conference was to acquaint the general public with the work being done by the Department of Parks, and also the Board of Education, and to arouse greater interest and enthusiasm on the part of the general public and interested agencies in recreation, and to bring out the sociological value of playgrounds and community centers.

There were demonstrations which took place in all of our park playgrounds. A tour of the playgrounds was made by interested citizens, and favorable comments were made on the improvements that have taken place within the past few years. On October 1st and 2nd discussions and conferences at the Hotel Commodore took place. The Conference concluded with a meeting and dinner at the Hotel Commodore on October 3rd.

Comptroller Berry, the respective Park Commissioners and Mr. August Heckscher were among the distinguished guests.

CHILDREN'S HOLIDAY FESTIVAL.

Owing to the number of poor children in New York City and the fact that the Playground Directors report each year that there are any number of cases that are not reached by any charitable agency or settlement, the Children's Holiday Festival was planned to be held at Palm Garden on December 26th. An entertainment was given by the talented children of the respective park playgrounds.

The merchants throughout the City donated sufficient fruit, crackers and candy so that each child was well provided for. The program of this festival which was attended by 1,500 children follows:

ALL CHILDREN FROM PARK PLAYGROUNDS ASSEMBLE.

Selections "Christmas Carols"

PLAYGROUND FROLIC

Freaks	Mt. Morris
Song	Tompkins Square
Mother Goose Characters	Thomas Jefferson
Tap Dance	Carmansville
Balloon Dance	Hamilton Fish and Seward
Song	Tompkins Square
Bear Dance	Columbus
Stunts	Tompkins Square and Hamilton Fish
Irish Clog	East 54th Street Gym
Yankee Hobby Horses	St. Catherine's
Tableaux	Morningside
Toe Dance	Hamilton Fish
Song	Chelsea
Clog Dance	Chelsea
Song and Dance	Columbus
Spanish Dance	Colonial
Acrobatic Dance	St. Gabriel's
Tumblers	Hamilton Fish
Toe Dance Group	Hamilton Fish
Lofty Acrobatics	Hamilton Fish
Song	Tompkins Square
Blind Boxing	East 54th Street Gym
Irish Jig	East 54th Street Gym

Parade of the Frolickers.

Distribution of Candy, Fruit and Crackers—By *Santa Claus*

RETURN OF CHILDREN TO PARK PLAYGROUNDS.

PARK PLAYGROUNDS, GYMNASIUMS AND RECREATION PIERS. LOCATIONS—AREA AND ATTENDANCE DURING JANUARY, JULY AND AUGUST—1929

Playground	Acreage	January	July	August
Battery—State St. and Battery Place	0.850	.....	19,550	23,950
*Carl Schurz—86th St. and East River	1.2	8,275	.....	.....
*Carmansville—162nd St. and Amsterdam Ave.	0.574	12,975	30,775	45,550
*Chelsea—28th St. and 9th Ave.	3.103	9,100	31,550	40,125
*Coleman—Market and Cherry Sts.	0.392	3,345	28,400	32,295
*Colonial—150th St. and Bradhurst Ave.	1.11	.....	9,175	12,415
*Columbus—Baxter and Worth Sts.	1.5	9,025	20,535	19,150
*Corlears Hook—Jackson St.	0.550	6,050	25,725	27,540
*De Witt Clinton—54th St. and 11th Ave.	8.455	4,240	43,520	51,685
*Downing Street—near Bleecker St.	0.173	3,995	18,925	29,240
*East 17th St.—near East River	1.037	3,180	6,350	10,960
*Hamilton Fish—Houston & Pitt Sts.	3.160	38,750	51,650	71,550
*Hamilton Place—140th St. and Hamilton Pl. .	0.811	5,950	15,850	29,475
*Heckscher—64th St., Central Park	7.	65,725	434,600	623,000
Highbridge—169th St. and Amsterdam Ave. .	1.	.....	.....	.....
Highbridge—177th St. and Amsterdam Ave. .	0.5	.....	4,600	8,000
Highbridge—189th St. and Amsterdam Ave. .	0.25	.....	1,480	7,270
*Hudson—Hudson and Clarkson St.	1.665	39,600	57,400	80,125

<i>Playground</i>	<i>Acreage</i>	<i>January</i>	<i>July</i>	<i>August</i>
Isham—At Seaman Ave.	0.333	.....	1,490	3,225
Jasper Oval—137th St. and Convent Ave. ...	4.379	.....	25,250	21,750
*John Jay—77th St. and East River	3.009	16,200	14,315	26,225
Morningside—114th St.	0.250	.....	1,500	2,570
Morningside—123rd St.	0.250	.....	3,050	14,935
*Mt. Morris—120th St. and Madison Ave.	1.1	.....	197,800	112,750
*Queensboro—59th St. and East River	1.329	2,725	6,500	25,700
Riverside—75th St. and Riverside Drive	0.2	.....	1,080	6,120
Riverside—96th St. and Riverside Drive	1.	.....	2,590	6,095
*St. Gabriel's—36th St. and 2nd Ave.	2.924	13,410	12,515	15,825
*St. Catherine's—67th St. and 1st Ave.	0.142	10,000	29,950	37,350
St. Nicholas—140th St. and St. Nicholas Ave. .	0.250	.....	17,675	14,165
*Seward—Canal and Jefferson Sts.	3.301	17,650	43,240	48,165
*Thos. Jefferson—114th St. and East River ..	4.120	3,345	61,400	50,175
*Tompkins Square—10th St. and Ave. A	1.250	48,800	161,600	272,700
*Watergate—134th St. and Amsterdam Ave. ...	1.670	5,625	20,400	29,585
*West 59th Street—near 10th Ave.	0.579	2,145	11,325	11,545
*Yorkville—101st St. near 2nd Ave.	0.846	11,600	19,600	12,200
Rutgers Slip—at South St. ....	.....	.....	1,775	17,575
Jay Hood Wright—175th St. and Ft. Wash- ington Ave. ....	.....	.....	14,650	20,750
Market and Henry Streets	0.122	.....	4,800	8,125
Payson Ave. and Dyckman St.	0.3	.....	1,700	3,875
Barrow Street Pier ....	.....	.....	3,710	5,100
East 3rd Street Pier ....	.....	.....	29,630	80,000
Market Street Pier ....	.....	.....	10,865	38,080
West 199th Street ....	.....	.....	7,800	23,120
Tennis Courts—Central Park—96th St. ....	.....	.....	8,930	50,785
Tennis Courts—173rd and Ft. Washington Pk. .	.....	.....	10,090	14,675
<i>Gymnasiums</i>		<i>January</i>	<i>July</i>	<i>August</i>
*Carmin Street ....	.....	4,270	.....	.....
*Cherry and Oliver Streets ....	.....	7,585	1,855	.....
*East 54th Street ....	.....	5,345	5,105	8,920
*Hamilton Fish ....	.....	8,835	1,475	.....
*Rutgers Place ....	.....	4,050	2,205	.....
*West 28th Street ....	.....	4,975	750	.....
*West 134th Street ....	.....	4,500	3,835	.....
*West 59th Street ....	.....	1,170	.....	.....
*John Jay ....	.....	1,700	.....	.....

* Designates centers open the year round.

(Approximate Playground Area—Borough of Manhattan—120 Acres.)

PERMITS ISSUED DURING YEAR—1929.

Base Ball	2,878
Basketball	720
Football	18
Soccer Ball	282
†Tennis	3,707
Sail Boat	105
May Parties and Picnics	58
Hockey	60
Field Day	16
Croquet	35
Airopplane	7
Recreational	38
Miscellaneous	14
Total	7,938

† A charge of \$2.00 for each permit collected. All other permits free.

It may be noted that there was a decrease in the number of tennis permits issued during 1929. In 1928 9,055 tennis permits were issued, while in 1929 3,707 were issued. This decrease may be due to the following reasons:

1. Our tennis courts were not opened until July 15th, due to reconstruction of same.
2. That some of the permit holders of 1928 may have had two permits, but since there was an increase in price to \$2.00 each they decided to only obtain one permit.

The amount received for tennis permits was \$19,055 in 1928 and \$7,414 in 1929.

The number of permits issued for the other activities compares favorably with the number issued for the previous year. There was a marked increase in soccer permits, as soccer is becoming more popular each year.

EQUIPMENT ERECTED IN 1929.

Swings—Baby	Tennis Posts
Carl Schurz	173d Street and Ft. Washington Park
Swings—Large	Basketball Standards
Carl Schurz	Seward
See-Saw Outfits	Jungle Gym
Corlears Hook	John Jay
Hamilton Fish	Baseball Backstops
Carl Schurz	Heckscher
Straight Slides	John Jay
John Jay	Thomas Jefferson
Carl Schurz	Awnings for Baby Swings
De Witt Clinton	Heckscher
West 59th Street	Awnings for Pavillions
Colonial	Heckscher
Yorkville	
Hamilton Fish	
Corlears Hook	

CALCIUM CHLORIDE APPLIED TO ELIMINATE DUST.

Heckscher Playground	65th Street—Central Park
De Witt Clinton	54th Street and 11th Avenue
St. Catherine's	67th Street and First Avenue
Mt. Morris	120th Street and Madison Avenue
Watergate	134th Street and Amsterdam Avenue
Jasper Oval	137th Street and Convent Avenue
Seward	Canal and Jefferson Streets
Hudson	Clarkson and Hudson Streets
Hamilton Fish	Houston and Pitt Streets
Columbus	Baxter and Worth Streets
Coleman	Cherry and Market Streets

For the first time in the history of the park playgrounds Calcium Chloride was used in 1926, to help eliminate the dust condition. This proved very satisfactory, and additional applications have been made each year.

During the year 1929 Calcium Chloride was applied to the above mentioned playgrounds with very satisfactory results, so much so, that it is the

intention of the Bureau of Recreation to request funds each year for the application of this chemical on all our playgrounds.

From my observation the best results are obtained by making two applications—one in the early part of May and the other about the beginning of August.

JUVENILE DELINQUENCY FOR THE YEAR 1929.

County—		
New York	2,640	534
Kings	2,342	282
Bronx	994	105
Queens	790	120
Richmond	187	30
Total	6,953	1,071

WAYS AND MEANS OF ELIMINATING ACCIDENTS WITHIN THE PLAYGROUNDS.

A daily inspection of all units of equipment is made by the Playground Director. An inspection is made by one of the Master Mechanics and a Playground Director four times throughout the year.

We have found that many of our accidents occur from the large swing frames, and we have experimented with placing a fence in front of same. This has proven very satisfactory and should be extended to the other playgrounds. All new swing frames will not be twelve feet high as those ordered many years ago, but will be not more than ten feet in height.

REPORT OF THE NUMBER OF CHILDREN KILLED AND INJURED IN VEHICULAR HIGHWAY ACCIDENTS DURING THE YEAR 1929.

	Manhattan		Bronx		Brooklyn		Queens		Richmond		Total	
	K.	Inj.	K.	Inj.	K.	Inj.	K.	Inj.	K.	Inj.	K.	Inj.
January	6	176	2	65	7	164	0	46	0	6	15	457
February	6	218	2	101	7	193	2	60	1	19	18	591
March	10	345	3	138	7	414	2	122	3	26	25	1,045
April	8	448	3	161	16	459	5	98	0	16	32	1,182
May	18	563	6	211	12	606	4	151	2	24	42	1,555
June	10	588	3	245	14	593	6	169	0	30	33	1,625
July	6	533	5	206	11	594	3	174	2	29	27	1,536
August	15	438	4	188	14	578	10	150	2	34	45	1,388
September ...	6	481	1	163	16	549	5	155	1	29	29	1,377
October	12	386	7	155	16	424	2	149	0	26	37	1,140
November ...	3	321	4	130	6	387	2	126	1	12	16	976
December ...	8	233	6	147	2	235	4	81	1	20	21	716
Total	108	4,730	46	1,910	128	5,196	45	1,481	13	271	340	13,588

TERMINOLOGY

A set of definitions were forwarded to this Department by the City Recreation Committee pertaining to recreational work. These definitions did not meet with the approval of the Executive Staff of the Bureau of Recre-

ation, and the following were adopted by the Bureau of Recreation, Department of Parks:

PLAY SPACE—Any area designated for play purposes but unsupervised.

PLAYGROUND—A play space with or without apparatus, or equipment and habitually used under some form of direction for childrens play.

SUMMER VACATION PLAYGROUND—A play space utilized during the summer vacation period as a playground.

BACK YARD PLAYGROUND—A playground at the rear of one or more buildings.

MOTHERS AND BABIES PLAYGROUND—A playground designated for the use of mothers accompanied by babies and children up to the age of 6 years.

PLAY FIELD—A large open play space used for sports, games, May parties, June walks, festivals, pageants, and Mass athletics.

ATHLETIC FIELD—A field or play space with facilities and equipment for formal, informal, individual and mass athletics.

PLAY SCHOOL—A project conducted all day during the summer vacation in settlements, public schools or other buildings for registered groups of children of elementary school age. The program includes cultural, manual and recreational activities, lunch and rest periods, with a year-round follow-up in health and parental education.

AFTER SCHOOL ATHLETIC CENTER—A play space in a school building or yard designated for supervised athletics, folk dancing, and active games for pupils after school hours.

CHILDREN'S CENTER—Any suitable place with a building and adequate play yard used for children's recreation and health work.

RECREATION PIER—The supper deck of a pier designated for recreational use by children and adults.

SCHOOL GARDEN—Also called School Farms and Children's School Gardens. A garden in a park or on school or private property, planted and cared for by children as part of their recreational and educational activities.

COMMUNITY CENTER—Any suitable place used by children and adults for educational, recreational and health work.

APPROPRIATIONS ALLOWED FOR IMPROVEMENTS—1929.

*CHELSEA—Resurfacing Playground	\$2,500
FT. WASHINGTON PARK—Resurfacing tennis courts and installing water pipe line	1,500
*JASPER OVAL—Chain link fence	4,500
DE WITT CLINTON—Construction of pergola	30,000
MT. MORRIS—Construction of playground in park and other improvements..	110,000
HIGHBRIDGE—Construction and improvement of playgrounds	40,000
FT. WASHINGTON PARK—Construction of new field house for tennis courts	25,000
JASPER OVAL—Resurfacing and construction of field house	45,500
HUDSON PARK—Resurfacing playground, new fences, new handball court and a backboard	10,000
THOMAS JEFFERSON—Construction of new field house, concrete floor under swings and new sheds over swings	15,000
HAMILTON FISH—Resurfacing playground, concrete floor under swings.....	5,300
TOMPKINS SQUARE—Resurfacing playground and concrete floor under seesaws	3,000
TOMPKINS SQUARE—Enlarging boys' playground	30,000
ST. NICHOLAS PARK TERRACE (128th to 130th Streets)—Construction of playground	40,000
DE WITT CLINTON—Construction of running track and walk on 11th Avenue	8,000
ST. NICHOLAS PLAYGROUND (140th Street)—Construction of small field house	8,000
189TH STREET AND AMSTERDAM AVENUE—Construction of field house.....	8,000
WADING POOLS—	
De Witt Clinton	
Hudson	
Seward	
Corlears Hook	
St. Gabriel's	

Yorkville	
Thomas Jefferson	
St. Nicholas	5,000
*Fencing and otherwise improving small parks	31,200

* Designates work completed.

APPROPRIATIONS ALLOWED FOR IMPROVEMENTS—1928 COMPLETED—1929

*HAMILTON FISH—Chain link fence	\$8,500
*RUTGERS SLIP—Fence	3,500
*TENNIS COURTS—CENTRAL—Resurfacing	20,000
*HUDSON—Chain link fence	3,231
*CARL SCHURZ—Enlargement and improvement of playground area, fencing and construction of shelter house	15,144.32
*TENNIS COURTS—CENTRAL—Construction of combined tennis house and Comfort Station	84,000

* Designates work completed.

SUGGESTED SITES FOR NEW PLAYGROUNDS.

To date, negotiations have been made for the purchase of sites in the following localities:

Thompson Street
115th Street (East)
Cherry Street

LOCATIONS RECOMMENDED

Allen Street and Bowery.
Cornelia Street, between Bleecker Street and 6th Avenue Extension.
Catherine Street, between Monroe and Madison Streets.
East 4th Street, between Avenues B and C.
Eldridge Street, between Houston and Stanton Streets.
Lewis Street, between East Houston and Stanton Streets.
Monroe Street, between Catherine and Market Streets.
Monroe Street, between Jefferson and Rutger Streets.
Monroe Street, between Clinton and Jefferson Streets.
Orchard Street, from East Houston Street, south.
Oak Street, between Oliver and Catherine Streets.
Rivington Street, between Sheriff and Willett Streets.
Rivington Street, between Columbia and Sheriff Streets.
Rivington Street, between Norfolk and Essex Streets.
Area bounded by Rivington Street and East 3rd Street.
Sullivan Street, between Prince and Spring Streets.
Area bounded by East 19th Street, 3rd Avenue, East 32nd Street, and East River.
Area bounded by West 45th Street, 9th Avenue, 49th Street, 9th and 10th Avenues.
80th Street, between 1st and 2nd Avenues.
88th Street, between 2nd and 3rd Avenues.
102nd-103rd-104th Streets, between Park and Madison Avenues.
106th Street, between Lexington and 3rd Avenues.
107-108th Streets, between 2nd and 3rd Avenues.
Area, 1st to 3rd Avenues, 109th-114th Streets.
Area, 1st to 3rd Avenues, 119th Street-124th Streets
Area, Lenox and Fifth Avenue—133rd-140th Streets
115th Street, between Lexington and 5th Avenues.
114th Street, between Lexington and 5th Avenues.
115th Street, between Madison and 5th Avenues.
114th Street, between Madison and 5th Avenues.
113th Street, between 5th and Lenox Avenues.
134th Street, between Lenox and 7th Avenues.
132nd Street, between Lenox and 5th Avenues.
133rd Street, between Lenox and 5th Avenues.

RECOMMENDATIONS.

1. It is recommended that additional park playgrounds be provided in the Borough of Manhattan, wherever available, in suitable localities, as previously mentioned in this report.

2. This Department advocates the adoption of the program for the extension of parks and parkways as advanced by the Park Commissioners of the five Boroughs of Greater New York at the Metropolitan Conference on Parks. Both Ward's and Randall's Island would fulfill a park and recreational need for the people of Manhattan and Bronx and the acquisition of the same would be most valuable for many reasons. It would be necessary, of course, for the City or State to provide for the removal of the inmates and patients of the various City and State Institutions on these Islands.

3. That in the event that any additional commercial piers are constructed by the Department of Docks, provision be made on the upper deck or on a special floor for a public gymnasium and also a playground for the young people of the neighborhood.

4. That additional tennis courts be provided in Ft. Washington Park. This will be necessary since the new Interstate Bridge, when constructed will take away nine of our tennis courts. There is sufficient area in this location for the construction of additional courts.

5. All of our playgrounds should have some type of wading pool. Where there is not adequate playing space showers in the area about 20 feet in diameter would provide a make-shift wading pool. For many reasons it is far more desirable to have showers in our playgrounds and parks, than in our city streets.

