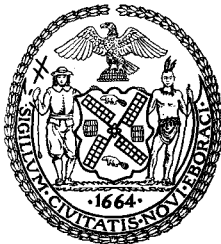


TWENTY-THIRD ANNUAL REPORT
OF THE
DEPARTMENT OF PARKS
OF THE
BOROUGH OF BROOKLYN
CITY OF NEW YORK
FOR THE YEAR 1920
BEING
THE SIXTIETH ANNUAL REPORT
OF THE
OLD CITY (NEW BOROUGH) OF BROOKLYN



JOHN N. HARMAN, Commissioner

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Superintendent

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Supervisor of Recreation

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**OFFICE OF
DEPARTMENT OF PARKS
BOROUGH OF BROOKLYN.**

December 31, 1920.

HON. JOHN F. HYLAN,
Mayor of the City of New York.

SIR—In compliance with the provisions of the Charter, I send you herewith the report of the work undertaken and accomplished in this Department for the year 1920.

I have the honor to remain,

Very truly yours,

JOHN N. HARMAN,
Commissioner.

INTRODUCTION

The Year will be notable in the history of Brooklyn's parks for the great number of permanent memorials of beautiful design and workmanship, that have been presented to the City, erected in Prospect Park and the smaller parks and dedicated to Brooklyn's brave citizens who sacrificed their lives to the great World War. The monuments which have enhanced the beauty of the parks are all of durable character, made of granite, marble and bronze. The sites were selected carefully by special committees, and the designs and locations were approved by the Landscape Architect of the Department and by the Art Commission; thereby not alone providing for proper settings and locations of the statues, but also for conformity with present and future development of the park system. The grounds bordering the memorials have been landscaped and embellished, with suitable fences, young trees, shrubbery, plants and lawn areas. The most beautiful and imposing of all monuments erected within the Greater City, if not in the entire country, is the magnificent pink granite memorial with bronze name plate panels, finished with steps, altar, statues and ornamental brick pavement approach, erected in the large concourse of Prospect Park, on the edge of the lake, adjacent to the formal flower garden.

The most important accomplishment during the year was completion of part of the permanent pavement program for parkways. This work—the proper paving of spacious grass-bordered and tree-lined drives and park roads, of large mileage and good widths, had been made conspicuous by neglect. The road beds and surface pavements on nearly all important roads, were, at the beginning of this administration of the same antiquated character—broken stone and gravel—which existed prior to the advent of the automobile. Pace had not been kept with vehicular progress in roadway improvements, so that during hot weather or long wet periods, the surface of old pavements became so bad as to make them not alone unfit for satisfactory use, but at times practically impassable. This condition prevented the automobiling public from enjoying Brooklyn's beautiful and picturesque parks and parkways, and caused great waste of funds in continually repairing.

The first permanent pavement was laid in Prospect Park. It is a standard heavy traffic sheet asphalt pavement, three inches in depth, on a six-inch Portland cement concrete foundation, and was laid from the main entrance at the Plaza for the entire length of the East Drive to the Lincoln road entrance.

Permanent pavements also were constructed on the inner circumferential roadway of Park Circle at the beginning of Ocean Parkway, and on Ocean Parkway traffic road, from Kings Highway to Avenue "W."

The first section of permanent pavement on the main roadway of Ocean Parkway, from Park Circle to Avenue "W," will be constructed next year, the plans for which have already been started. Nearly one-half million dollars has been expended on permanent pavements this year, and arrangements now made for next year's work involve approximately one and a half million dollars.

Prospect Park and the smaller parks and playgrounds were well and satisfactorily maintained and were kept clean and free from paper and rubbish. The trees and shrubs were regularly cultivated and pruned; dead trees were removed and new trees and shrubbery plantations set out. While considerable progress was made, a very great amount of reforestation work remains to be done before the parks and parkways will have been again sufficiently replanted.