6. Shade is a very important consideration in the park playgrounds where there are not a sufficient number of trees. Awnings should be placed over all swing frames wherever possible. It is expected that by the year 1930 at least two playgrounds will be equipped with awnings over all swing structures.

7. Practically all of the Playground Directors of the Bureau of Recreation (permanently employed) have been in the City Service for the past fifteen years and have rendered excellent service. They have only received two general increases in all of that period for small amounts. These Playground Directors are well educated and trained, and should receive the maximum salary as scheduled by the Park Board, namely—\$2,150 per annum. Had these same people left the playground system and entered the Board of Education, which they could have done many years ago, they would now be receiving a salary of at least \$3,000. Playground Directors recently assigned realize this fact and do not intend to make this their life work. It

is only by giving a Playground Director an adequate salary that good work can be obtained and good Playground Directors kept in the service.

8. Resurfacing—The Bureau of Recreation received an appropriation for resurfacing the following playgrounds during 1929:

Chelsea.
Ft. Washington Park (Tennis).
Jasper Oval.
Hudson.
Hamilton Fish.
Tompkins Square.

A request to resurface the other playgrounds will be made when the request for the next budget is submitted.

9. Outdoor Swimming Pools—An outdoor swimming pool could be located to advantage at Ft. Washington Park and also at the Reservoir, 175th Street and Amsterdam Avenue. It is possible that this property (Reservoir) will be turned over to this Department if a request were made and funds appropriated for developing the same.

10. Additional Playground Directors—A study of the attendance records of the Bureau of Recreation, Department of Parks will bring out the fact that our Playground Directors are supervising, directing and teaching games and play activities to at least 250 children per day. This is entirely too large a number for any one person to take charge of. Wherever the attendance warrants the same additional Playground Directors should be assigned.

In addition to the present force this Department should have under its supervision 30 more per annum employees, Female, and 6 more Male. If we do not have adequate supervision there is always a question of serious accidents in the playgrounds.

11. Milk Booths—An experiment was made at Heckscher Playground, Central Park, and 43,942 glasses of milk were sold. There was a deficit of \$654.97, and this item was paid by Mr. August Heckscher.

12. Prizes—There is nothing that stimulates interest and enthusiasm in playground activities like the winning of a prize. This Department receives no appropriation for the purpose of providing prizes for the winners of our respective tournaments, and it is necessary for us to communicate with philanthropists and newspapers in order to obtain them. This method does not always prove satisfactory, and it would be a much better plan to have an appropriation provided for this purpose, to purchase medals and prizes for the winners of all tournaments and contests.

13. Band Concerts—Band concerts on the Market Street Pier proved very satisfactory. In connection with them, dances were given in cooperation with the neighborhood agencies and these proved very satisfactory. It is recommended that a larger appropriation for band concerts be obtained for the smaller parks and recreation piers.

14. Camp—Bear Mountain—For the past three years this Department has been requesting an appropriation for the operation of a camp at Bear Mountain. No appropriation has as yet been received. This camp should be operated and controlled by the Department of Parks. Supervision would be provided and the camp run on a cost basis. Each child would only have to pay the amount necessary for food and transportation, which would cost between \$4.00 and \$5.00 per week.

Westchester County Park Commission has been conducting camps for the past six years and municipal camps have been conducted in 84 cities of the United States.

15. Additional Public Gymnasiums—So great is the demand for the use of our public gymnasiums, not only by the general public but also by the boys and girls of the public and parochial schools that we are unable to comply with all requests. It is most advisable to request an appropriation for additional public gymnasiums. These could be erected in the following localities.

126th to 135th Streets and Amsterdam Avenue.
150th to 175th Streets and Amsterdam Avenue.
88th to 110th Streets—East Side.

The public gymnasium which is under the jurisdiction of the Department of Parks at Houston and Pitt Streets (Hamilton Fish) is constantly under repair. It was erected almost 30 years ago. It would be most advisable to tear down this old structure and erect a modern gymnasium with swimming pool and showers combined. The cost of this would be approximately \$85,000. This locality is quite congested and we are unable to properly conduct our recreational activities in the existing building.

At the West 59th Street gymnasium it would be advisable to enlarge the same and raise the roof of the building. At the present time the ceiling is only twelve feet high.

The vicinity of Thomas Jefferson Park is in a thickly congested neighborhood and the Alderman of this District called at this office and made an appeal for a gymnasium and swimming pool to be erected in the vicinity of Thomas Jefferson Park.

16. Field Houses—It is advisable to erect some sort of shelter or field house in those playgrounds where the same has not been provided. Every year it is necessary for the Playground Directors to endeavor to obtain cooperation from some Settlement or other agency in the neighborhood in order that they may change into their playground uniform.

17. Office Force—It is necessary for the proper administration of the Bureau of Recreation to assign two Playground Directors to the office. These Playground Directors are assigned for the issuance of recreational

permits, to check up on work orders, field staff reports, attendance records, attendance, activities, semi-monthly time sheets, answering telephones and other general office routine.

It would be much more advisable to have two clerks assigned to the Bureau of Recreation so that the Playground Directors could be assigned for duty in the playgrounds.

18. Lighting of Playgrounds at Night—All large play area should be brilliantly lighted at night, and used for adult recreation. The tennis courts in Central Park should also be lighted at night, thus affording maximum use of all recreation facilities.

ADMINISTRATION

SUPERVISOR OF RECREATION.

1

ASSISTANT SUPERVISOR—Male
1

ASSISTANT SUPERVISOR—Female
1

FIELD STAFF—Male
3

FIELD STAFF—Female
2

PLAYGROUND DIRECTOR—Male
24

PLAYGROUND DIRECTOR—Female
26

Temporary—Summer Season
70

Temporary—Summer Season
66

PLAYGROUND DIRECTOR—Male

PLAYGROUND DIRECTOR—Female

FINANCIAL STATEMENT

Salaries—Permanent Force	\$84,036.33
Salaries—Temporary Force	41,260.00
Recreational Equipment	10,000.00
Recreational Supplies	500.00
Medical Supplies	125.00
Total Appropriation	<u>\$135,921.33</u>

BUREAU OF MAINTENANCE.

During the year 1929 the Department maintained within the parks forty-nine comfort stations, 37 single tour and 12 double tour, for men; also forty-five comfort stations for women, 30 single tour and 15 double tour.

Single tour comfort stations operate from 9 A.M. to 5 P.M. or 10 A.M. to 6 P.M. Double tour comfort stations operate from 7 A.M. to 2 P.M. and from 2 P.M. to 10 P.M.

There are also three bath houses for the use of men and women in the following parks:

De Witt Clinton Park.
Thomas Jefferson Park.
Hamilton Fish Park.

The bath house in Seward Park is being torn down and a new one is to be erected in its place.

The working force under the Bureau of Maintenance and operation for the year 1929 consisted of the following :

- 1 Forester.
- 1 Arboriculturist.
- 1 General Foreman.
- 3 District Foremen.
- 22 Park Foremen.
- 400 Laborers all year 'round (516 summer months).
- 4 Stablemen.
- 1 Supervisor of Attendants (Female).
- 71 Attendants (Female)
- 1 Caretaker (Female).
- 1 Caretaker (Male).
- 8 Watchmen.
- 21 Drivers.
- 23 Auto Enginemen.
- 1 Foreman of Greenhouses (Gardener).
- 20 Gardeners assigned to Greenhouses.
- 36 Gardeners assigned to Forestry Bureau.
- 46 Climbers and Pruners.
- 1 Foreman of Mechanics.
- 10 Keepers.
- 68 Mechanics.
- 1 Machinist.
- 1 Supervisor of Attendants (Male).
- 25 Attendants (Male).
- 1 Curator.

CARE OF LAWNS.

The proper maintenance of lawns, in view of the poor soil generally existing in Manhattan park areas and the constant crowded use of park territory, is one of the most difficult problems of the administration. Carelessness and lack of respect for public property on the part of those using the parks as well as insufficient police protection have caused our lawns to deteriorate to such an extent that a thorough re-seeding has become necessary throughout the parks in the Borough of Manhattan.

The areas were spread with stable manure which was ploughed in the autumn and seeded with corn, peas and rye, which in turn were ploughed in the spring. The ground was then harrowed and raked; lime used where required and seed sown.

To allow the newly seeded areas an opportunity to become thoroughly established, temporary six foot wire mesh fences were erected around such areas.

All small lawn areas where the grass was weak and had deteriorated, were spaded and seeded during the spring. Lawns in comparatively good condition were maintained and improved by putting on top dressing and well rotted stable manure in the early winter, or were treated with commercial fertilizer in the spring.

2,948 tons of rotted stable manure were distributed on the lawns and plantations throughout the parks in the Borough of Manhattan.

The stable manure from the department stables at 97th Street Yard, Central Park, and from a large riding academy and the armories in the vicinity of Central Park, was used as a fertilizer.

The manure is stored in two concrete manure pits each of 4,250 and 4,400 cubic yard capacity.

During the dry weather of July, August and September, it was necessary to water the lawns in numerous parks.

SOD.

75,000 square feet of sod was purchased and laid along the borders, drives and lawns throughout Central Park, Riverside Drive, City Hall Park, Bryant Park, and other places requiring it.

DRIVES AND BRIDLE PATHS.

The bridle path and drives in Central Park and Riverside Drive were spiked up with the road roller and re-surfaced with fresh gravel. At many points where the constant addition of new gravel from year to year had raised the grade of the path, the surplus gravel was removed and the surface brought to the proper grade. During the summer the Bridle Path has been sprinkled daily and a layer of calcium chloride was used in order to keep the dust down. These drives have been kept in as good condition as possible with the small amount of money available for laborers and repairs.

FLOWER SHOW.

There was the usual floral exhibition at the Central Park Greenhouse during the winter season, which was open to the public daily from 10 A.M. to 4 P.M. At Easter time the annual show of azalias, tulips, hyacinths, lilies and other seasonable flowers was given. The annual chrysanthemum show was held in November. Palms and plants were sent for the Exhibition held at the Grand Central Palace from February 23, to March 1st, 1929.

Flower beds were maintained during the season in Central Park, City Hall Park, Madison Square Park, Stuyvesant Park, Riverside Park, Mt. Morris Park and Park Avenue plots. The largest of these displays were in City Hall Park and at the Plaza, 59th Street and Fifth Avenue.

SKATING AND BAND CONCERTS.

The skating houses erected at the large lake at 72nd Street and the Harlem Mere, 110th Street, Central Park, for use during the season of 1929, will be removed in the spring, stored for the summer and re-erected at the beginning of the winter.

On January 14, 1929, a Skating Carnival took place at the Conservatory Lake. Double band stands were erected and benches and chairs furnished

for the occasion. Platforms, stands and poles were erected for the championship.

Platforms and diving platforms were erected and compartments built for dressing purposes for use at the Water Carnival held August 4, 1929, and removed after the celebration.

CONCERT SEASON.

During the concert season, temporary band stands and seats and the necessary electric lighting were installed in those parks which are not provided with permanent stands. A large number of festivals and celebrations were held in the parks during the year which necessitated extra work for the labor and mechanical forces.

Canoe races were held July 4, 1929, at the large lake, 72nd Street, Central Park.

GARAGE.

The equipment for maintaining the work throughout the Department of Parks in the Borough of Manhattan consists of:

- 1 $\frac{3}{4}$ ton truck.
- 4 $1\frac{1}{2}$ ton truck.
- 1 2 ton truck.
- 4 3 ton truck.
- 3 Fords—business body.

MECHANICAL FORCE.

The mechanical force of the Department was employed largely in small job repairs necessary to keep the buildings, structures and equipment of the Department in good condition. Work Orders were issued covering the work to be done by the mechanical force.

Playground structures and apparatus were kept in condition for use throughout the season and new supplies, jumping ropes, swings, etc., were made at the Department work shop for use in the playgrounds.

BUILDING REPAIRS.

Police Booth at 59th Street and Seventh Avenue repaired and painted.

Repairs were made to Bridge No. 13 opposite 62nd Street, Central Park.

The chain link fence surrounding plots around Arsenal Building was painted.

Iron steps leading to Arsenal Police Station and iron steps leading to the main entrance of Arsenal Building were also painted.

MENAGERIE.

Electrical blowers were installed for the purpose of disinfecting and ventilating the Lion House.

Interior and exterior of buildings repaired and painted.

The Seal Tank was enlarged by the Department force.

Runways were built for the purpose of cleaning out the lakes at 59th and 72nd Streets and 100th Street Pool.

Closet and shelves made for Auditor's office, Arsenal Building.

Rustic flower boxes made for the Commissioner's office.

Furniture repaired, painted and re-upholstered for the Ladies' Room, Arsenal Building.

Merry-go-rounds repaired and painted in Heckscher Playground.

Concrete curb was built at the south end of Wading Pool, Heckscher Playground.

Interior of men's comfort station at Heckscher playground repaired and painted.

Interior of women's comfort station, Heckscher Playground, repaired and painted.

Interior of Arsenal men's comfort station repaired and painted.

Interior and exterior of Sheep Meadow men's comfort station repaired and painted.

Gates were placed at the entrance to Indian Cave, Central Park.

Interior of Conservatory women's comfort station repaired and painted.

Parapet wall at 106th Street and East Drive repaired.

Interior of women's comfort station, 79th Street and Riverside Drive, repaired and painted.

102nd Street Riverside Drive—Retaining wall repaired and re-set; wall was sinking towards railroad track.

Jasper Oval Playground—Fence repaired and painted.

Watergate Playground—All units of equipment painted.

Carmansville Playground Field House—Interior painted and repaired.

Hamilton Place Playground—All units of equipment painted.

175th Street and Amsterdam Avenue—Playground House—Interior and exterior of building repaired and several rooms painted.

McNally Plaza—Plates placed on tree guard dedicated to the memory of Congressman Royal H. Weller, May 26, 1929.

Laurel Hill Terrace, 184th Street—Pier caps were placed on eight piers at stairway in order to secure lamp post.

Isham Park east of Inwood Hill Park—Laid approximately 60 feet of pipe so that this area would be properly drained. This was requested by the Consulting Engineer, Mr. Sielke.

J. Hood Wright Playground—All units of equipment were painted.

Riverside Drive, 177th Street—Stone wall on the northeast corner repaired and re-set.

Riverside Drive, 162nd Street—Stone wall and coping repaired and re-set.

Mt. Morris Park—Flagpole painted.

Thomas Jefferson—Girls' Playground—Interior of field house painted.

Yorkville Playground—Men's Comfort Station—Interior of boys' comfort station repaired and painted.

St. Catherine's Women's Comfort Station—Interior repaired and painted.

St. Catherine's Men's Comfort Station—Interior repaired and painted.

St. Gabriel's Field House—Interior repaired and painted.

St. Gabriel's—Men's Comfort Station—Interior repaired and painted.

St. Gabriel's Women's Comfort Station—Interior repaired and painted.

Madison Square, Broadway and 25th Street—Sidewalk around Worth Monument repaired and relaid.

Hudson Park—Men's Comfort Station—Exterior repaired and painted.

Hudson Park—Women's Comfort Station—Interior repaired and painted.

Hudson Park—Shelter House—Interior repaired and painted.

Washington Square—Foreman's Office—Interior and exterior repaired and painted.

Downing Street Playground—Field House—Interior repaired and painted.

Tompkins Square—Foreman's Office—Interior repaired and painted.

John J. Murphy Playground—Field House—Interior repaired and painted.

Seward Park—Schiff fountain was removed to shops as it was reported dangerous.

Seward Park—Men's Comfort Station—Interior and exterior repaired and painted, also shower room and corridor.

Seward Park—Foreman's Tool House—Interior painted.

City Hall Park—Brownstone tablet crated and taken to 97th Street Yard.

City Hall Park—Pennsylvania stone placed at base of flagpole, June 14, 1929.

City Hall Park—Tool House—Entrance changed so as to face Broadway side.

Battery Park—Women's Comfort Station—Interior repaired and painted.

Greenhouse Boiler Room and Growing House—Interior of boiler room painted and interior of Growing House repaired and painted.

86th Street Repair Shops—Office repaired and painted.

Spraying Machines Nos. 5 and 8 overhauled and painted.

Storeroom—Office repaired and painted.

City Hall Park—Frames were made to be used at the Marble Contest held June 7, 1929.

PLUMBING.

Necessary plumbing repairs were made to all men's and women's comfort stations, baths, field houses, etc., throughout the parks in the Borough of Manhattan.

STOVES.

Repairs were made to all stoves, stove pipes, boilers and heating apparatus throughout the parks.

DRINKING FOUNTAINS AND DISPLAY FOUNTAINS.

Repairs were made to all drinking fountains and display fountains as required throughout the various parks.

RUSTIC BENCHES AND ARBORS.

Repairs were made to rustic benches and arbors where required throughout the various parks.

BENCHES.

New benches were re-assembled and old benches were repaired and painted as required throughout the various parks.

FENCES.

The iron fences along the Broadway plots from 60th to 122nd Streets were repaired as required. Also along Park Avenue plots, 34th to 40th Streets, and from 59th to 96th Streets, also along Seventh Avenue plots, 110th to 153rd Streets, which require daily attention from the department iron workers as these fences are constantly being damaged by automobiles and horse-drawn vehicles.

Repairs were made from time to time to the pipe-rail fence, chain link fence and iron picket fence as required in the various parks.

BRIDGES.

Repairs were made to all bridges in Central Park, which are constantly being broken by automobiles.

WATER LINES.

Repairs were made to the old water supply lines and new lines were laid where required.

HALYARDS.

Halyards were replaced on flagpoles where required throughout the parks.

SIGNS.

Signs were re-lettered and painted and new signs made standard color as required throughout the parks.

PLAYGROUND APPARATUS.

Repairs were made to all playground apparatus and equipment throughout the various playgrounds in the parks.

WALKS.

Walks throughout the parks were repaired and re-laid.

POLICE BOOTHS.

Repairs were made to police booths as required.

LEADERS AND GUTTERS.

Repairs were made to leaders and gutters where required throughout the parks.

ELECTRIC SUPPLY.

Lighting fixtures were repaired and new ones installed where required throughout the buildings in the parks. All band stands where concerts were given were wired and light furnished also lighting for Christmas trees.

RADIATORS.

All radiators were repaired and overhauled as required throughout the buildings in the parks.

OFFICE EQUIPMENT.

Repairs were made to all office equipment as required.

ROLLING STOCK.

Repairs were made to all rolling stock as required.

HARNESS.

Repairs were made to all the harness as required.

STATUES AND MONUMENTS.

All statues were repaired and cleaned where necessary.

MARBLE PARTITIONS AND TILE.

Repairs were made to all marble partitions and tile as required.

RE-GLAZING.

Repairs were made to windows, catches and sash cords and replaced wherever necessary. Reglazing was also done where required.

BOILERS OF HEATING PLANTS.

All boilers and heating plants were overhauled and repaired as required throughout the year.

BASINS AND MANHOLES.

Drain basins and manholes were cleaned out and repaired as required.

RECREATION PIERS.

The Department maintained the following recreation piers during the summer time for a period of seventy days and the following force was required to operate them:

<i>Piers</i>	<i>Employees</i>
Barrow Street, } East Third Street, } Market Street, and } West 129th Street. }	12 Male Attendants. 6 Female Attendants. 1 Foreman.

With the small labor force employed we maintain 98,031 acres of lawns, clean and cut grass, also clean the comfort stations, tool houses, shelter houses, gymnasium buildings, and put the bridle paths in shape, also put up and take down the swings in the playgrounds each day.

During the year 1929 money was appropriated for the purpose of appointing 125 additional laborers.

During the summer months a considerable amount of calcium chloride was purchased and spread over the bridle paths and all the playgrounds, which disinfected the grounds and kept the dust down.

Besides the regular routine work the following special work was accomplished during the year:

Greenhouse—Excavated and laid 60 feet of drain pipe and installed 4 catch basins.

Isham Park—A new drain basin was installed, new walk laid and walls built.

96th St., Riverside Drive—Coping repaired and reset.

102nd St., Riverside Drive—Coping along railroad track repaired and reset.

115th St., Riverside Drive—Excavated and drain pipe put in along bridle path.

Washington Square Park—Concrete surface laid around display fountain.

Jumel Mansion—Walls repaired and re-papered and woodwork painted.

207th St., Inwood Hill Park—New 15" tile drain laid.

Central Park, Bridle Path—50 feet of drain pipe laid.
 Manhattan Square—175 feet of water pipe installed.
 Colonial Park—Comfort station at present under construction.
 J. Hood Wright Park—Three new drain basins installed.
 Highbridge Park, 184th Street—Concrete wall built.
 Riverside Drive, near Dyckman St.—Steps leading to boat house repaired.

J. Hood Wright Park—Brick stable demolished.

MENAGERIE.

The following presentations were made during the year.

4 Racoons.	2 Alligators.
11 Canaries.	2 Rhesus Monkeys.
1 Coyote.	3 Green Monkeys.
1 Elephant	1 Capuchin Monkey.
2 Macaws.	1 Java Monkey.
7 Parrots.	1 Bonnet Monkey.
1 Coate Mundi.	5 Monkeys.
1 Golden Eagle.	1 Mandrill Monk
4 Turtles.	1 Ground Hog.
1 Partridge.	1 Black Bear.
2 Marmosets.	3 Lionesses.
2 Parakeets.	1 Ring Neck Pheasant.
1 Possum.	2 Kinkajous.

The following is a list of sales during the year :

3 Lion Cubs.	1 Alligator.
1 Goat.	1 Zebu.
1 Hyena.	24 Sheep.
1 Red Deer.	1 Young Camel.
1 Dorset Ram.	9 Macaws.
9 Cockatoos.	2 Black Bears.
1 Red Deer.	

The following is a list of births during the year :

1 Red Deer.	1 Sea Lion.
1 Camel.	1 Bison.
1 Elk.	44 Lambs.
26 Ring Neck Pheasants.	4 Reeves Pheasants.
2 Golden Pheasants.	2 Silver Pheasants.
4 Turkins.	

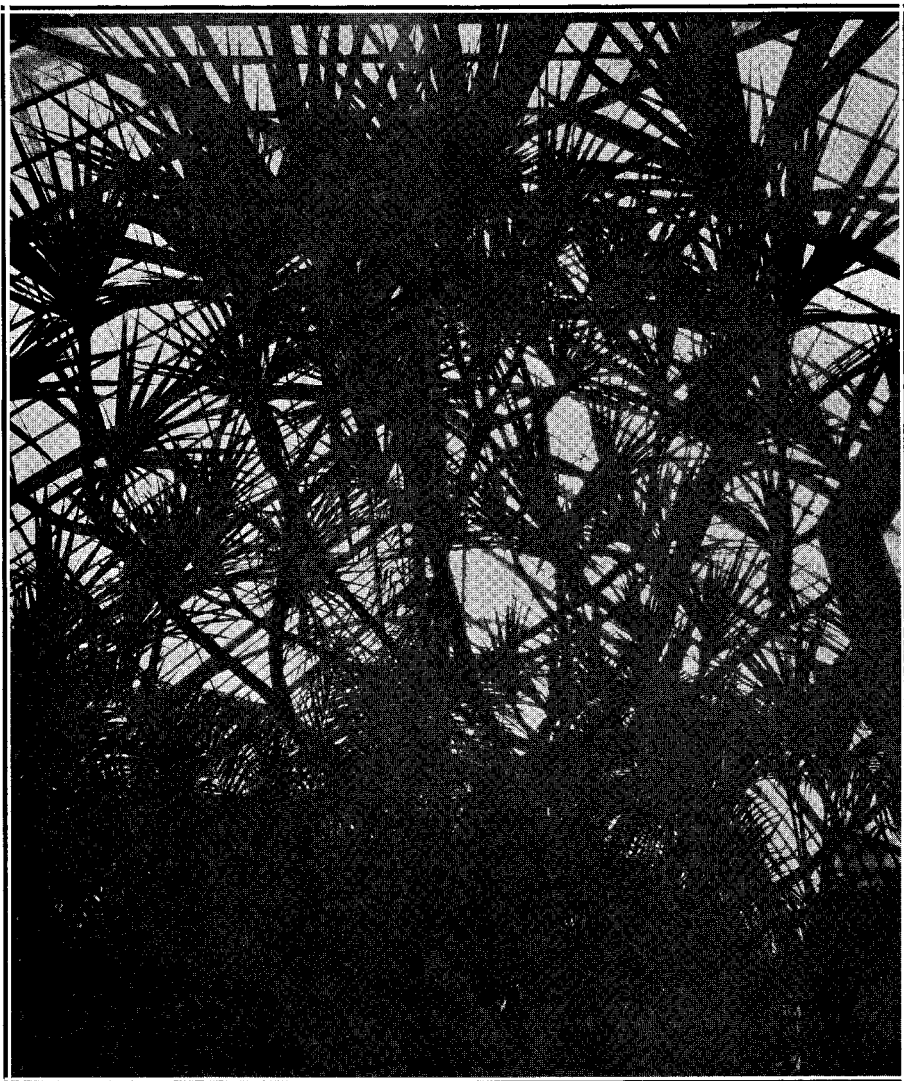
The following is a list of exchanges made during the year :

Traded old turkey cock for young one.
 Exchanged two lion cubs for 1 elk (doe).

REPORT OF THE HORTICULTURAL ACTIVITIES AND GREEN- HOUSE RANGE OF THE CONSERVATORY—CENTRAL PARK—FIFTH AVENUE AND 104TH STREET, MANHATTAN.

THE FLOWER HOUSE.

This house had, from the early part of the winter of 1929 to the close of the season in June, a continuous display of flowering plants shown to the



A LARGE TREE GROWING IN PALM HOUSE—SCREW PINE
(*Pandanus Candelabrum*)
2½ Feet in Circumference, 40 Feet High—December, 1929
CONSERVATORY—CENTRAL PARK

visiting public every day, including Sundays and Holidays, from 10 A.M. to 4 P.M., with the hours extended during the Easter Season from 10 A.M. to 5.30 P.M., to accommodate the large number of visitors.

Approximately 17,500 plants of many varieties were grown and placed on exhibition in the flower shows. These consisted of Azaleas, Cinerarias, Primulas, Cyclamen, Camelias, Poinsettias, Heathers, Solanums, Calceolarais, Carnations, Stevias, Buddleas, Jasmines, Narcissus, Tulips, Freesias. In addition to the afore-mentioned, a special feature of the opening fall season, in November, was the annual exhibition of Chrysanthemums, when a total of 4,500 flowering blooms (145 varieties) were grouped in the flower house. A photograph of this collection is shown on a following page.

THE TROPICAL HOUSES.

A collection of 4,517 tropical plants, of many varieties, is shown in this range. A number of the trees, such as the Rubber, Coffee, Date, Banana (Musa), Palms, Fig, Citrus from 10' to 40' high, as well as many rare and popular varieties of other plants are displayed in the stove and fern houses. We have added to this collection for display in a separate location near the main entrance a group of 225 cacti plants. All of the plantations in these houses have been thoroughly restored by cultivating, fertilizing and trimming. All weak and partially dead plants have been removed. A new platform has been erected for the purpose of displaying collections of the different varieties of plants.

THE PALM HOUSE.

Many varieties of the palm family are included in the 400 palms in this building; these range in height from 2, 2½ to 20 feet. In addition to these, there are 450 other ornamental plants. A special feature in this house is the showing of one of the largest screw pines (*Pandanus Candelabrum*) growing in doors in this section of the country. It is 2½ feet in circumference, stands 40 feet high and has a spread of thirty feet. It is firmly rooted in the soil of the greenhouse floor. A photograph of this tree is shown on a following page.

All of the large sized palms have been transplanted into newly constructed tubs, cultivated, resoiled and fertilized. A new set of botanical labels has been attached to all plants, trees, groups and plantations in both the palm and tropical houses, thus acquainting the visitor of the common botanical names of the species.

A large roomy cellar under the south potting house, which, for a number of years, had been used for storing old material, was cleaned out and ventilated and is now used as a cold storage for cannas. The plants are set on newly constructed wooden racks during the dormant season.



CHRYSANTHEMUM EXHIBITION - CENTRAL CITY CONSERVATORIES NOVEMBER 1929

ORCHIDS.

In November, 1929, the orchid collection which has been in poor condition for a number of years in its present quarters, was moved to a new growing house where ventilation, temperature and lighting conditions are very much better for these valuable plants. The group was thoroughly cleaned and cultivated and a number transplanted, and to date are showing considerable improvement. More than a dozen of the Cattleyas and other varieties of the collection have since flowered and were placed on exhibition in the show houses.

In order to have a more interesting collection of the orchid family, it will be necessary to purchase new plants, to replace many of the old group, from which very little, or no improvement, can be expected for at least a year or more. Upon completion of the five new proposed growing houses on the south side of the conservatory (within the coming year) much benefit can be gained in the matter of care and growth of the orchids as well as the numerous other flowering plants to be propagated, and grown for public exhibition. In this regard, we are at the present time more or less handicapped due to very limited space.

CONSERVATORY.

All the interiors of propagating houses and potting rooms, record office, etc., have been renovated and painted. A newly equipped lighting system has been installed throughout the potting rooms and record office; also boiler rooms, and basement cellars of the greenhouses, which adds to the efficiency of the gardening force.

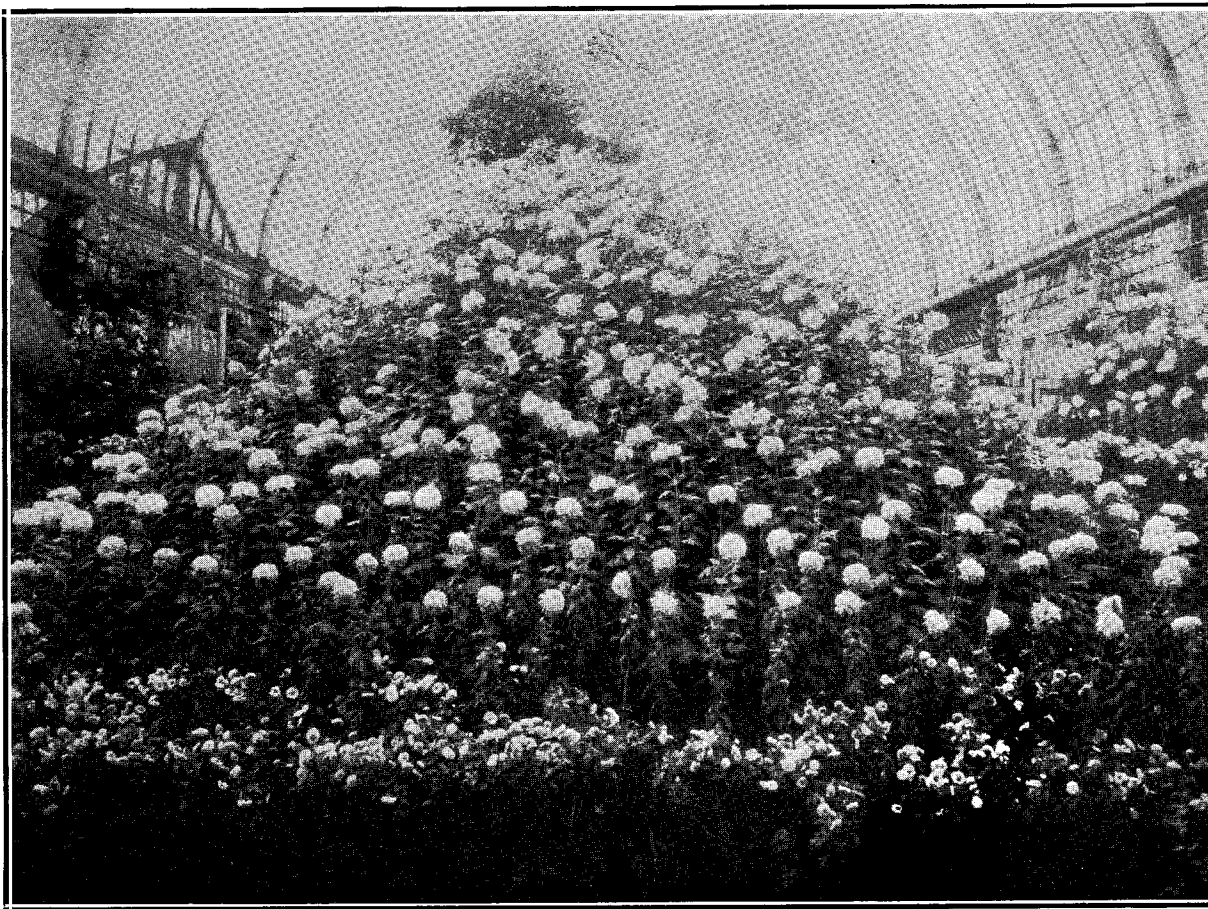
Three new greenhouse seven-day recording thermometer clocks have been installed in the exhibition houses. These instruments can be relied upon for accurate temperature readings, as all temperatures are traced in ink, automatically, on the face of a paper disc and are very helpful to night-watchmen and fire-room crews, in keeping required temperature records in view during their tours of duty at the conservatory.

ISHAM PARK.

The following plants were propagated and grown at greenhouse in Isham Park and field nursery:

AMPELOPSIS.

Quinquefolia	3,000
Veitchii	1,500
Euonymus Japonica, 18"	2,000
Pachysandra Terminalis	3,000
Lonicera	2,700
Boxwood, 12" high	500
Aralea Pentaphela, 3"	1,000
Myrtle	2,500
Pansies and Daisies	6,500



CHRYSANTHEMUM EXHIBITION—CENTRAL PARK CONSERVATORY
NOVEMBER, 1929

Following is a detailed account of the number and kinds of summer flowering plants grown in the greenhouses and set out in the parks and parkways of the Borough of Manhattan during 1929:

<i>Name of Plants</i>	<i>Number</i>
Alternanthera	24,000
Begonias	15,000
Geraniums	16,500
Cannas	13,000
Coleus	5,000
Santalinias	7,000
Iresines	2,000
Other Varieties	4,500

Total	87,000
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<i>Location—Park</i>	<i>Kind of Plant</i>	<i>Number</i>
Corlear's Hook Park	Geraniums	360
	Cannas	430
	Alternanthera	350
	Begonias	150
	Coleus	100
	Annual Plants	100
		1,490
Washington Square Park	Cannas	90
	Geraniums	175
	Begonias	300
	Santilinas	250
	Palm	1
	Tulip Bulbs, in variety	2,300
		800
		3,916
Seward Park	Cannas	75
	Variety of Annuals	35
Abingdon Square Park	Mixed Variety—Tulip Bulbs	700

The following is a detailed account of the number and kind of plants distributed and planted in the flower beds of small parks and parkways in the Borough of Manhattan from the Conservatory, during 1929:

<i>Location—Park</i>	<i>Kind of Plant</i>	<i>Number</i>
Battery Park	Summer flowering plants:	
	Cannas	565
	Salvias	100
	Pyrethrum	400
	Tulip Bulbs, in variety	1,200
		2,165
Court House Centre, Lafayette Street, Centre Street	Cannas	450
	Centureas	75
	Pennesetura	150
	Recinus	1
		676
City Hall Park	Cannas	1,200
	Salvias	250
	Alternanthera	5,725
	Geraniums	2,825

	Begonias	1,250
	Crotons	940
	Santilinas	350
	Mesembryanthemums	500
	Centureas	600
	Stevias	375
	Echeverias	950
	Grevilleas	6
	Golden Privet	580
	Eresina	400
	Abusilon	175
	Draceanas	34
	Centre Plants	10
	Recenus	18
	Tulip Bulbs, in variety	20,950
	Daisies and Pansies	3,200
	Variety of Summer Annuals	558
Chelsea Park	Geraniums	800
	Stevias	150
Madison Square Park	Alternanthera	700
	Begonias	300
	Dracianas	4
	Yucca	4
		<hr/>
		1,958
	Mixed Variety Tulip Bulbs	2,700
De Witt Clinton Park	Mixed Variety—Summer Bedding Plants	600
	Cannas	500
Plaza—Fifth Avenue, 59th Street	Alternanthera	2,750
	Begonias	2,800
	Centurea	300
	Eresine	500
	Achyranthes	200
		<hr/>
		125
		<hr/>
		7,175
	Mixed Variety Tulip Bulbs	12,800
Mall—Central Park	Mixed Variety for Ornamental Vases	350
Shakespeare or Rock Garden, 79th St., West Drive, Central Park	Flowering Plants	3,134
	Mixed Variety Tulips	1,700
Boat Houses, Central Park	Flowering Plants	350
Park Avenue Parkway Plots, From 47th to 72nd Streets	Cannas	690
	Salvias	270
	Alternanthera	1,120
	Geraniums	645
	Begonias	1,120
	Santilinas	200
	Centurea	200
	Coleus (Vinca Rosea)	175
		<hr/>
		4,420
	Mixed Variety of Tulip Bulbs	8,800
72nd Street and Riverside Drive	Geraniums	600
	Begonias	290
	Alternanthera	175
	Cannas	150
	Santilinas	600
	Dracianas	4
	Mixed Variety Tulips	2,800

		4,619
Claremont House, Riverside Park	Mixed Variety Flowering Plants ..	770
Thos. Jefferson Park, 1st Ave., 112th St....	Mixed Variety Flowering Plants ..	950
	Mixed Variety Tulip Bulbs	600
137th St. and Broadway, Triangle Parks...	Mixed Variety Flowering Plants ..	525
Mount Morris Park	Cannas	300
	Geraniums	425
	Begonias	325
	Border Plants	1,325
	Ornamental Centre Plants	10
		2,385
Jumel Mansion	Mixed Variety Flowering Plants ..	1,000
Dyckman House	Mixed Variety Flowering Plants ..	700
	Mixed Variety Tulip Bulbs	1,300
Highbridge Park	Mixed Variety Annual Flowering ..	
	Mixed Variety Flowering Plants ..	1,250
Ft. Washington Park	Summer Bedding Flowering Plants.	3,567
Isham Park	Plants	325
	Mixed Variety of Tulip Bulbs	2,300

BUREAU OF ENGINEERING.