The horticultural work reflected itself in the very fine appearance of the greenhouses during the show seasons and in the formal flower garden, the old fashioned garden, the rose garden and vale of cashmere, as well as in the flower beds and floral plantations in Prospect Park and the outside parks; all of which were exceptionally luxurious in display.

The Mechanical Division completed a very full year's work. The Coney Island Bridge was reconstructed; a great number of shelters and comfort stations were re-roofed, generally repaired and painted inside and out; the rustic fences and bridges and exterior and interior iron fences were repaired and painted as required. The proper and timely repair of all structures, water supply and drainage systems, fixtures, equipment, etc., by the mechanical forces was made a special feature and given preference over new work and improvements. This resulted in a very much better appearance of the premises and a large saving in funds.

Recreational activity again advanced. City Park, at Navy street and Flushing avenue was reconstructed as a combined park and playground, upon it being vacated by the Navy Department, which occupied it for barracks buildings during the war. The playground design makes it one of the department's most used and up-to-date playfields. It comprises two fully equipped playgrounds, each one square block, and an athletic field that is flooded in the winter season for skating, bordered by an eighth mile running track. The park and playground were constructed by the department's forces and the first section opened on July 4th.

Music was again provided in the parks during the season and enjoyed by ever-increasing numbers.

The model farm gardens at Betsy Head, McCarren Park and Highland Park were in great demand, and were well cared for by amateur gardeners and farmers, small boys and girls, who were rewarded by an exceptionally fine harvest.

Tennis, baseball, golf, hockey and all outdoor games and field sports continually are being forwarded by our Recreation Department and ever increasingly taken up by the public; so much so that our present limited play areas are overcrowded and new playgrounds urgently needed.

A miniature nine-hole golf course was constructed on the peninsula in Prospect Park, to the great enjoyment of those desiring a nearby place for practice on the putting greens and for careful driving.

In the late Fall construction work was started on the entire menagerie section of Prospect Park. This part of the park was never completed and for years had been in poor condition. It is expected that by the Spring of next year the entire section will have been brought to a condition in keeping with the rest of the park. The work is extensive and will comprise general landscaping, road, walk and retaining wall building, as well as general repairing and painting of all existing structures and fences.

Park Department maintenance operations were carried out during 1920 with a decreased force and with less materials and supplies than heretofore. This situation has been overcome to a great extent by rigid economy and cooperation of the working forces, which accounts for the satisfactory condition and appearance of the park properties.

RECREATIONAL REPORTS

The facilities for active recreation in the Brooklyn parks were used very extensively. A summation of activities shows that this has been the most successful year the recreation bureau has ever experienced.

Our department today ranks amongst the leaders as promoters of outdoor sports for the general public. Few cities in the country carry on as diversified a program. Summer and winter sports were encouraged. Our facilities provided opportunities for recreation for practically all persons from babyhood to old age. Small swings and sand pits are provided for babies. Large swings, slides, and see-saws are in our playgrounds for the youngsters. Equipment for the more strenuous games, basket ball, baseball, and athletics are provided for the adults, while croquet, bowling on the green, and band concerts are enjoyed by those of matured years.

Outdoor recreation is taking a very rapid forward step. Many citizens are following the lead of our municipality and are building private tennis courts adjacent to their homes. In some sections individuals have found it profitable to build private courts and rent them for fifty cents an hour. About one hundred of these private courts have been built in Brooklyn. Some of these courts are converted into skating rinks in the winter.

Many baseball clubs have their own fields which are patronized by hundreds of spectators. Some clubs charge a small admission, others sell score cards or take up collections at the fields to defray expenses. These factors indicate that the public is becoming more interested in recreation and outdoor sports.

Our recreation system in Brooklyn has met with strong public favor. Citizens in the vicinity of our playgrounds willingly have cooperated with our playground instructors. The newspapers have been very generous in announcing and reporting our activities and one of our local papers printed an entire page of photographs in their Art Gravure section on four different occasions showing the Historical Pageant given by playground children on Long Meadow; and others showing our croquet ground, bowling on the green and views of Betsy Head Playground.