CONTRACTS.

CENTRAL PARK—TENNIS COURTS.

Work on this contract was carried on from 1928 and finished July 3, 1929. The quantities and items are as follows:

- 1,278.33 cubic yards of earth excavation.
- 424.23 cubic yards of rock excavation.
- 1,040.14 cubic yards of borrowed filling.
- 8 basins built complete.
- 600.00 linear feet 6 in. drain pipe.
- 1,517.20 linear feet 10 ft. chain link fence reset.

Additional Posts and Fittings required to reset 10' fence:

- 239.40 linear feet 8' chain link fence.
- 26.40 linear feet 10' chain link fence.
- 169.90 linear feet 8' chain link fence.
- 10 new net posts furnished.
- 54 old net posts removed.

1,545.6 linear feet of concrete edging set.

Complete Water Supply and Extra Stop Cock.

1,276.50 cubic yards of clay topping.

BRIDLE ROADS.

The Bridle Roads were harrowed and the gutters cleared of all material. Six thousand eight hundred and sixty-five (6,865) cubic yards of coarse sharp sand were spread upon the roads to a depth of three (3) inches.

FELLING TREES.

Dead trees were felled and the stumps removed and disposed of. The holes resulting therefrom were filled in with mold:

- 9 trees under 24" in diameter.
- 22 trees 24" in diameter or over.
- 44 stumps were removed and disposed of and the pits resulting therefrom were filled in.

TRANSVERSE ROADS—*Removing Loose Rock and Erecting Concrete Walls.*

Loose rock in a dangerous condition was removed and reinforced concrete walls were erected to make safe these roads.

244.11 cubic yards of concrete.

88.30 cubic yards of loose rock removed.

PERMANENT CONCRETE BENCHES.

The movable park benches were frequently moved away from their proper locations. Two hundred (200) permanent concrete benches were placed.

BOW BRIDGE.

The contract for the work of repairing this bridge was advertised a second time as the lowest bidder on the first letting had defaulted. Work on this contract is being carried on now. A second contract for the remainder of the repairs was awarded to the same contractors, who were the lowest bidders.

REPAVING ASPHALT WALKS.

Work on this contract was carried on in September and October, 1929, and following quantities were laid:

160 cubic yards of concrete.

16,389 square feet of asphalt wearing surface.

ROCK-FACING LARGE LAKE.

To create a rustic effect and to protect the shores from erosion a rock-facing was placed along the shores of the Large Lake. Some of this rock was obtained from the Park, but the larger part was furnished from outside the park by the contractor. The final quantities are as follows:

1,400 lin. ft. rock-facing with stones from the Park.

5,734 lin. ft. rock furnished from outside sources.

PAVING EAST 102ND STREET ENTRANCE.

This entrance road was in bad condition and surveys were made, estimates furnished and a contract let. The work was completed and the final quantities are as follows:

584.7 cubic yards of excavation.

1,147.6 linear feet of concrete curbing.

398.8 cubic yards of concrete roadway foundation.

2,460.5 square yards of asphalt wearing surface laid.

WIRE FENCES.

Actual work of erecting these fences has not begun as the contractor is getting out the posts, etc. They are of high carbon steel and require special foundry work.

MUSEUM OF ART.

A contract was awarded for new roofing at the Museum of Art. Specifications were prepared by the Architect's Office.

A contract was awarded for new rolling screens at the Museum of Art, according to plans and specifications.

The general contract was awarded for an extension to the North Court of "E" at the Museum of Art. The plans were prepared by the Museum and the specifications were prepared by the Architect's Office.

The plumbing contract for the extension to the North Court of "E" at the Museum of Art was awarded. Plans were prepared by the Museum. Specifications prepared by the Architect's Office.

The heating contract for the extension to the North Court of "E" at the Museum of Art was awarded. Plans were prepared by the Museum. Specifications were prepared by the Architect's Office.

A contract was awarded to install new water closets in the Museum of Art, according to the specifications prepared by the Architect's Office.

MUSEUM OF NATURAL HISTORY.

All necessary contract forms, approvals, etc., were prepared by the Architect's Office for the New Power and Service Building (Contract No. 1) in the Museum of Natural History. Plans and specifications were prepared by Trowbridge & Livingston.

All necessary contract forms, approvals, etc., were prepared for the new Power and Service Building (Contract No. 2), in the Museum of Natural History. Plans and specifications were prepared by Trowbridge & Livingston, the Architects.

All necessary contract forms, approvals, etc., were prepared for the new Power and Service Building (Contract No. 3), in the Museum of Natural History. Plans and specifications were prepared by Trowbridge & Livingston, the Architects.

All necessary contract forms, approvals, etc., were prepared for the new Power and Service Building (Contract No. 1-A), in the Museum of Natural History. Plans and specifications were prepared by Trowbridge & Livingston, the Architects.

Specifications and all necessary procedure for receiving bids were prepared for the Extension to Corridor, Southeast Wing and Hall of Ocean Life. Plans were prepared by the Museum of Natural History.

REPAIRING CEMENT WALKS IN BOWLING GREEN, BATTERY AND COLUMBUS PARKS.

Ten thousand five hundred (10,500) square feet of cement walk pavements were laid in the parks, above named, under a contract.

IMPROVING THE UNFINISHED PLOTS ON BROADWAY.

Plans and specifications for the work of improving the unfinished plots on Broadway between 142nd and 166th Streets. The contract was advertised in the latter part of December. Bids to be opened January 7, 1930.

WROUGHT IRON PICKET FENCE AROUND DANTE PARK.

Work on this fence was begun late in 1928 and finished in 1929. One gate 4' wide and 310 linear feet of 4' picket fence were erected.

COURT HOUSE SITE—CITY HALL PARK.

The demolition of the old City Court Building on Chambers Street left a large excavation to be filled and parked. An estimate of the work required was made and a contract awarded. Work was carried on to a finish.

The items and quantities were as follows:

- 3,500 cubic yards of earth filling furnished.
- 427 cubic yards of top soil.
- 170 linear feet of bluestone edging.
- 1,200 square feet of cement walk.
- 0.268 acres seeded.
- 81.88 cubic yards of old walls excavated.

WALK IN FRONT OF CITY HALL IN CITY HALL PARK.

A contract for repaving this walk was let but no work has been done owing to weather conditions.

TENNIS COURTS IN FORT WASHINGTON PARK.

To increase the number of courts available, a contract was awarded to move the wire mesh fences and install a water supply system. Under this contract the following work was done:

- 1,023.15 linear feet of 2" galvanized water pipe laid.
- 628.75 linear feet of chain link fences removed and re-erected.
- 72.70 linear feet of new 10' chain link fence furnished.
- 7 drinking hydrant installed.

CHAIN LINK FENCES IN VARIOUS PARKS.

Two thousand nine hundred and fifty-five (2,955) linear feet of chain link fences 4' high were erected in Dewey Square, Battery and DeWitt Clinton Parks; four 4' gates and seven 10' gates.

HIGH CHAIN LINK FENCE AT QUEENSBORO BRIDGE PLAYGROUND.

To protect passersby and surrounding buildings, 270 linear feet of high chain link fence were erected with 66 braces.

FOUR FT. CHAIN LINK FENCE IN RUTGERS PARK.

As the picket fence had become dilapidated a four (4) foot chain link fence was erected. 770 feet of galvanized chain link fence erected.

FENCES—HARLEM RIVER DRIVEWAY—176TH TO 178TH STREETS.

The fence along the easterly side of this sidewalk was so dilapidated that it was removed and 276.93 linear feet of wrought iron picket fence erected in its place.

CARL SCHURZ PARK.

To protect two lawns near Gracie Mansion, 1,154 linear feet and two double gates of galvanized steel chain link fence erected.

MORNINGSIDE PARK.

A four (4) foot galvanized chain link fence with four gates were erected around the playground in the Northerly end of Morningside Park. 838.9 linear feet of 4' fence was erected and two (2) four (4) foot and two (2) five (5) foot double gates were furnished.

HUDSON PARK.

An 18' chain link fence was erected on three (3) sides of Hudson Park. About 777 linear feet of fence were erected.

BROADWAY PLOTS BETWEEN 135TH AND 167TH STREETS.

A three (3) foot galvanized chain link fence was erected along the inner margins of the center plots along Broadway. 2,889.58 linear feet of 3' chain link fence was erected.

WROUGHT IRON PICKET FENCE, WITH GATE, AROUND THE CENTRE PLOT IN RIVERSIDE DRIVE—156TH STREET.

A cement curb was erected around this plot and the wrought iron picket fence erected thereon. 363.66 linear feet of cement curb set and the picket fence erected thereon.

SHEET ASPHALT WALK PAVEMENTS.

CARL SCHURZ AND CHELSEA PARKS.

The walks of these parks were badly broken up and a contract was awarded and the work finished. The quantities were 41,937.50 square feet of asphalt mastic wearing surface was laid, 263 cubic yards of concrete laid and 85 linear feet of stone steps reset.

HIGH BRIDGE PARK.

Along Dyckman Street from Harlem River Driveway to St. Nicholas Avenue, along Laurel Hill Terrace from McNally Plaza to a point approximately 50' North of 184th Street and along Amsterdam Avenue from 188th Street to 190th Street, a new walk was laid out and built as follows:

454.22 cubic yards of excavation.
18,782.80 square feet of asphalt walk pavement laid.

VARIOUS PARKS.

Roadway pavements had become defective, sunken and bunched and a contract was awarded to repair all of these pavements in Central Park,

Riverside Drive at 72nd to 129th Streets, and 135th to 158th Streets, Morningside Drive, the Harlem River Driveway and the roadway in Battery Park. The quantities of work done are as follows:

176.25 cubic yards of concrete laid.
7,839.40 square yards of wearing surface laid.

CENTRAL PARK WEST DRIVE—66TH TO 86TH STREETS.

This part of the West Drive was badly in need of repairs and a contract was awarded to repair it. The quantities of work done are as follows:

41.38 cubic yards of cement concrete laid.
11,136. square yards of asphaltic concrete laid.

SETTING CONCRETE CURBING AROUND LAWNS ADJACENT TO DRIVES IN THE SOUTHWESTERLY CORNER OF CENTRAL PARK.

2,530 linear feet of cement curb furnished and set.

PERMANENT CONCRETE BENCHES—HARLEM RIVER DRIVEWAY.

The wooden benches along the Harlem River Driveway were frequently moved and turned over. A contract was awarded and twenty-eight (28) permanent benches (concrete) were furnished and erected between 190th and Dyckman Streets.

RAISING PARAPET AND CONCRETE BENCHES ALONG RIVERSIDE DRIVE.

The asphalt walk along the eastern side of Riverside Park between 79th and 96th Streets was relaid and the grade raised necessitating the raising of the retaining wall and benches between the walk and wall. A contract was awarded for this work and the items and quantities are as follows:

115. concrete benches raised and reset.
1,053.84 cubic yards of filling furnished.
241.08 cubic yards of rubble masonry in wall foundation.
598.10 cubic yards of masonry wall rebuilt.

RETAINING WALL—SOUTHERLY END OF FORT WASHINGTON PARK.

This wall had failed and was in a dangerous condition, shored up to prevent its falling on the New York Central Railroad right-of-way. A contract was awarded and the work done was as follows:

1,800 cubic yards of excavation, and
1,700 cubic yards of wall removed.

A lump sum bid was requested so the Engineer's estimate was used.

BALL FIELD IN CHELSEA PARK.

The ball field was in a bad condition, rough and covered with small stones. A contract was awarded and a new surface composed of three (3) parts of clay loam and one (1) part clean cinders were spread to a depth of two (2) inches.

8,216.1 square yards of ball field resurfaced.

HIGH BRIDGE PARK PLAYGROUND.

The playground at 172nd Street and Amsterdam Avenue was not adequate, this neighborhood having grown considerably.

Surveys were made and plans and specifications drawn. A contract was awarded and the items and quantities are as follows:

- 1,066.81 cubic yards of earth excavation.
- 110.72 cubic yards of rock excavation.
- 175.50 linear feet of 15" vitrified pipe laid.
- 283.00 linear feet of 12" vitrified pipe laid.
- 144.50 linear feet of 10" vitrified pipe laid.
- 195.55 linear feet of 8" vitrified pipe laid.
- 308.75 linear feet of 6" vitrified pipe laid.
- 12 walk basins built.
- 5 manholes built.
- 2,884.42 square yards of playground surfacing.
- 17,669.58 square feet of asphalt walk on concrete foundation.
- 564.33 linear feet of 4' chain link fence.

Extra work was ordered by the Park Commissioner, as follows:

- 6.40 cubic yards of extra rock excavation.
- 2.43 cubic yards of extra earth excavation.
- 15.15 cubic yards of concrete as cradle for 15" vit. pipe.
- 1 special steel cover for manhole.
- 1 standard Park Dept. manhole cover.

WADING POOL—HAMILTON FISH PARK.

In order to utilize the plot in the Westerly half of this Park to greater advantage, plans and specifications were drawn up to convert it into a Wading Pool which could be used for skating in the Winter time. The quantities of work done are as follows:

- 360 cubic yards of concrete.
- 17,700 square feet of asphaltic mastic.
- 290 square feet of asphaltic flashing
- 80 linear feet of picket fence.
- 4 showers to erect.
- 730 cubic yards of excavation.
- 479 linear feet of cast iron pipe.
- 27 linear feet of vitrified pipe, and
resetting existing stone steps.

The new pool was in use during the late summer.

DRAFTING DIVISION.

SPECIFICATIONS FOR CONTRACTS PREPARED DURING 1929.

1. Repairing asphalt roadway pavements—Contract No. 1.
2. Corlears Hook Park—Repairing concrete bulkhead.
3. Riverside Drive—Raising benches.
4. Chelsea Park—Resurfacing the ball field.
5. Broadway Center Plots, 135th-157th Streets—Erecting chain link fences.
6. High Bridge Park, 188th-190th Streets—Asphalt sidewalks.
7. Harlem River Driveway, 176th-178th Streets—Erecting iron picket fences.
8. Central Park—Rock-facing the large lake.
9. Central Park—Repairing a portion of Bow Bridge.
10. Central Park—New wall around Conservatory Pond.
11. Morningside Park—Chain link fence around Playground.



HAMILTON FISH WADING POOL—1929

12. Jasper Oval—Repairing chain link fence.
13. Carl Schurz Park—Chain link fences.
14. Central Park—Repaving roadway around the Casino.
15. Central Park—Repairing asphalt walks.
16. Museum of Natural History—Steel storage cases.
17. Central Park—Guard fences around lawns.
18. Repairing asphalt roadway pavements—Contract No. 2.
19. J. Hood Wright Park—Concrete ramp.
20. De Witt Clinton, Hudson and St. Gabriels Parks—Repairing asphalt walks.
21. Central Park—Paving 102nd Street entrance roadway.
22. Central Park—Repairing remaining portion of Bow Bridge.
23. Jasper Oval—Resurfacing playground.
24. High Bridge Park—Improving triangular plot West 155th Street.
25. City Hall Park—Repaving asphalt walk in front of City Hall.
26. High Bridge Park, 168th-172nd Streets—Asphalt walk.
27. Central Park Tennis House—Concrete walk.
28. Riverside Park, 96th-122nd Streets—Repairing walks.
29. Museum of Art.—40 screens.
30. Riverside Park—Three row pipe fences.
31. Morningside Park—Installing water supply system.
32. Central Park—Tennis House sewer.
33. Columbus and Battery Parks—Cement walks.
34. Hudson Park—Resurfacing large playground.

DRAWINGS MADE DURING 1929.

1. Survey of portion of Isham and Inwood Hill Parks.
2. Progress of dumping along Hudson River front—W. 158th to Ft. Washington Point.
3. Progress of dumping along Hudson River—Dyckman St. to Spuyten Duyvil Creek.
4. Proposed layout of Bryant Park.
5. Progress of dumping along Hudson River—100th St. to St. Clair Place.
6. Repairing bulkhead wall on waterfront of Corlears Hook Park.
7. Progress of dumping along Hudson River—W. 72nd to W. 100th Sts.
8. Raising concrete benches and parapet wall—Riverside Dr., 79th and 96th Streets.
9. 3' chain link fences—Broadway center plots between 135th and 167th Streets.
10. Paving with asphalt sidewalks of High Bridge Park.
11. Plots of Central Park numbered.
12. Picket fence—Westerly sidewalk Harlem River Driveway.—176th and 178th Streets.
13. Baseball back stops—Various playgrounds in Manhattan.

14. Excavation, backfilling, dressing, facing and planting rock facing along the shore of the Large Lake in Central Park.
15. Grades from Old Viele Map and present grades on proposed site of new Tennis House.
16. Chain link fence at playground, northerly end of Morningside Park.
17. Constructing new wall and laying pavement—Conservatory Pond—Central Park.
18. Constructing pipe frame and awning over swings—Heckscher Playground—Central Park.
19. Laying water pipe and 2 bends, taking up and resetting gate valve—Central Park.
20. Balustrade at Conservatory Lake in Central Park.
21. Removing wire mesh and attaching new link fabric to frame—Jasper Oval.
22. Location of lampposts—Balustrade at Conservatory Lake—Central Park.
23. Condition of Park Wall—Central Park West—As left by Board of Transportation.
24. Proposed changed of West Dr. and 81st St. Entrance—Central Park.
25. Installing Fish Traps, new lawns sprinkling system—Central Park.
26. Chain link fence, with gates, 2 plots northerly end of Carl Schurz Park.
27. Cast iron lamp standards—Balustrade at Conservatory Lake, Central Park.
28. Repaving and curbing roadway at Casino in Central Park.
29. Repairing asphalt walks, where directed, in Central Park.
30. Guard fences, where required, along edges of lawns in Central Park.
31. Elevations of Webb Estate, Broadway, Wadsworth Terrace, North of West 188th Street.
32. Proposed walk from 184th Street to 190th Street, High Bridge Park.
33. Proposed walk from 175th St. and Amsterdam Ave. to walk on Speedway.
34. Details of bronze railing—Robert Ray Hamilton Memorial Fountain.
35. Fence on part of new park plot in City Hall Park (Former Court House site).
36. Location of existing and proposed lampposts at the Casino.
37. Rebuilding portion of wall on westerly side of Broadway-Isham Street and 214th Street.
38. Proposed walks and fences in Hamilton Fish Park.
39. 15' from to which link fabric is to be attached in High Bridge Park.
40. Ramp in J. Hood Wright Park.
41. Water Supply in City Hall Park plot.
42. Rock facing and curbing certain lawns in Carl Schurz Park.
43. De Witt Clinton Park—new and revised plan.
44. Concrete ramp at N. side of J. Hood Wright Park.