The Rotary Club of Brooklyn, composed of many of our most progressive and influential business men, took a very unusual interest in our work and contributed about \$400 for medals for the Boys Spring and Fall Athletic Championships, and the Summer Playground Base Ball Tournament.

Facilities for Active Recreation.

Parks—

Name.	Location.	Description.	Acreage
Amersfort	Ave. J., E. 38th St.....	Tennis .....	.50
Bay Ridge Parkway.....	6th Ave. and 67th St.....	Hockey Field .....	....
Betsy Head Playground..	Blake, Hopkinson and Du- mont Aves.	Girls' Playground with wading basin; Boys' Athletic Field and Track, Tennis Courts, Shower Baths and Swimming Pool	10.50
Bushwick Playground ...	Putnam, Irving and Knick- erbocker	Boys' and Girls' Playground Wading Pool	2.80
City Park	Flushing Ave.	Boys' and Girls' Playground Athletic Field and Track...	7.50
Cooper Park	Maspeth Ave. and Olive St.	Tennis Courts .....	.15
Dreamland Beach	Coney Island	Bathing Beach — Children's Day Camp	14.71
Fort Greene Park.....	Myrtle Ave. and St. Ed- wards St.	Boys' and Girls' Playground..	3.00
Highland Park	Jamaica Ave. and Cleve- land St.	Tennis Courts, Baseball, Foot- ball Field	18.50
McCarren Park	Lorimer St. and Driggs Ave.	Boys' Playground, Athletic Field and Track, Girls' Play- ground and Social Centre, Tennis Courts, Baseball Dia- monds, Football Fields.....	38.42
McKibbin Playground ...	McKibbin, Siegel and White Sts.	Boys' and Girls' Playground, Baseball Field	1.37
McKinley Park	7th Ave. and 76th St....	Baseball and Football Field, Tennis Courts	3.00
McLaughlin Playground..	Jay, Bridge and Tillary Sts.	Boys' and Girls' Playgrounds..	3.30
New Lots Playground....	Sackman and Christopher Sts.	Boys' and Girls' Playgrounds..	2.29
Prospect Park	Cross Country Course...	.....	3 Mile
	Croquet Field .....	.....	12.50
	Hockey Field .....	.....	8.00
	Picnic Grounds .....	.....	10.00
	Tennis Courts .....	.....	34.00
	Bridle Path .....	.....	3.7 Mile
	Lakes	Boating and Skating.....	62.00
	Parade Grounds	Baseball Diamonds	39.50
	Coney Island	Bowling on the Green.....	....
	Parkside Ave.	Cricket Fields .....	....
		Football Fields .....	....
Red Hook Playground...	Dwight, Richards Boys' and Girls' Playground..	.....	2.29
Sunset Park	5th Ave. and 44th St....	Tennis Courts .....	.20
Williamsburg Playground	So. 5th St. and Wythe Ave.	Boys' and Girls' Playgrounds..	2.00

Playground Operated on Property Loaned to Department—

Name.	Location.	Description.	Acreage
Bushwick H. S. Athletic Field	Putnam, Irving and Knick- erbocker Aves.	Baseball and Football Field...

Recreation Pier—

Metropolitan Ave.	Foot of Metropolitan Ave.
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Children's Farm Gardens—

Betsy Head Playground..	Blake, Hopkinson and Du- mont Aves.
McCarren Park	Lorimer St. and Driggs Ave. ....	.....	....
Highland Park	Jamaica Ave. and Cleve- land St. ....	.....	....
Fort Greene Park.....	Myrtle Ave. and St. Ed- wards St. ....	.....	....

Staff.

The activities of the Recreation Bureau were carried on by a staff consisting of a Supervisor of Recreation and eighteen permanent playleaders. During the Spring and Summer fifty-four additional temporary playleaders were employed.