45. Repaving with asphalt walk on westerly side Northbound Dr.—Riverside Park.
46. Ends of Park Avenue plots.
47. Repaving, where directed, walks of De Witt Clinton, Hudson and St. Gabriel's Parks.
48. Paving and curbing entrance Central Park—102nd St. and 5th Ave.
49. Lawns in Riverside Park—proposed sprinkling system.
50. Repairing remaining portion of Bow Bridge in Central Park.
51. Installing fish traps in new lawn sprinkling system in Central Park.
52. Setting curb and laying walk pavement—Central Park—59th St. and Central Park West.
53. Constructing walks with drainage and retaining wall—High Bridge Park.
54. Tree gratings for Riverside Drive between 79th and 93rd Streets.
55. Proposed walks in High Bridge Park—184th to Harlem River Drive-way.
56. Buildings, roads, etc., in Inwood Hill Park.
57. Improving unfinished park plots—Broadway, between 142nd and 166th Streets.
58. Repaving the roadway around the Casino in Central Park.
59. Improving triangular plot at West 155th Street and Edgecombe Avenue.
60. Installing water pipes and appurtenances in Morningside Park.
61. Erecting retaining wall West of Comfort Station in Riverside Park.
62. Erecting 4' chain link fence with gate at Mt. Tom—Riverside Drive at 83rd Street.
63. Constructing new walk and appurtenances—New Tennis House—Central Park.
64. 18' fence on easterly boundary of Queensboro Bridge Playground.
65. Laying pipe sewer and appurtenances from Tennis House to Transverse Road No. 4.
66. Constructing walk, westerly side, High Bridge Park—168th-172nd Sts.
67. Location of bluestone flagging—west edge of High Bridge Park.
68. Alterations service road—65th St., Transverse Road to Arsenal, Central Park.
69. Street lines and sidewalk widths—S. of W. 181st St. to Broadway and Dyckman St.
70. Repairing and otherwise improving walks in Riverside Park—96th and 122nd Streets.
71. Elevations and grades, Lower Reservoir, Central Park, for filling and grading.
72. Erecting fence along certain lawns in Riverside Park.
73. Erecting fence on easterly side of large playground of Hudson Park.
74. Repairing, where directed, walk pavements of Columbus and Battery Parks.

75. Resurfacing large playground in Hudson Park.
76. Survey of Playground between 59th and 60th Streets, West of Amsterdam Avenue—Wading Pool.
77. Proposed treatment of Union Square Park.
78. Erecting fences and gates at Washington Bridge and Amsterdam Ave.
79. Redesign of Seward Park and proposed relocation of Comfort Station.
80. Survey of St. Gabriel's Park for Wading Pool.
81. Constructing new walk and steps, Riverside Park, North of Soldiers' and Sailors' Monument.
82. Northerly end of Harlem River Driveway and private property northerly thereof.
83. Progress of fill, North of Dyckman Street.
84. Parcel at S. E. Corner Hudson Park to be transferred to Borough President.
85. Speedway—Dyckman St.—Land to be transferred from Dock Dept. to Park Dept.
86. Constructing new walks in Central Park.
87. Restoration of entrance St. Nicholas Park—130th St. and St. Nicholas Ave.
88. Dismounting and remounting Lincoln and Washington Monuments—Union Square Park.
89. New layout of Union Square Park.
90. Repaving cement walk at foot of bridge stairway in City Hall Park and resetting bluestone edging.

ARCHITECT'S DIVISION.

BATTERY PARK.

1. A contract was awarded for a new parapet wall at the Aquarium. Plans and specifications were prepared by H. DeB. Parsons, Consulting Engineer. All necessary procedure for bids was done by this office.

2. Plans and specifications for new tanks and repairs at the Aquarium were prepared by H. DeB. Parsons, Consulting Engineer. All necessary procedure for bids was done by this office. To date this contract has not been awarded.

3. A contract was awarded for roof repairs at the Aquarium. Specifications were prepared by this office.

CARL SCHURZ PARK.

1. Plans and specifications for a new field-house at 84th Street and East End Avenue were prepared. This contract was advertised twice this year. To date the contract has not been awarded. Bids were above the appropriation.

2. Due to poor roof on the Gracie Mansion, it was replaced with a new roof according to specifications prepared by this office.

CARMANSVILLE PLAYGROUND.

1. Due to the poor roof on the field-house, it was replaced with a new roof, according to specifications prepared by this office.

2. A contract was awarded to paint the new roof of the field-house, according to specifications prepared by this office.

CENTRAL PARK.

1. Full size details of the concrete benches on the Mall were prepared by this office.

2. A contract for a new balustrade at the Conservatory Lake was awarded. Plans and specifications were prepared by this office.

3. A contract for new roofing at the Museum of Art was awarded. Specifications were prepared by this office.

4. A contract for a new Tennis House and Comfort Station was awarded. Plans and specifications were prepared by this office.

5. Due to the poor heating system in the North Meadow Comfort Station, it was necessary to replace this with a new heating system, according to specifications prepared by this office.

6. Due to the poor roof on the North Meadow Comfort Station, a contract was awarded for a new roof, according to specifications prepared by this office.

7. A contract was awarded to enlarge the Boiler Room Floor and install an ash hoist in the Greenhouses, according to the specifications prepared by this office.

8. An alteration to the Tool House at 97th Street was found necessary. Specifications were prepared by this office.

9. It was found necessary to award a contract for pointing up the mortar joints at the Belvidere. Specifications were prepared by this office.

10. A contract for a new asphalt roof was awarded at the Belvidere according to specifications prepared by this office.

11. A contract was awarded for a new chimney and boiler foundation at the 86th Street Garage. Specifications were prepared by this office.

12. A contract was awarded for heating repairs and partitions at the 97th Street Comfort Station, according to specifications prepared by this office.

13. Due to new shop space, it was found necessary to install new heating coils at the 86th Street Garage. Specifications were prepared by this office.

14. A new contract was awarded for a new roof at the 86th Street Garage. The roof was in a very poor condition. Plans and specifications were prepared by this office.

CHELSEA PARK.

1. A contract was awarded for roof repairs and a new ceiling in the Women's Comfort Station, according to specifications prepared by this office.

COLONIAL PARK.

1. A contract was awarded for a new Comfort Station. Plans and specifications were prepared by this office.

COLUMBUS PARK.

1. A contract was awarded for enclosing the Archway under the pavilion. Plans and specifications were prepared by this office.

2. The old water closets in the Men's Toilet Room were in such a condition that it was found necessary to replace these with new ones. Specifications were prepared by this office.

CORLEARS HOOK PARK.

1. A contract was awarded for replacing the old urinal system with a new one in the Men's Toilet Room. The old system was in a very unsanitary condition. Specifications were prepared by this office.

DE WITT CLINTON PARK.

1. A contract was awarded for repairs to the hot water tanks in the Pavilion. Specifications were prepared by this office.

2. Due to continuous leaks, it was found necessary to award a contract for a new cement roof on the School Farm Building. Specifications were prepared by this office.

FORT WASHINGTON PARK.

1. Plans were prepared for a new Tennis House at the Tennis Grounds. Further work was ordered stopped. This being due to a new highway contemplated on Riverside Drive.

HARLEM LANE PARK.

1. Preliminary sketches for a new Pergola was prepared by this office.

JOHN JAY PARK.
A contract was awarded for plaster repairs at the pavilion and comfort station.

2. A contract was awarded for pointing up masonry and carpenter work at the Pavilion. Specifications were prepared by this office.

3. A contract was awarded for painting the interior of the Pavilion. Specifications were prepared by this office.

MADISON SQUARE PARK.

1. Due to leaks of the roof of the Men's Comfort Station, it was found necessary to award a contract for waterproofing the vault lights. Specifications were prepared by this office.

RIVERSIDE DRIVE AND 156TH STREET.

1. A contract was awarded for rebuilding the Fountain. This was in a dangerous condition. Specifications were prepared by this office.

ST. NICHOLAS PARK.

1. Plans and specifications for a new Balustrade of the Ramp at 130th Street and St. Nicholas Avenue were prepared by this office.

THOMAS JEFFERSON PARK.

1. A contract was awarded for a new concrete pit and lowering boilers in the Pavilion, according to specifications prepared by this office.
2. A contract was awarded for additional heating in the Pavilion according to specifications prepared by this office.
3. A contract was awarded for repairs to the steps and sidewalk of the Pavilion. Specifications were prepared by this office.
4. Due to dangerous condition of the masonry, a contract was awarded for repairs to the masonry of the Pavilion. Specifications were prepared by this office.
5. A contract for a new roof on the Pavilion was awarded. Specifications were prepared by this office.

UNION SQUARE PARK.

1. Preliminary sketches for a new Bandstand and Comfort Station were prepared by this office.

SURVEYS COMPLETED IN 1929.

1. Completion of Tennis Courts Improvement in Central Park.
2. Survey for a Comfort Station and a new walk at the Tennis Courts, Central Park. Survey for a sewer from above Comfort Station to an existing sewer.
3. Construction of retaining wall West of Comfort Station at Riverside Drive and 88th Street.
4. Measurements and supervision of a new wire mesh fence at the playground in Morningside Park.
5. Survey for improvement of Conservatory Pond, Central Park.
6. Raising parapet wall and benches along Riverside Drive from 79th Street to 96th Street.
7. Erecting new benches on The Mall in Central Park.
8. Rock-facing around "The Lake"—Central Park at 72nd Street.
9. Realignment and extension of curbing and walk at the Maine Monument, Central Park and Columbus Circle.
10. Levels for new Seal Tank, Menagerie, Central Park.
11. Survey of 77th Street Entrance to Museum of Natural History for estimating repaving cost of same.
12. Survey of Southerly end of Carl Schurz Park for data for the construction of new Field House.
13. Survey of sites for eighteen (18) new walks in Central Park.
14. Changing line and curvature of roadway at West Drive and West 81st Street Drive, Central Park.
15. Levels at Casino for roadway pavement.
16. Levels at Heckscher Playground for the construction of two (2) new drain basins.
17. Repair of Water Main (12") opposite 97th Street and the East

Drive.

18. Survey of playground on 59th Street, between 10th and 11th Avenues for new Wading Pool.

19. Survey of westerly portion of DeWitt Clinton Park, Westerly portion of St. Gabriel's Park and Easterly portion of Chelsea Park for new Wading Pools.

20. Survey of Sprinkler System for new strainers.

21. Survey of service entrance to Arsenal at 66th Street and Fifth Avenue for widening same.

22. Survey for repair of Sea Wall at Corlears Hook.

23. Survey for repair of Battery Park Sea Wall.

24. Soundings on Lower Reservoir, Central Park.

25. Installation of new fire hydrants in Central Park.

26. Survey of bridges No. 5 and No. 10 in Central Park.

27. Survey of Harlem Meer for rock-facing.

28. Layout of flower beds in Park Avenue Plots.

29. Survey of tree plots and ventilators on Central Park West.

SURVEYS COMPLETED BY THE SPEEDWAY OFFICE IN 1929.

1. Survey of sidewalk on East side of Amsterdam Avenue from 172nd Street South, then along the North side of Edgecombe Avenue for a proposed paving contract.

2. Surveys of the various unfinished and unimproved park plots in the center of Broadway from 142nd Street North to 166th Street.

3. Profile and survey of culvert courses and ducts in Fort Washington Park North of the New Hudson River Bridge.

4. Cross-section levels and survey of East side of Amsterdam Avenue from 188th Street to 190th Street.

5. Cross-section levels and survey of the East Side of Amsterdam Avenue North of 190th Street to St. Nicholas Avenue.

6. Survey of Isham Park North of 213th Street to the Spuyten Duyvil Creek.

7. Survey of West walk and wall on the West side of Seaman Avenue from Isham Street to 212th Street.

8. Survey for setting grades on the inside of the wall on the West side of Seaman Avenue from Isham Street to 212th Street.

9. Survey for repairs to pier and parapet wall at Riverside Drive and 148th Street. Also for repairs to granite pier and balustrade at 149th Street—Riverside Drive.

10. Survey and cross-section of park plot from 189th to 190th Streets, Wadsworth Terrace to Broadway.

11. Survey and cross-section of proposed walk from Speedway to other main walk, joining at 190th Street near Amsterdam Avenue.

12. Survey for replacing old fence with a new one on the stone coping of the ramp on the Harlem River Driveway just North of High Bridge.

13. Survey of concrete walk in front of steps of the pavilion at Inspiration Point and Riverside Drive.

14. Location survey of the Harlem River Driveway Bulkhead Line and subsequent shifting of the top of the wall at various places.

15. Location survey of gravel walk and steps at 162nd Street—163rd Street, East of Riverside Drive.

16. Survey for repairs to stairs, sewer drain pipe and water supply system at 130th Street and St. Nicholas Avenue.

17. Survey and cross-section of Triangular Plot in High Bridge Park—North of 155th Street and West of Edgecombe Avenue.

18. Cross-section levels on proposed walk in Triangular Plot at 155th Street and Edgecombe Avenue.

19. Survey and cross-section of wall and walk on the West side of Riverside Drive from 79th Street to 95th Street.

20. Cross-section survey of the Fort Washington Tennis Courts at 170th Street and Riverside Drive.

21. Survey of Wall rebuilt along the West side of Broadway from Isham Street to West 214th Street.

CONSULTING ENGINEER.

The work of the Consulting Engineer included the study and review of all contract drawings, proposed projects affecting park areas, inspection and examination of work in progress, etc., from an engineering and construction point of view.

In direct charge of the work in connection with all filling operations in areas under the jurisdiction of the Park Department.

Filling operations in Riverside Park Extension from 72nd to 129th Streets are progressing in a favorable manner. The work of filling from 72nd to 96th Streets has been practically completed. There is still a considerable amount of filling which remains to be done between 84th and 120th Streets.

In order not to delay the work of completing the Riverside Park Improvement, necessary action has been taken to have the areas at 79th and 96th Streets, now under this jurisdiction of the Department of Docks, transferred to the Department of Parks. These areas should be filled as soon as possible, as it will require at least two years to permit proper settlement to take place before park treatment can be placed thereon.

Work of filling is also progressing in Fort Washington Park, north of West 158th Street. When the area from 158th Street to 174th Street has been filled, approximately twenty-one acres of new made land will be added to the park area.

Owing to the difficulty of securing fill, very little has been placed immediately south of 174th Street. Work of filling is continuing slowly north of Dyckman Street.

Following is a summary showing the areas of new park land made during year 1929:

72nd to 77th Sts.	21,380.00	Square Feet
81st to 85th Sts.	28,090.00	Square Feet
87th to 88th Sts.	7,258.00	Square Feet
90th to 94th Sts.	17,840.00	Square Feet
106th to 111th Sts.	10,285.00	Square Feet
115th to 120th Sts.	31,460.00	Square Feet
North of 158th St.	155,460.00	Square Feet
North of Dyckman St.	513,902.50	Square Feet
Total Square Feet	785,675.50	

The description of the plan for the improvement of Riverside Drive has been outlined in the Park Department's Report for 1928.

BOW BRIDGE—CENTRAL PARK.

It was found upon removing the cast iron ornamentation from this bridge that the structural members of the bridge had greatly corroded. In order to determine the safety of the bridge, a careful examination was made and measurements and computations made to establish the extent of corrosion. It was found that the corrosive action had reduced the effective structural metal approximately 10%. The span of the bridge is 95'; the width 13'. A riveted girder on each side is approximately 4' 6" deep and consists of four cover plates 14" x $\frac{3}{8}$ "; four angles 3" x 3" x $\frac{3}{8}$ ", and two web plates 50" x $\frac{1}{4}$ ". Computation shows that the total moment of inertia of the original section was 32,588. Redesign shows that the bridge was originally planned to carry a live load of 100 pounds plus 25% impact and vibration.

The bridge, as it now stands, making allowance for the corrosive action, is capable of sustaining a live loads of 90 pounds per square foot, plus 25% vibration, and will safely sustain (with bridge otherwise empty) an eight ton truck, making it absolutely safe for all park purposes.

CONSERVATORY LAKE.—Examination of construction work about Conservatory Lake showed that it was advisable to use pre-cast blocks for the parapet in order to obtain true curves to properly carry out the architectural treatment.

Examination of work being done in connection with duct line constructed in Inwood Hill Park and over the Harlem Ship Canal.

Investigation and design of structural members of tennis house, Central Park.

Inspection and examination in connection with the New York Central Railroad Company's grade crossing elimination at 138th Street, west of Riverside Drive, in connection with restoration of park property.

Calculation for retaining wall at 128th Street and St. Nicholas Avenue.

Examination and computations to determine cost of correcting rock slides, Riverside Drive from approximately 162nd Street north to Dyckman Street.

As a member of special committee of engineers for the West Side Improvement, cooperating with the New York Central Railroad Company in the preparation of plans and specifications for city structures West Side Improvement. Studies and plans prepared in order to eliminate all cross traffic on express highway in Riverside Park, at entrances to 72nd, 79th and 96th Streets.

All other work necessary in order to cooperate with the New York Central Railroad Company in preparing of the plans for covering of the railroad tracks in connection with the West Side Improvement. It is expected that the Express Highway will be completed up to 80th Street in about two years.

Examination of plans and specifications negotiations, etc., with the Board of Transportation in connection with reconstruction of Seward Park and the building of a new comfort station, together with other work.

Consultations, examination of plans and negotiations with the Board of Transportation in connection with the reconstruction of Union Square Park.

Examination, engineering work, preparation of papers, estimate of costs, etc., in connection with reclamation of the Old South Reservoir, Central Park, which is situated in the middle of the park and extends from 79th to 86th Streets, occupying an area of almost 37 acres.

At ten o'clock on January 22nd, 1930, the big gate valve is to be opened and the 250,000,000 gallons of water now in the reservoir permitted to flow out. The old reservoir was first filled from the Croton System in June 27th, 1842. It has served its usefulness and is no longer required in the water supply system of New York City. The walls which surround the reservoir are constructed of massive field stone masonry, 18' thick at the top, 50' thick at the bottom and approximately 34' in height. Computation shows that the total cost of the entire project would be approximately \$1,300,000.

Through an arrangement to get the fill and have the walls razed without expense to the city, we expect to save \$700,000.

The jurisdiction of the Old South Reservoir was originally under the control of the Department of Water Supply, Gas & Electricity, but was transferred to the Park Department by action of the Sinking Fund Commission on November 6, 1929.

BATTERY PARK.

Examination of the Battery Sea Wall in connection with reconstruction.

WEST SIDE IMPROVEMENT.

Attendance at meetings and studies in connection with approaches to new Hudson River Bridge.

Reports on proposed work to be done by other city departments, etc., affecting park property.

Review and study of plans presented by the Board of Transportation in connection with construction work of subways, affecting various park areas.

As a member of the Mayor's West Side Architects' Committee, attended meetings, made necessary field inspections and prepared reports in connection with studying the architectural and landscaping features of the design shown on plans for the removal of the tracks of the New York Central Railroad Company from public streets along the Hudson River waterfront, and for related public improvements.