The Children's Farm Gardens were operated by two Farm Garden Directors, and six School Farm Attendants. Three Swimming Instructors were assigned to the outdoor swimming pool at Betsy Head Playground.

A word of appreciation must be given to our Staff for the interest they displayed in their work, and for the wholehearted manner and excellent spirit with which they carried out instructions and suggestions.

The playleaders are the most important cog in the wheel that operates the playgrounds, and without competent playleaders our plans would fail. A trained and experienced playleader always will have an active and well-attended playground while nothing will tend to make a playground deteriorate faster than a poor playleader. This also applies to our farm garden and swimming pool employees.

Some of our playleaders have been in the work for a long time and a few, up to a few years ago, worked for about ten years without an advance in salary. This system, of course, was not conducive to securing good results, and during this period many excellent playleaders resigned from the department because they felt that there was no chance for further advancement.

This condition has been better the past few years. The Municipal Civil Service Commission requires that applicants for playleader's position possess a high school education, or its equivalent, and that they pass a somewhat difficult examination. Yet the playleaders have not been paid any higher salaries than the average worker in the department.

The City has thousands of dollars invested in playgrounds and our aim is for them to be used by the largest possible number of people. The best way to accomplish this result is to attract most efficient playleaders to our department, which can be done by continuing to reward those who have given faithful service and by increasing salaries so that the position will be attractive enough to induce the best talent available to take the examinations.

Supplies and Equipment.

A generous appropriation permitted us to have all playgrounds furnished with sufficient supplies and equipment. An inventory showing equipment on hand in each playground will be found in this report. A good supply of materials is very necessary and helps considerably to keep the children in the playgrounds. A considerable amount of playground equipment was made at our shops early in the year, which included jumping ropes, hurdles, approach boards, wooden bases and kindergarten tables and benches.

Apparatus.

A chart showing the large quantity of apparatus in use in our playgrounds will be found in another section. Nearly all apparatus was kept in good repair by our mechanics, notwithstanding the constant use.

The Board of Education transferred to this department, through the Sinking Fund Commission, one climbing outfit, one swinging outfit, one horizontal ladder, and a number of giant strides and garden swings, which were used to advantage.

Additional Play Space.

City Park, used by the Navy Department, was turned back to this department, and put into operation on July 5th. Baby swings, garden swings, see-saws and basketball backstops, were made at the department shops and erected at the playground. New steel frame apparatus will be purchased early next year and when it is erected City Park will be one of our best equipped playgrounds.

Previous to turning this park over to the Navy Department but one plot was used for a playground. The park had to be remodeled entirely after our department retook possession, and it was decided, after careful study, to devote three plots entirely for playground purposes, viz.: the plot facing St. Edwards street to be used for girls' playground; the plot facing Park avenue, for boys' playground; and the plot facing Navy street, for a 220-yard running track and athletic field. The remaining plot facing Flushing avenue to be used for a park. The enclosure of the remaining track was built so that it could be flooded for ice skating in winter. The very large attendance of children at this playground has justified fully the wisdom of furnishing a larger area.

Athletics.

Brooklyn is the only borough in the Greater City that can boast of three quarter-mile running tracks. One is at the Public School Athletic Field in Flatbush, under jurisdiction of the Board of Education; the others are maintained by this department; at McCarren Park, in Greenpoint, and at Betsy Head Playground, in East New York. The McCarren and Betsy Head tracks have a field house equipped with lockers and shower baths. The fields have high jumping and broad jumping pits and a shot-putting circle of regulation size. High jumping standards, pole vaulting standards, shots of various sizes, 56-pound weight, a discus, hurdles, javelins and practically any equipment that the modern athlete might desire to use can be secured from our playleaders at the parks.

Temporary tracks are laid out for special occasions in all playgrounds. A new one-eighth mile track is now in course of construction at City Park.

Many youngsters are taught the rudiments of athletics in our playgrounds, and a large number of the best amateur athletes use our tracks for training purposes.

During the year thirty athletic meets were held in our playgrounds and the Public School, High School and Playground boys were the principal competitors.

High School Girls.

High School girls are taking active interest in athletics and the Girls' Commercial High School and Erasmus Hall High School held very successful athletic games at the Hockey Field in Prospect Park.

Playground Boys.

The Playground Boys' Spring Athletic Championships were held at McCarren Park Playground on Decoration Day. The eight best boys from each playground, after competing in elimination games, were selected to represent their playground at the final championships. These boys were put through a very diligent course of training by the playleaders and about 600 boys competed in the final games. The prizes for the games, were donated by the Rotary Club of Brooklyn, which consisted of gold filled, silver and bronze medals. In addition to athletic events a number of amateur boxing exhibitions were given. About 10,000 people witnessed the games.

The Playground Boys' Fall Athletic Championships were held at Betsy Head Playground on Labor Day, and were conducted along lines similar to the Spring Championships.

July 4th.

July Fourth was the banner day for athletics. Twelve sets of athletic games, consisting of 130 events for boys and 50 events for girls, were held in the Park Playgrounds. About 5,000 boys and girls competed in the events and it was estimated that about 20,000 spectators viewed these games. The City provided the prizes, which consisted of gold-filled, silver and bronze medals for each event.

Baseball.

Brooklyn is one of the biggest amateur baseball cities in the country. Forty-four public diamonds are laid out in various sections, and of these twenty-one diamonds are located at the Parade Grounds, which is one of the show places of our department. Many recreation officials visiting Brooklyn have expressed the opinion that there is nothing to equal this field any where in the United States. The diamonds cover a grass area of 39½ acres. They are all equipped with wire mesh backstops and ten of them have the base lines cut out. They are equal in every respect to the diamonds laid out in the Major League balls parks. Adjacent to the field there is a \$75,000 Club House for use of the ball tossers. The building contains 64 rooms, with 12 lockers and stools in each. Twenty-two shower baths are in the building. From the time the diamonds were opened for the season, early in April, until the summer vacation season commenced the diamonds were crowded every afternoon by the public, parochial and high school teams. The demand for diamonds was so large that we were unable to accommodate

them. This condition was still more acute on Saturday and Sunday afternoons. To alleviate this condition teams were given permits for McCarren and Highland parks, where the demand was not so large. Permits were issued for four periods each day, from 10 a. m. to 12; 1:30 to 3:30 p. m.; 4 to 6 p. m., and 6 to 8 p. m. The last period was added this season, owing to the Daylight Saving Law. The diamonds at the Parade Grounds furnish a place for recreation and exercise for the youngsters and adults who participate in the games, and in addition they provide diversion for 20,000 spectators. With twenty-one baseball games in progress and 20,000 spectators enjoying the games there is rarely any disorder on the field.

The following leagues played their tournament games at the Parade Grounds:

- 1—Bankers League
- 2—Brooklyn Amateur League
- 3—Brooklyn Metal Industries League
- 4—Brooklyn Y. M. C. A. Industrial League.
- 5—Coffee and Sugar Trade Baseball League
- 6—Junior Boro League
- 7—K. of C. League
- 8—Loeser Department Store League
- 9—Marine League
- 10—Royal Arcanum Baseball League
- 11—Stationers' Baseball League
- 12—Wholesale Clothiers' League

The Playground Boys' Baseball Championships created considerable interest and was one of the biggest event conducted by the Recreation Bureau.

About 200 teams, 12 boys to a team, competed for the medals donated by the Rotary Club of Brooklyn. The boys were divided into three weights, 85 lb., 105 lb. and 125 lb. The tournament commenced in July and each playleader organized as many teams as possible in his own playground and arranged an elimination series from which the best team in each weight was selected to represent its playground. With the elimination series over, the parks were divided into five sections, as follows:

Southern Section—McKinley, Red Hook, Sunset.