BUREAU OF CHILDREN'S SCHOOL FARMS.

Name of Garden	Established		
De Witt Clinton	1902	$\frac{3}{4}$ acre	52-54th St. and 12th Ave.
Corlears Hook	1913	$\frac{3}{4}$ acre	Jackson and Cherry Sts.
Thomas Jefferson	1911	2 acres	111-114th Sts., East River.
Seward Park	1827	$\frac{1}{8}$ acre	Canal and Jefferson Sts.
Chelsea Park	1928	$\frac{1}{16}$ acre	28th Street, 9th Avenue.

The total attendance of each farm—January 1 to December 31, 1929:

DeWitt Clinton	50,319
Corlear's Hook	41,520
Thomas Jefferson	52,706
Seward Park	6,125
Chelsea Park	560
Total	151,230

The Budget of 1929 provided for:

1 Head School Farm Attendant at \$2,160.00	\$2,160.00
5 Per Annum School Farm Attendants at \$1,478.00	7,390.00
1 Per Annum School Farm Attendant at \$1,200.00	1,200.00
940 Days for Per Diem School Farm Attendants at \$4.00	3,760.00
(11 were employed for various length of time, not exceeding 6 months, April to October.)	
Total	\$14,510.00

Unexpended item of 4 months, due to leave of absence of Francis J. McCormack	\$492.67	
Unexpended item of 1 month (May) due to Hannah Hanlon resignation	100.00	
		<u>592.67</u>
		\$13,917.33

Per annum increases were granted September 1st:

1 Head Attendant	\$180.00	4 months	\$60.00
3 Per Annum Attendants	142.00	4 months	142.00
1 Per Annum Attendant (sub)	142.00	1 month	11.83
1 Per Annum Attendant	120.00	4 months	40.00
			<u>253.83</u>

Cost of Maintenance of the Bureau of Childrens School Farms \$14,171.16

Crops produced during 1929:

Radishes	28,000 bunches
Celery	3,000 stalks
Onions	5,000 buches
Lettuce	19,000 heads
Carrots	25,000 bunches
Corn	5,000 ears
Swiss Chard	12,600 stalks
Beans	220 quarts
Beets	17,000 bunches

SHAKESPEARE GARDENS.

A lecture tour of the Shakespeare Garden was given by this Bureau on Saturday afternoon, May 18, 1929, in conjunction with a visit to Central Park arranged by one of our New York newspapers.

About 75 high school boys and girls and grown people visited this interesting garden, conducted by members of our staff. A brief outline of the poet's history was given, before viewing the flowers and plants he so ably described and wove into his literary masterpieces.

TOPICS.

Life and history of Shakespeare. Flowers and plants he portrayed in his writings:

Chamomile	Lily of the Valley
Columbine	Pansy
Daisy	Rose
Dandelion	Rosemary
Eglantine, or Sweet Brier	Strawberry
Hawthorne	Tulips
Honeysuckle	Violets
Houseleek	Yarrow
Iris	Yucca

OPEN AIR CLASSES.

The courtesy of the garden is extended to the Open Air Classes of the Board of Education. The two classes from Public School No. 102 use the garden at Thomas Jefferson School Farm and the two classes from P. S. No. 110 use the Corlear's Hook School Farm.



1ST PRIZE EXHIBIT OF BUREAU SCHOOL FARMS
SECOND ANNUAL CHILDREN'S FAIR—MUSEUM OF NATURAL HISTORY

These classes use the garden as their classroom for the entire year. They take part in the garden activities and the most delicate child can plant a bulb or flower seed.

EXHIBITIONS.

This Bureau received 2 first prizes, 2 second prizes and 1 third prize out of 5 exhibits at the Second Annual Childrens Fair, held at the Museum of Natural History during October, 1929.

DETAILED REPORT OF THOMAS JEFFERSON SCHOOL FARM.

Total Plot Attendance of all classes for 1929	52,706	
Neighborhood Children	12,863	
Open Air	8,694	
Kindergarten	2,984	
Ungraded	1,424	
P. S. 102	5,270	
P. S. 57	6,698	
P. S. 85	6,073	
Nature Study	5,348	
Pier and Pier Kindergarten	1,243	
Federation	764	
Observation Classes	1,345	
Individual Gardens	1,000	4x8'
Open Air Classes (2)	75	Children
Attendants detailed during the summer months	5	
Attendant per annum	1	

Attendant in Charge of Garden Helen Mahon

The School Farm at Thomas Jefferson Park is so named in honor of our former President who said, "The greatest service which can be rendered any country is to add a useful plant to its culture, especially a bread grain or one producing oil." He imported, in 1790, olive plants from Marseilles and rice seed from Africa, to be cultivated in South Carolina and Georgia.

The School Farm at Thomas Jefferson Park is located at Pleasant Avenue and 111th Street, adjoining the river, with a pleasant view of Ward's Island and the bridge. It covers an area of more than 2 acres with beautiful flower beds, a small cottage, tool house and barn. In addition, there is a long building with many windows. This building is used throughout the entire year by the Board of Education for Open Air Classes. Two classes of anæmic children, with teachers detailed, occupy this building. All nature and physical training periods are taken in the garden and the improvement both physically and mentally, has been marked under this helpful, open-air environment with a garden practically as a classroom.

This garden has more than 1,000 individual plots, 4 x 8 feet. The children attending it are mostly of Italian extraction. It was planted for its spring crop the first week of May and the second or main planting was completed by June 27th. The crops from both plantings were abundant as the following enumeration will show. The entire garden was fertilized during the fall, with 25 truck loads of manure.

VEGETABLES PRODUCED FROM 900 CHILDREN'S PLOTS.

Radishes	14,100	bunches
Beets	8,600	bunches
Swiss Chard	6,400	stalks
Corn	2,500	ears
Lettuce	9,650	heads
Carrots	12,600	bunches
Onions	2,500	bunches
Celery	1,530	stalks
Beans	110	quarts

CROPS PRODUCED FROM 57 OBSERVATION PLOTS.

Celery	90	stalks
Parsley	60	bunches
Kale	90	plants
Squash	4	
Cabbage	30	heads
Broom Corn	48	plants
Kaffir Corn	96	plants
Sorghum Corn	72	plants
Flax	120	plants
Peanuts	20	plants
Cotton	160	plants
Tobacco	32	plants
Indian Corn	80	plants
Vetch	4	pounds
Alfalfa	18	pounds
Wheat	1	pound
Rye	1	pound
Barley	1	pound
Millet	2	pounds
Okra	1	quart
Pumpkin		
New Zealand Spinach	30	quarts
Castor Oil	15	plants
Parsnips	30	plants
Sugar Beets	30	plants
Egg Plants	30	plants
Peppers	30	plants
Sweet Potatoes	3	quarts

VISITORS.

The Columbia University, in its itinerary, has suggested a visit to the Thomas Jefferson School Farm and 40 students availed themselves of this offer in 1929.

IMPROVEMENTS AND REPAIRS AT THOMAS JEFFERSON SCHOOL FARM.

The roof of the School Farm was resingled.

New runways were installed at tool house.

3 new shut-off valves were installed.

New cement floor laid in tool house.

Bureau of Forestry planted 86 Poplar Trees.

DETAILED REPORT OF DE WITT CLINTON SCHOOL FARM.

Total Plot Attendance of all classes for 1929	50,319
Neighborhood Children	15,384

Kindergarten Classes	10,275	
P. S. 51	9,880	
P. S. 58	4,525	
Industrial No. 2	4,885	
Nature Study Classes	5,370	
Individual Gardens	412	4x8'
Attendants detailed during the summer months	4	
Attendants detailed per annum	2	
Attendant in Charge	Adele Mueger	

De Witt Clinton School Farm is located in De Witt Clinton Park, 52nd Street, 12th Avenue. This garden covers an area of about $\frac{3}{4}$ of an acre. It was opened in 1902 and was the nucleus from which the other gardens branched. The children attending this garden are mostly of Irish, Polish and Swedish extraction with a strong influx of colored children. There are 400 individual gardens 4x8 feet which were planted for the spring crops, the first week in May. The seeds for the fall crop were in the ground by the end of June.

VEGETABLES PRODUCED FROM 412 CHILDREN'S PLOTS.

Radishes	7,185 bunches
Beets	4,350 bunches
Swiss Chard	3,250 stalks
Corn	1,250 ears
Lettuce	4,850 heads
Carrots	6,350 bunches
Onions	1,280 bunches
Celery	780 stalks
Beans	55 quarts

CROPS PRODUCED FROM 55 OBSERVATION PLOTS.

Indian Corn	72 ears
Broom Corn	48 stalks
Kaffir Corn	48 stalks
Sorghum Corn	48 stalks
Cabbage	30 heads
Castor Oil	8 plants
Alfalfa	4 pounds
Wheat	2 pounds
Oats	2 pounds
Millet	2 pounds
Buckwheat	2 pounds
Barley	2 pounds
Vetch	2 pounds
Kale	30 plants
Parsley	90 plants
Sugar Beets	64 plants

DETAILED REPORT OF DE WITT CLINTON SCHOOL FARM.

Cotton	8 plants
Okra	1 quart
Rhubarb	32 bunches
Peanuts	20 plants
Squash	6
Celery	90 plants

Tobacco	12 plants
Sweet Potatoes	12 plants
Horse Radish	12 plants
Tomatoes	12 plants
Pumpkin	8 plants
New Zealand Spinach	4 bunches
Flax	1 pound

IMPROVEMENTS AND REPAIRS DURING 1929, AT DE WITT CLINTON SCHOOL FARM.

A new roof over $\frac{1}{2}$ of the Pergola Building.

Summer House in garden was repaired and roof reshingled.

Work on new drains was started in 1929.

DETAILED REPORT OF CORLEAR'S HOOK SCHOOL FARM.

Total Plot Attendance of all classes for 1929	41,520
Neighborhood Children	9,058
Nature Study Classes	8,048
P. S. 12	3,638
P. S. 110	8,088
P. S. 147	3,738
P. S. 31	3,428
P. S. 34	4,048
Settlement House	1,474
Individual Gardens	389
Attendants detailed during the summer months	3
Attendant per annum	1

Attendant in Charge of the Garden May H. Reilly

Corlear's Hook School Farm is located at Jackson and Cherry Streets. This garden covers an area of $\frac{3}{4}$ of an acre and was established in 1913. The children attending this garden are of Jewish and Irish extraction.

This garden has two Open-Air Classes throughout the year. The fence around the garden, facing the ball field, is in very bad condition. A new retaining wall of cement is needed to replace the one of wood, which acts as a base for the fence that encloses the garden.

VEGETABLES PRODUCED FROM 300 CHILDREN'S PLOTS.

Radishes	4,800 bunches
Beets	2,930 bunches
Swiss Chard	2,175 stalks
Corn	835 ears
Lettuce	3,265 heads
Carrots	4,265 bunches
Onions	890 bunches
Celery	505 stalks
Beans	35 quarts

CROPS PRODUCED FROM 27 OBSERVATION PLOTS.

Celery	30 stalks
Parsley	30 bunches
Kale	
Broom Corn	
Kaffir Corn	24 plants

Sorghum Corn	24 plants
Squash	4 plants
Cabbage	10 heads
Flax	½ pound
Peanuts	10 plants
Cotton	8 plants
Tobacco	10 plants
Indian Corn	50 ears
Vetch	1 pound
Alfalfa	2 pounds
Wheat	3 pounds
Rye	1 pound
Barley	1 pound
Millet	½ pound
Okra	½ quart
Pumpkin	8 plants
Castor Oil	5 plants

IMPROVEMENTS AND REPAIRS DURING 1929, AT CORLEAR'S HOOK SCHOOL FARM.

New leaders and new gutters were put on the cottage.

The roof of the cottage was repaired and painted.

DETAILED REPORT OF SEWARD PARK SCHOOL FARM.

Total Plot Attendance	6,124
Individual Gardens	100
Attendant, summer months	1
Attendant in Charge	Josephine O'Connell

SEWARD PARK GARDEN is located at East Broadway and Canal Street.

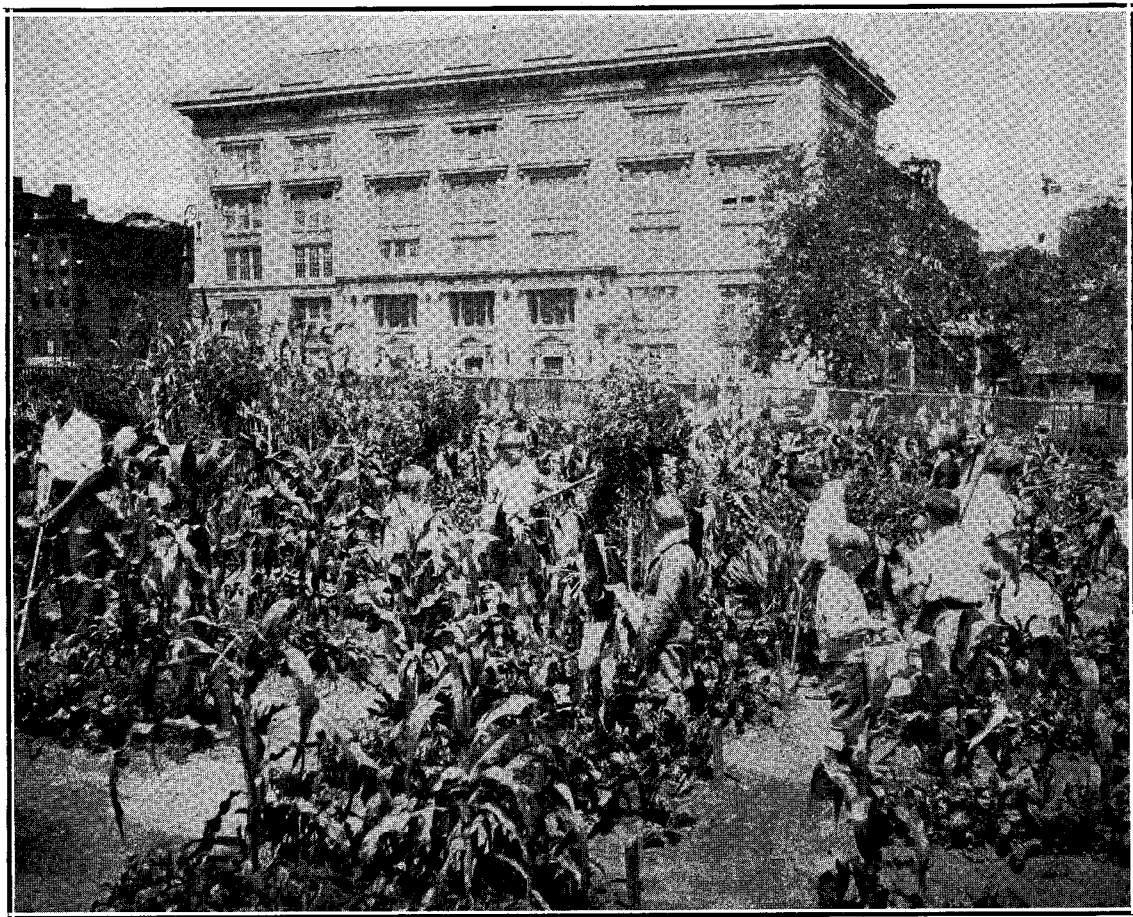
This School Farm was established in 1927, covering an area of ⅛ acre. This area is divided into 90 individual garden plots and ten observation plots. The children attending the garden are all of Jewish extraction. It is extensively used by the Garden Club of The Hebrew Educational Alliance.

VEGETABLES PRODUCED FROM 90 CHILDREN'S PLOTS.

Radishes	1,605 bunches
Beets	935 bunches
Swiss Chard	635 stalks
Corn	275 ears
Lettuce	995 heads
Carrots	1,350 bunches
Onions	270 bunches
Celery	150 stalks
Beans	10 quarts

THE OBSERVATION PLOTS are similar to those of the large gardens, only smaller, owing to the limited area.

This garden was closed immediately after the harvest, as contractors removing the Pavilion Building at Seward Park, required additional space. A new site will be selected upon completion of this building. All tools and equipment have been removed to Corlear's Hook Park as the cottage is being used for the park foreman.



A GARDEN IN JULY—SEWARD PARK
East Broadway and Jefferson Street

CHELSEA GARDEN is located at 28th Street and 9th Avenue, covering an area of about 30 feet by 150 feet. The garden was established in 1928 by request of the Hudson Guild. This is the smallest garden and has about 20 individual plots. It has no building or toolhouse, adjoining Park House being used. This garden only requires the part time services of one attendant, three times a week. A large flower bed has been installed and plots arranged so as to fit into the general park scheme. A new fence is required around the garden.

New borders were placed around the garden.

300 tulips were planted in the fall.

METHODS AND ACTIVITIES.

In order that there may be a clear understanding as to the scope and usefulness of the Children's School Farms, a paragraph or two of rhapsody so to speak, might not be amiss, before beginning the means and ways used to gain our objective.

City children are alienated from their human birth-right of trees, fields, and flowers. Encased amid bricks, stone, concrete, trolleys, trucks, and automobiles, the crowds of people in our streets are as giants to them and the blue sky overhead is seldom seen.

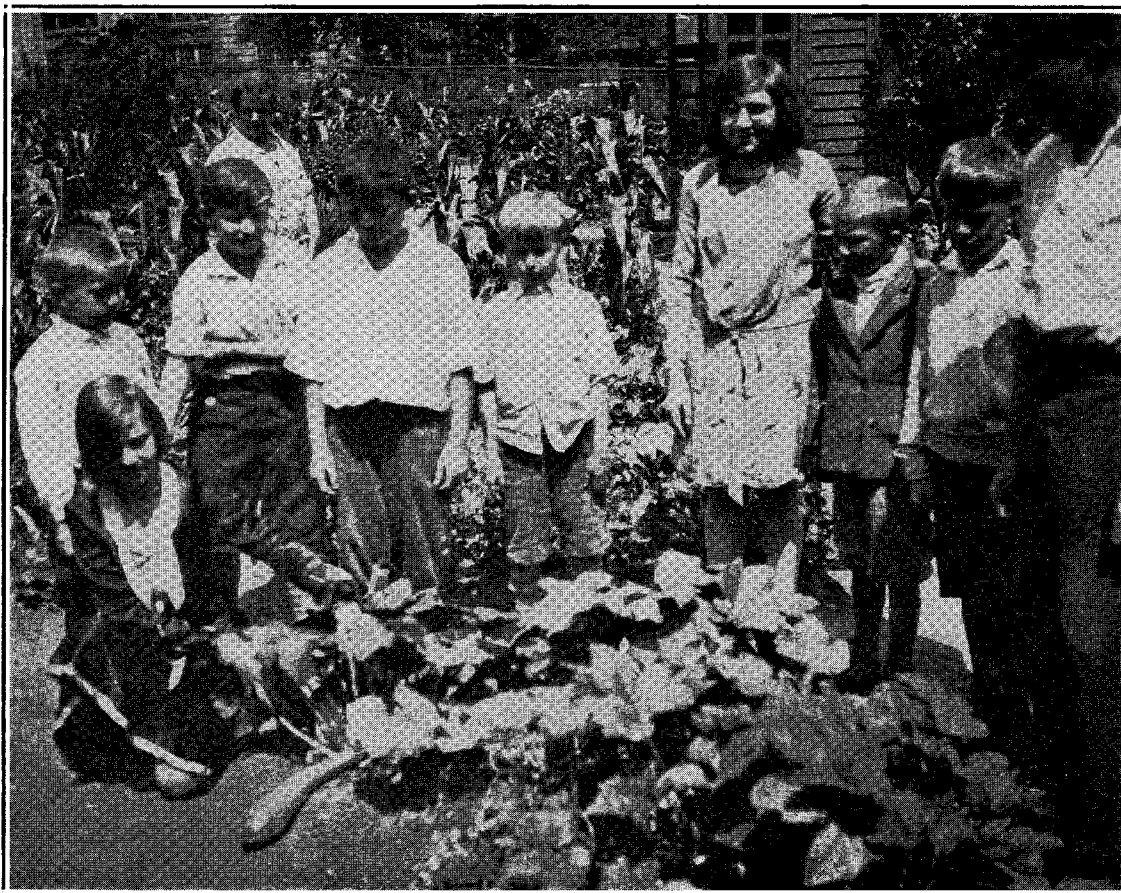
These conditions are making our children hard and unfeeling. Deprived of their natural lives, impelled by the restless energy of youth, they find mischief the only diversion possible and they become easy victims of vice and crime, for, as a well known writer has said, "sin is misdirected energy."

The Children's School Farms as conducted by the Department of Parks, are used as a means to show how willing and anxious children are to work, and to teach them, in a spirit of play, the care of public property, economy, honesty, concentration, and the love of nature, by opening to their minds, the little we know of her mysteries, more wonderful than any fairy tale.

The season is divided into two sessions, first, planting in May, harvesting in July. Second planting before August 1st, harvesting on October 15th.

MANAGEMENT.

The systematic method of assigning and planting which has been in practice for twenty-five years, has made it possible for the children to do more and more thorough work in preparing the ground under the expert supervision of the Bureau's Force. All the garden work is done entirely by the children. This work includes the preparation of soil in the spring, spading, raking, planting, cultivating, and for the harvesting season, the preparing and manuring of the ground.



A LESSON ON THE SQUASH—SEWARD PARK SCHOOL FARM
East Broadway and Jefferson Street

ASSIGNMENT OF PLOTS.

Cooperation with the Public, Parochial and Industrial Schools from which children come in classes on a regular schedule from April to June 30th, and from September to December. Upon entering the garden, slips are distributed, giving the procedure for the day, which is governed by weather conditions. During the vacation months, the attendance is voluntary, "first come, first served." A bulletin, posted in the garden, notifies the children of the time for registration. Different days are reserved for boys and for girls. Tags bearing their names and plot numbers are given to the children at registration.

MEMBERSHIP RULES.

The rules of the garden are Honesty, Truthfulness, Justice and Courtesy.

PLANTING.

Immediately following the registration, School Farm Attendants take groups of children to the lesson plot, where a model planting lesson is given. Seeds of seven different vegetables are distributed and sown, the furrows covered, and the little plots watered. This operation is continued until the entire garden is planted, which is accomplished by this method in a very short time. After the individual work is finished, other public or special work is assigned to children.

OBSERVATION PLOTS.

Decorative flower beds are included in the Farm Gardens, consisting of flowers and bedding plants. These are set out with careful arrangement of attractive colors. Other beds are set aside for observation and study. These are planted with Cotton, Tobacco, Wheat, Broom Corn, Flax, Hemp, etc. Such observation plots are usually located near the edge of the School Farm with descriptive signs turned outward to interest the adults of the neighborhood. The local schools are deeply interested in the observation plots.

RAKING AND CARING FOR PATHS.

The care of paths, if properly taught, can be the foundation of good road-making on a larger scale. Each individual plot owner is expected to care for the narrow paths surrounding his plot, but all of the individual plot owners must give their services toward keeping the wide paths of the garden in order. This teaches the child plot owner the duty of good citizenship and public service. In keeping up to a standard his own property and the property of the community, he acts like a tax payer in the city or country, who must give money or his services in keeping the community streets in order.

COURTESY EXTENDED.

The courtesy of the garden is extended to all schools, public, parochial and industrial, as well as to the exceptional child, whether he be deaf, dumb, blind or crippled, in the same manner as the courtesy extended by the Metropolitan Museum of Art and the Museum of Natural History.

VISITING CLASSES.

With the cordial cooperation of the school authorities, the gardens are used as a valuable laboratory, children other than plot owners coming in groups of four hundred an hour, three hours a day, during September and October, and here opportunity is afforded for them to see the sprouted seed, the grown plant, the raw material and the finished product of field and fibre crop.

LESSONS TAUGHT IN THE FARM GARDENS.

<i>Theoretical Talks</i>	<i>Practical Work</i>
Private care of public property	Theories put into excellent and noticeable practice in the work.
Citizenship. Attitude of the citizen of the garden toward the visitor to the garden. Individual rights vs. community rights. Power of co-operation. Dignity of labor.	
The Hoe—Its history and evolution	Used in every day work.
Spade	Spading and path making.
Spading Fork	Spading in manure, etc.
Rake	Raking garden and paths.
Sieve	Separating trash from soil.
Garden line—How to make straight lines, curves and angles. Tape-measure	Making paths and plots.
Wheelbarrows—Principles of loading and using	Wheelbarrows for wheeling manure, soil and rubbish.
Watering Can	Watering in sun and shade.
Hand weeding with hand weeder	Weeding and loosening the soil.
Trowel	Transplanting, and flower planting.
How to tie some useful knots	Used in flag raising, doing up bundles, putting up clothes lines, etc.
Soil. What it is. How it is made	Samples collected and different points noted and talked about, day after day in the children's own plots. Effect of different soil conditions noticed in growing plants. Soil testing experiments.
Some different kinds. What it supplies to plants. Cultivation of soil. Mulches and their uses. Soil drainage. Water in soil. Air in soil. Warmth in soil.	
Manure. What it is. Why we add it to garden soil	Draws and holds moisture.
Adds warmth and plant food. Carries weed seeds. Increases soil ventilation. Makes acids which break up materials from which come plant food.	A large quantity of manure was handled by the children. They wheeled it to each plot, spread it and spaded it in.
Seeds—Inside and outside	Besides regular planting of their plots, the seeds were dissected and sprouted for study.
How seeds are distributed by winds, insects, animals	Illustrations are given with burrs, apple seeds, dandelions, showing distribution, etc.

<p>Their composition</p> <p>Below ground—Roots. How they grow, how they differ from stems. Above ground stems. How they grow, how they differ from roots. Some over-ground roots.</p>	<p>Subjects for these talks were taken from children's plots, and weed plots, beets and grasses, etc.</p>
<p>Leaves</p> <p>The plant's stomach, lungs, and general laboratory. Color and how affected by light. Wilting, etc. Water in growing plants and where it got in. How much needed. What percentage. What else plants get from air. How much percentage. Proportion of plant which came from each, earth, air and water.</p>	<p>The information gained in these talks was fixed by observation in the daily garden work and by simple experiments.</p>
<p>Beans and Peas</p> <p>Watching for the blossoms. Watching for the pods. Discovery of the nodule on the roots. Story of the nodule.</p>	<p>Names of parts.</p>
<p>Air—What Is It?</p> <p>Mixture of gases. Names of gases.</p>	<p>Making windbreaks and shelters.</p>
<p>Carbon-dioxide</p> <p>Where it comes from. Use in plants. Oxygen and nitrogen. Organic impurities in air. How rain washes the air. How we protect ourselves from wind and why. Importance of air to animals and plants. How to keep cool on hot days.</p>	<p>Watering in the garden. Saving moisture by mulching. Ditching and raising plots to carry off water. Irrigation of the garden. Weeding to save water.</p>
<p>Sunlight—Color shown by prism</p> <p>Purifying power of sunlight. How sunlight affects health.</p>	<p>Using a smoked glass. Bleaching clothes by sunlight. Bleaching plants by darkness.</p>
<p>Warmth from sun</p>	<p>Thinning plants to get more sun.</p>
<p>How leaves make starch under sunlight</p> <p>How light affects color of leaves and children. Sunlight and air vs. washing.</p>	<p>Planting rows north and south to get more sunlight.</p>
<p>Insects—Friends and enemies</p> <p>Cabbage worm and butterfly. Plant lice, tomato worm and parasites. Lady bugs and larva and many others, captured and mounted for study. Flies and maggots.</p>	<p>Children learned to know a number of insects, and captured and killed a great number of enemies and when they learned of the use of the lady bug, they caught them on their own plots. Insectaries were made by the children, butterflies and caterpillars kept in them, fed and watched.</p>
<p>Value of gardens</p> <p>Market gardens.</p> <p>Geographical locations.</p> <p>Gardens for beauty.</p> <p>Back yard improvements.</p> <p>Window boxes.</p>	<p>Preparing seed bed. Planting seeds. Weeding. Transplanting lettuce. Making paths. Watering plots. Thinning vegetables. Spading, using wheelbarrows. Painting and numbering signs. Cutting grass. Laying sod, etc. The children did all the work, and the majority proved quite capable. Only enough was done by the instructors to get them started right.</p>

The Children's School Farms in Manhattan closed their 28th successful year on December 31st, 1929.

DEPARTMENT OF PARKS
BOROUGH OF MANHATTAN
IMPROVED PARKS

	AREA IN ACRES
Abingdon Square, Eighth avenue and Hudson street	0.222
Ahearn Park, Grand street and East Broadway	0.096
Battery Park, foot of Broadway	19.261
Beach Street Park, Beach street and West Broadway	0.040
Bowling Green, Broadway and Whitehall street	0.526
Bryant Park, Sixth avenue and Forty-second street	4.631
Central Park, Fifth to Eighth avenue, Fifty-ninth to One Hundred and Tenth street	840.010
Chelsea Park, Twenty-seventh to Twenty-eighth street, Ninth to Tenth avenue	3.103
Christopher Street Park, Christopher and West Fourth street	0.146
City Hall Park, Broadway and Chambers street	8.550
Colonial Park, One Hundred and Forty-fifth to One Hundred and Fifty-fifth street, Bradhurst to Edgecombe avenue	12.766
Columbus Park, Mulberry and Bayard street	2.568
Cooper Park, Third avenue and Seventh street	0.225
Corlear's Hook Park, Corlear's and South street	7.458
Dante Park, Broadway and Sixty-third street	0.142
Dewey Square, Triangle at Seventh avenue and One Hundred and Seventeenth street	0.074
DeWitt Clinton Park, Fifty-second to Fifty-fourth streets, North River	8.455
Donnellon Square, Triangle at St. Nicholas avenue and One Hundred and Fiftieth street	0.038
Duane Street Park, Duane and Hudson streets	0.115
Dyckman House Park, Broadway and Two Hundred and Fourth street	0.316
Greeley Square, Sixth avenue and Thirty-second street	0.139
Hamilton Fish Park, Houston and Willett streets	4.068
Hancock Square, St. Nicholas avenue and One Hundred and Twenty-third street	0.067
Harlem Lane Park, Seventh avenue and One Hundred and Fifty-third street	1.245
Herald Square, Sixth avenue and Thirty-fifth street	0.042
Hudson Park, Hudson and Leroy streets	1.665
Isham Park, Seaman avenue, Two Hundred and Fourteenth street and Broadway	8.796
Jackson Square, Eighth avenue and Horatio street	0.226
John Jay Park, Seventy-sixth to Seventy-eighth street, East River	3.009
Jeannette Park, Coenties slip and South street	0.709
Thomas Jefferson Park, One Hundred and Eleventh street, First avenue, One Hundred and Fourteenth street and Harlem river	15.534
Joan of Arc Park, Riverside Drive, Ninety-first to Ninety-fifth street	1.578
Kuyter Park, South approach Third Avenue Bridge	0.298
Lincoln Square, Broadway and Sixty-sixth street	0.051
Madison Square, Broadway and Twenty-third street	6.101
Manhattan Square, Central Park West, Seventy-seventh street to Eighty-first street	17.582
Mitchel Square, Broadway and 166th street to 168th street	0.319
Montefiori Park, Broadway and One Hundred and Thirty-eighth street	0.340
Morningside Park, One Hundred and Tenth street to One Hundred and Twenty-third street, between Columbus and Amsterdam avenues	30.495
Mount Morris Park, Mount Morris to Madison avenue, One Hundred and Twentieth to One Hundred and Twenty-fourth streets	20.131
John J. Murphy Park, bounded by Seventeenth and Eighteenth streets, Avenue C and East River	1.037
Park Avenue Parks, Park avenue, Thirty-fourth to Thirty-eighth streets, and Fiftieth to Ninety-sixth street	8.861
Plaza Lafayette, Riverside Drive and West One Hundred and Eighty-first street	0.092

Riverside Park and Drive, North River, Seventy-second to One Hundred and Twenty-ninth street	134.791
Riverside Drive Extension, One Hundred and Thirty-fifth to One Hundred and Fifty-eighth street	24.000
Roger Morris Park, Jumel terrace, Edgecombe Road, One Hundred and Sixtieth and One Hundred and Sixty-second streets	1.521
Rutgers Park, Rutgers slip and South street	0.453
Ryan Park, Second avenue and Forty-second street	0.180
St. Gabriel's Park, Thirty-fifth to Thirty-sixth streets, First to Second avenues	2.924
St. Nicholas Park, One Hundred and Thirtieth to One Hundred and Forty-first streets, St. Nicholas avenue to St. Nicholas terrace	20.219
Schiff Parkway, center of Delancey street from Bowery to Essex street	0.716
Carl Schurz Park, Eighty-fourth to Eighty-ninth streets, East River	10.341
William H. Seward Park, Canal and Jefferson streets	3.301
Sherman Square, Broadway and Seventieth street	0.001
Thomas F. Smith Park, West Twenty-third street and Eleventh avenue	1.849
Straus Park, Broadway and One Hundred and Sixth street	0.072
Stuyvesant Park, Rutherford place and Sixteenth street	4.229
Tompkins Square, Avenue A and Seventh street	10.152
Union Square, Broadway and Fourteenth street	3.433
Verdi Square, Triangle at Broadway and Seventy-third street	0.095
Washington Square, Fifth avenue and Waverly place	8.626

IMPROVED AND UNNAMED PARKS

	AREA IN ACRES
Dorrence Brook Sq., Triangle at St. Nicholas avenue and One Hundred and Thirty-seventh street	0.038
Triangle at Manhattan avenue and One Hundred and Fourteenth street	0.018
Parks, centre of Broadway, Sixtieth to One Hundred and Twenty-second street	7.306
Parks, center of Broadway, One Hundred and Thirty-fifth to One Hundred and Sixty-eighth street, total	3.337
Parks, center of Seventh avenue, One Hundred and Tenth street to Harlem River	1.679
Addition to Riverside Park, One Hundred and Twenty-second street, Riverside Drive to Claremont avenue	2.043
Parks at County Court House, Centre and Worth streets, Baxter and Pearl streets	1.450

UNIMPROVED PARKS

	AREA IN ACRES
Fort Washington Park, Fort Washington Point, Hudson River	123.850
High Bridge Park, One Hundred and Fifty-fifth street to Dyckman street, west of "the Harlem River Driveway," and from One Hundred and Fifty-fifth to One Hundred and Fifty-ninth streets, east of "the Harlem River Driveway" (includes McNally Plaza, One Hundred Eighty-first street and Washington Bridge)	103.026
St. Nicholas Park Extension at One Hundred and Thirtieth street	2.590
Isham Park, Two Hundred and Thirteenth street and Seaman avenue to Harlem Ship canal	9.797
Park at Inwood Hill	166.000
Gorman Memorial Park, Broadway, 190th street, Wadsworth Terrace	1.890

UNIMPROVED UNNAMED PARKS

	AREA IN ACRES
Extension of Riverside Park, New York Central and Hudson River Railroad to the bulkhead line of Hudson River, Seventy-second to One Hundred and Twenty-ninth street	48.215
West of Harlem River Driveway and north of High Bridge Park	50.013
Extension to Corlear's Hook Park, an extension southerly to the pierhead line	2.343

Park, east of Riverside Drive, about One Hundred and Ninetieth street	3.567
Triangle, One Hundred and Forty-third street and Hamilton place	0.001
Park, east of Riverside Drive, about One Hundred and Sixty-ninth to One Hundred and Seventy-seventh streets	1.494
Park at Fort Washington avenue, W. 183d street	2.096

LANDS ACQUIRED FOR PLAYGROUNDS

	AREA IN ACRES
J. Hood Wright Park, West 173d street, Haven avenue and Fort Washington avenue	6.600
Playground, Fifty-ninth to Sixtieth streets, west of Amsterdam avenue	0.579
Coleman Square Playground, Numbers One Hundred and Eighty to One Hundred and Eighty-four Cherry street	0.392
Yorkville Playground, south side One Hundred and First street, between Second and Third avenues	0.846
Carmansville Playground, One Hundred and Fifty-first and One Hundred and Fifty-second streets, east of Amsterdam avenue	0.142
St. Catherine Park Playground, west of First avenue, between Sixty-seventh and Sixty-eighth streets	1.383
Jasper Oval Playground, St. Nicholas Terrace and One Hundred and Thirty-sixth street	4.379
Playground, Hamilton place and One Hundred and Forty-first street	0.811
Playground, Market and Henry street	0.122
Playground, Downing street to Carmine street, west of Bleecker street	0.173
Playground, Thompson street, between Spring and Prince streets	0.165
Playground, Cherry street, between Gouverneur and Montgomery streets	0.454

LANDS OF OTHER CITY DEPARTMENTS USED BY THE DEPARTMENT OF PARKS AS PLAYGROUNDS

	AREA IN ACRES
Queensboro Bridge Playground, west of Sutton place, Fifty-ninth to Sixtieth streets	1.239
Additional Land at Carmansville Playground, One Hundred and Fifty-second street and Amsterdam avenue	0.432
Annunciation Park, Amsterdam avenue and One Hundred and Thirty-fourth street	1.670
Additional Land at Manhattan Bridge Anchorage, Cherry and Pike streets	

PARKWAYS, STREETS, AVENUES, ETC., UNDER THE JURISDICTION OF THE DEPARTMENT OF PARKS

	LENGTH IN FEET	WIDTH IN FEET
Harlem River driveway	11,562	100 to 150
Morningside Drive	3,538	90
Riverside Drive	17,000	90 to 168
Riverside Drive Extension, One Hundred and Thirty-fourth to One Hundred and Fifty-eighth street	6,800	

FINANCIAL STATEMENT

REVENUES—1929.

Fees for Privileges	\$83,119.28
Fees for Motion Picture Taking	65.00
Fees for Still Picture Taking	257.00
Damage to Departmental Property (Collections)	150.00
Zoological Garden Fund (Collections)	1,523.10
Interest on Bank Deposits	118.55
Deposits for Tree Planting	390.00
Deposits for Street Openings, etc.	825.00
Fees for Overhead Sheds	98.00
Fees for Deposit of Fill	10,000.00
Auction Sale of Scrap Iron	315.00
Fees for Lawn Tennis Permits	7,416.00
Inspection Fees	36.00

Total Collections, Year 1929 \$104,312.93

Amount remitted to Chamberlain, City of New York \$104,312.93

DEPOSITS ON HAND

On Account of Employees' Badges:			
On hand December 31, 1928	\$994.35		
Receipts	187.50	\$1,181.85	
Refunds		24.70	
On Hand December 31, 1929			\$1,157.15
On Account of Attendants' Badges:			
On hand December 31, 1928	\$64.10		
On hand December 31, 1929			64.10
On Account of License Tags:			
On hand December 31, 1928	\$290.00		
On hand December 31, 1929			290.00
On Account of Foremans' Badges:			
On hand December 31, 1928	\$45.25		
Receipts	5.00	\$50.25	
Refunds		2.50	47.75
Total on Deposit, December 31, 1929			<u>\$1,359.00</u>

PERSONAL SERVICE

Code No.		Appropriations		Unexpended
1929	Title of Account	As Adjusted	Expenditures	Balance
1100	Salaries, Regular Employees, Park Board	\$61,240.00	\$60,490.00	\$750.00
1110	Salaries, Regular Employees, Administration	89,661.34	88,836.37	824.97
1111	Salaries, Regular Employees, Parks and Boulevards	214,249.79	213,417.72	832.07
1112	Salaries, Regular Employees, Playgrounds and Children's School Farms	91,665.00	91,265.76	399.24
1113	Salaries, Regular Employees, Menagerie	18,606.66	18,606.66	.....
1114	Salaries, Regular Employees, Dyckman House and Jumel Mansion ..	5,685.00	5,684.63	.37
1115	Salaries, Temporary Employees, Attendants	15,125.00	15,124.30	.70
1116	Wages, Regular Employees, Jumel Mansion	3,832.50	3,727.50	105.00
1117	Wages, Temporary Employees, Parks and Boulevards	1,253,227.50	1,214,039.21	39,188.29
1118	Wages, Temporary Employees, Restoration of Parks	18,878.50	18,878.50	.....
1119	Wages, Temporary Employees, Maintenance of Riverside Drive, 158th Street to Dyckman Street ..	18,425.00	17,357.87	1,067.13
1120	Wages, Temporary Employees, Playgrounds and Children's School Farms	45,040.00	45,006.00	34.00
		\$1,835,636.29	\$1,792,434.52	\$43,201.77

DEPARTMENT OF PARKS, MANHATTAN.

STATEMENT OF THE CONDITION OF TAX NOTE, CORPORATE STOCK AND SPECIAL REVENUE BOND ACCOUNTS, AS AT DECEMBER
31, 1929.

Code No.	Title of Accounts	Appropriations as Adjusted	Expenditures	Unexpended Balances	Net Reserve for Contracts	Net Reserve for Open Market Orders and Miscellaneous Invoices	Net Reserve for Pay Rolls	Total Net Encumbrances	Unencumbered Balances
N. D. P.									
3X	American Museum of Natural History	\$1,036.35	\$1,008.15	\$28.20					\$28.20
3Y	American Museum of Natural History	25,000.00	22,422.75	2,577.25	\$2,294.00	\$75.60		\$2,369.60	207.65
3Z	American Museum of Natural History	4,600.00	4,365.31	234.69					234.69
3-1	American Museum of Natural History	14,000.00	11,239.88	2,760.12					2,760.12
3-2	American Museum of Natural History	5,000.00	4,628.50	371.50					371.50
3-3	American Museum of Natural History	2,500.00	1,855.88	644.12					644.12
3-4	American Museum of Natural History	64,600.00	34,949.70	8,604.47	7,731.00	73.00		78.04	800.47
3-6	American Museum of Natural History	10,500.00	873.65	9,626.35		982.70	\$5,700.00	6,752.70	2,873.65
3-7	American Museum of Natural History	10,000.00		10,000.00					10,000.00
3-8	American Museum of Natural History	89,800.00	39,949.70	54,850.30	14,705.00	1,051.67	19,808.50	35,566.17	19,284.13
4-d	New York Aquarium	60,000.00		60,000.00					60,000.00
4-e	Parapet Wall—Battery Park	5,000.00	2,470.50	2,529.50	2,529.50			2,529.50	
4-f	Battery Park—Construction of Permanent Roadway	25,000.00		25,000.00					25,000.00
75-e	Improvement of Highbridge Playground	18,000.00	12,566.76	5,443.24					5,443.24
75-g	Improvement of Highbridge Park (New Walks)	50,000.00	11,245.77	38,754.23					38,754.23
75-h	Highbridge Park—Construction and Im- proving Playgrounds	40,000.00	477.50	39,522.50					39,522.50
75-j	Harlem River Parkway—General Improve- ment	30,000.00		30,000.00					30,000.00
102-a	Improvement of Inwood and Fort Washing- ton Parks	100,000.00	96,223.57	3,776.43	1,687.30			1,687.30	2,089.13
102-b	Inwood Hill Park—Demolition of Buildings and Construction of New Trails	50,000.00		50,000.00					50,000.00
102-c	Fort Washington Park, Construction of Field House for Tennis Courts	25,000.00		25,000.00					25,000.00
105	Washington Square Park, Construction of Comfort Station	24,825.41	24,729.81	95.60				95.60	
106-a	Rehabilitation, Riverside Park	164,500.00	147,107.56	17,392.44		993.50		993.50	16,398.94
107-a	Improvement of Broadway Plots	122,000.00	24,370.77	97,629.23					97,629.23
108-a	Benches, Riverside Drive, 161-165th Streets	3,060.00	2,649.60	410.40					410.40
109-a	Fencing and Improving Small Parks	31,200.00	290.00	30,910.00					30,910.00
110-a	Enlarging and Improving Carl Schurz Park	23,000.00	8,318.98	14,681.02	1,474.00			1,474.00	13,207.02
113	Retaining Walls, Central Park	17,000.00	16,999.95	.05					.05
113-a	Rehabilitation, Central Park	967,037.33	791,256.31	175,781.02	38,345.08	3,911.92		42,257.00	133,523.98
113-b	Removal—Dead Trees	40,367.20	39,568.00	799.20					799.20
113-c	Merkel Contract	5,000.00	3,700.00	1,300.00	1,300.00			1,300.00	
113-d	Repaving Park Drives, Central Park	25,000.00		25,000.00	6,842.50			6,842.50	18,157.50

DEPARTMENT OF PARKS, MANHATTAN.

STATEMENT OF THE CONDITION OF TAX NOTE, CORPORATE STOCK AND SPECIAL REVENUE BOND ACCOUNTS, AS AT DECEMBER

31, 1929—Continued.

Code No.	Title of Accounts	Appropriations as Adjusted	Expenditures	Balances Unexpended	for Contracts Net Reserve	Net Reserve for Open Market Orders and Invoices Miscellaneous	Net Pay Rolls Reserve for	Encumbrances Total Net	Balances Unencumbered
N. D. P.									
113-e	Reconstruction, South Reservoir	100,000.00		100,000.00					100,000.00
115	Retaining Wall, Fort Washington	148,500.00	34,743.62	113,756.38					113,756.38
116	Fence, Harlem River Driveway	5,000.00	4,720.88	279.12					279.12
117	Fence, Hudson and Queensboro Playgrounds	7,000.00	5,289.00	1,711.00		989.00		989.00	722.00
118	Comfort Station, Colonial Park	9,950.00	4,758.30	5,191.70	5,191.70			5,191.70	
121-a	Metropolitan Museum of Art	20,000.00	7,356.66	12,643.34		6,313.92	2,350.04	8,663.96	3,979.38
121-b	Metropolitan Museum of Art	30,000.00	19,531.48	10,468.52		1,600.52	7,879.36	9,479.88	988.64
121-c	Metropolitan Museum of Art	10,000.00	4,514.80	5,485.20		44.70	3,989.89	4,034.59	1,450.61
122	Reconstructing Site of City Court House	5,000.00	2,780.01	2,219.99				2,219.99	
123	Paving Walks in Other Than Central Park	25,000.00		25,000.00					25,000.00
124	De Witt Clinton Park, Pergola	30,000.00		30,000.00					30,000.00
124-a	Wading Pools, Various Parks	50,000.00	1,660.00	48,340.00					48,340.00
124-b	De Witt Clinton Park, Running Track, etc.	8,000.00		8,000.00					8,000.00
125	Rehabilitation, Morningside Park	50,000.00	1,000.79	48,999.21					48,999.21
126	Mt. Morris Park, Construction of Play- ground, etc.	110,000.00		110,000.00					110,000.00
127	Madison Square Park, Rehabilitation	50,000.00		50,000.00					50,000.00
128	Union Square Park, General Improvement	125,000.00		125,000.00					125,000.00
129	St. Nicholas Park—Stairway	25,000.00	2,650.00	22,350.00					22,350.00
129-a	St. Nicholas Terrace—Playground	40,000.00		40,000.00					40,000.00
129-b	St. Nicholas Playground, Field House	8,000.00		8,000.00					8,000.00
130	Improving Park at 155th Street, Edge- combe Avenue	4,000.00		4,000.00					4,000.00
131	Union Square Park, Removal of Monuments	30,000.00	220.00	29,780.00					29,780.00
132	Jasper Oval, New Field House, etc.	45,500.00		45,500.00					45,500.00
133	Hudson Park, Improvement of Playground	10,000.00		10,000.00					10,000.00
134	Thomas Jefferson Park, Improvement of Playground	15,000.00		15,000.00					15,000.00
135	Hamilton Fish Park, Improvement of Play- ground	5,300.00		5,300.00					5,300.00
136	Tompkins Square Park, Resurfacing Play- grounds	3,000.00		3,000.00					3,000.00
136-a	Tompkins Square Park, Enlarging Boys' Playgrounds	30,000.00		30,000.00					30,000.00
137	Stuyvesant Park, Lowering of Sidewalk	5,000.00		5,000.00					5,000.00
138	189th Street Highbridge Park, Field House	8,000.00		8,000.00					8,000.00
		\$3,111,276.29	\$1,408,529.97	\$1,702,746.32	\$82,195.68	\$16,036.53	\$39,798.79	\$138,031.00	\$1,564,715.28

DEPARTMENT OF PARKS, MANHATTAN.

STATEMENT OF THE CONDITION OF TAX NOTE, CORPORATE STO K AND SPECIAL REVENUE BOND ACCOUNTS, AS AT DECEMBER

31, 1929—Continued.

Code No.	Title of Accounts	Appropriations as Adjusted	Expenditures	Unexpended Balances	Net Reserve for Contracts	Net Reserve for Open Market Orders and Miscellaneous Invoices	Net Reserve for Pay Rolls	Total Net Encumbrances	Unencumbered Balances
C. D. P.									
3-5	American Museum of Natural History	\$150,000.00	\$74,719.58	\$75,281.42	\$51,770.62	.....	.....	\$51,770.62	\$23,510.80
118	Metropolitan Museum of Art	71,000.00	70,666.47	333.53	.....	\$250.80	.....	250.80	82.73
118-a	Metropolitan Museum of Art	11,000.00	10,343.72	656.28	136.60	.....	\$400.00	536.60	119.68
118-b	Metropolitan Museum of Art	46,000.00	.....	46,000.00	23,979.00	528.00	.....	24,507.00	21,493.00
118-c	Metropolitan Museum of Art	4,000.00	669.73	3,330.27	2,331.72	276.16	.....	2,607.88	722.39
119	Metropolitan Museum of Art	20,000.00	10,842.07	9,157.93	649.00	930.78	6,474.56	8,054.34	1,103.59
120	Metropolitan Museum of Art	9,000.00	4,870.38	4,129.62	.....	228.00	398.62	626.62	3,503.00
121	Tennis House, C/S Central Park	65,200.00	37,634.50	27,565.50	20,098.00	.....	.....	20,098.00	7,467.50
121-a	Tennis House, C/S Central Park	18,800.00	3,240.00	15,560.00	9,803.00	.....	.....	9,803.00	5,757.00
122	American Museum of Natural History	1,500,000.00	12,000.00	1,488,000.00	.....	.....	.....	.....	1,488,000.00
123	American Museum of Natural History	136,500.00	.....	136,500.00	.....	.....	.....	.....	136,500.00
123-a	American Museum of Natural History	572,500.00	.....	572,500.00	572,500.00	.....	.....	572,500.00	.....
123-b	American Museum of Natural History	240,000.00	.....	240,000.00	240,000.00	.....	.....	240,000.00	.....
123-c	American Museum of Natural History	58,000.00	.....	58,000.00	54,894.00	.....	.....	54,894.00	3,106.00
123-d	American Museum of Natural History	444,000.00	.....	440,000.00	444,000.00	.....	.....	440,000.00	.....
123-e	American Museum of Natural History	199,000.00	.....	199,000.00	199,000.00	.....	.....	199,000.00	.....
124	Metropolitan Museum of Art	75,000.00	.....	75,000.00	.....	.....	.....	.....	75,000.00
125	Metropolitan Museum of Art	35,000.00	.....	35,000.00	.....	.....	.....	.....	35,000.00
		\$3,655,000.00	\$224,985.45	\$3,430,014.55	\$1,619,161.94	\$2,213.74	\$7,273.18	\$1,628,648.86	\$1,801,365.69
R. D. P.									
24	Soldiers and Sailors Monument	\$25,000.00	\$17,166.16	\$7,833.84	\$130.84	.....	.....	\$130.84	\$7,703.00
28	Repairs to Gracie Mansion	9,776.50	.....	9,776.50	.....	.....	.....	.....	9,776.50
29	Purchase of Hippopotamus	6,500.00	.....	6,500.00	.....	\$5,000.00	.....	.....	1,500.00
		\$41,276.50	\$17,166.16	\$24,110.34	\$130.84	\$5,000.00	.....	\$130.84	\$18,979.50

BUREAU OF AUDIT.
STATEMENT OF THE CONDITION AS AT THE CLOSE OF BUSINESS DECEMBER 31, 1929, OF ALL APPROPRIATION ACCOUNTS FOR THE CURRENT YEAR.

Code No. 1929	Title of Account. Accounts Other Than Personal Service.	Appropriations as Adjusted	Total Expenditures	Unexpended Balances	Net Reserve for Contracts	Net Reserve for Open Market Orders and Miscellaneous Invoices	Total Net Encumbrances	Unencumbered Balances
1101	Park Board, Contingencies	\$1,725.00	\$136.00	\$1,589.00		\$8.66	\$8.66	\$1,580.34
1121	Forage and Veterinary Supplies	30,000.00	26,374.98	3,625.02	982.44	1,863.13	2,845.57	779.45
1122	Fuel Supplies	17,800.00	9,769.38	8,030.62	7,412.79	22.60	7,435.39	595.23
1123	Office Supplies	2,500.00	2,305.33	194.67		69.07	69.07	125.60
1124	Medical and Surgical Supplies	125.00	113.70	11.30		11.25	11.25	.05
1125	Motor Vehicle Supplies	5,190.00	5,045.09	144.91	36.01	59.80	95.81	49.10
1126	Cleaning and Disinfecting Supplies	1,300.00	1,219.23	80.77		28.04	28.04	52.73
1127	Recreation Supplies	500.00	285.49	214.51		211.65	211.65	2.86
1128	Botanical and Agricultural Supplies	26,900.00	22,094.24	4,805.76	4,344.12	4,344.12	4,344.12	461.64
1129	General Plant Supplies	6,500.00	6,063.59	436.41		245.31	245.31	191.10
1130	Office Equipment	475.00	430.73	44.27		5.25	5.25	39.02
1131	Motor Vehicle Equipment	7,200.00	6,303.39	896.61		338.18	338.18	558.43
1132	Recreational Equipment	10,000.00	7,820.03	2,179.97		2,179.92	2,179.92	.05
1133	General Plant Equipment	18,225.00	14,994.53	3,230.47	1,746.00	621.37	2,367.37	863.10
1134	Live Stock	900.00	828.00	72.00				72.00
1135	General Plant Materials	43,200.00	39,225.90	3,974.10		3,887.30	3,887.30	86.80
1136	Repairs to Roadways and Pavements	25,000.00	24,275.18	724.82		631.15	631.15	93.67
1137	Repairs to Walks	15,000.00	9,324.61	5,675.39	3,400.00	632.25	4,032.25	1,643.14
1138	Other Repairs	60,950.00	37,081.92	23,868.08	15,306.02	5,973.34	21,279.36	2,588.72
1139	Motor Vehicle Repairs	900.00	749.84	150.16		43.08	43.08	107.08
1140	Shoeing and Boarding of Horses, Including Veterinary Service	1,100.00	1,089.50	10.50		49.00	49.00	38.50
1141	Carfare	1,400.00	1,398.36	1.64				1.64
1142	Telephone Service	3,000.00	2,999.43	.57				.57
1143	General Plant Service	800.00	525.00	275.00		101.00	101.00	174.00
1144	Music	36,768.00	36,633.00	135.00		135.00	135.00	
1145	Contingencies	260.00	242.19	17.81				17.81
1180	Grant's Tomb—Contract or Open Order Service	7,000.00		7,000.00				7,000.00
1186	N. Y. Public Library—General Maintenance	65,000.00	52,768.21	12,231.79				12,231.79
1187	N. Y. Public Library—Special Repairs	28,500.00	21,672.86	6,287.14				6,827.14
1190	Metropolitan Museum of Art—Personal Service	310,766.00	284,573.79	26,192.21				26,192.21
1191	Metropolitan Museum of Art—Personal Service	67,500.00	67,500.00					
1192	Metropolitan Museum of Art—Other Than Personal Service	99,150.00	94,351.03	4,798.97				4,797.98
1193	N. Y. Aquarium—Personal Service	52,892.00	48,488.29	4,403.71				4,403.71
1196	N. Y. Aquarium—Supplies	9,690.00	6,483.26	3,206.74				3,206.74
1197	N. Y. Aquarium—Equipment	2,875.00	1,912.10	962.90				962.90
1198	N. Y. Aquarium—Materials	2,800.00	1,792.52	1,000.48				1,000.48
1199	N. Y. Aquarium—Contract or Open Order Service	2,750.00	1,552.48	1,197.52				1,197.52
1200	N. Y. Aquarium—Contingencies	225.00	90.44	134.56				134.56
1205	American Museum of Natural History—Personal Service	398,676.16	366,188.03	32,488.13				32,488.13
1206	American Museum of Natural History—Other Than Personal Service	68,296.50	67,565.72	730.78				730.78
3067		6,500.00	6,477.96	22.04				22.04
		\$1,440,338.66	\$1,278,752.33	\$161,586.33	\$28,883.26	\$21,460.47	\$50,343.73	\$111,319.60