Eastern Section—Highland, New Lots, Betsy Head.

Northern Section—Williamsburg, McCarren North, McCarren South.

Western Section—McLaughlin, City, Fort Greene.

Central Section—McKibbin and Bushwick.

A series of games were then arranged in which the teams played a Home and Home game with the other teams in their section. After these games had been decided another schedule was arranged in which the winners in each section played the winners of the other sections. Some very high-class baseball was played and all teams manifested considerable in-

terest in the tournament. The final games were played at the Parade Grounds in September, with the following close results:

85 lb.		105 lb.		125 lb.	
McKibbin	5	Red Hook.....	9	McKibbin	2
McKinley	0	McKibbin	8	Ft. Greene.....	0

Basket Ball.

The next game in popularity in our playgrounds was basket ball. The fourteen basket ball courts were used very extensively and were the scene of many games at practically all seasons of the year.

Bathing.

The only bathing beach under our jurisdiction is located at Coney Island, known as Dreamland Beach. The beach is about 3,000 feet long, facing the Atlantic Ocean, and has accommodated as many as 40,000 people on the hot Sundays during July and August. Many mothers visited the beach during the weekdays with their small children. It has been estimated that about 10,000 people make use of the beach on weekdays. The Municipal Bath House, which is located on property under the jurisdiction of this department, furnishes bath houses for thousands of people at a reasonable rate.

Boating.

The lake in Prospect Park is an ideal place for boating. Boats can be secured for the nominal fee of 25 cents an hour for one or two persons, and 10 cents for each additional persons. The lake is well covered with row boats on every pleasant day and the crowds are unusually large on Saturdays, Sundays and holidays. An electrical launch, which carries about 30 people, makes a circuit of the lake for a fee of ten cents for adults and five cents for children under twelve years of age. The swan boats, operated on Swan Boat Lake, are extremely popular with the small children. A fee of ten cents is charged for adults and five cents for children under twelve years of age, for a sail on the swan boats.

Bowling on the Green.

The Bowling Greens at the Parade Grounds were extremely popular throughout the season. They were used principally by the Brooklyn Bowling Green Club, which opened the season on May 29th. Many interesting contests were held at the greens, and a number of clubs from other cities competed here against the Brooklyn players.

Bridle Paths.

The 3.7 mile path which winds its way through Prospect Park and the 5½ mile path on Ocean Parkway, from Park Circle to Coney Island are used frequently by equestrians.

Coasting.

Last winter furnished us with an abundance of snow, and provided some excellent coasting on the hills at Prospect, Highland, McKinley, Sunset and Fort Greene parks. These parks were crowded with youngsters during the day. A large number of adults also took advantage of the opportunity to participate in this favorite sport. Precautions were made to keep the children off the hills where in coasting they would be in danger of being run over by automobiles. The children were asked also to stay off the hills where shrubs and young trees were planted. There was ample space for coasting in the parks.

Cricket.

This game was played at the Parade Grounds and met with its usual popularity, attracting many spectators to witness the contests. The following teams played games at the Parade Grounds:

- Brooklyn Cricket Club.
- Cardinals Cricket Club.
- Colonial Cricket Club.
- Gleaners Cricket Association
- Jamaica Athletic Club.
- Manhattan Cricket Club.
- Middlesex Cricket Club.
- United Cricket Club.
- Veteran Cricket Club.
- West Indian-American Cricket Club
- Windsor Social Cricket Club.

Croquet.

Our Croquet Field is located on the Long Meadow in Prospect Park, and is an ideal location. A small field house is near the field, in which lockers are provided for the players. 136 locker permits were issued and a fee of 50 cents each was charged for these permits. The game was played principally by adults, many of whom are retired business men. A slight snow storm or a rainy day holds no terror for some of the players and enthusiasm for the game can be measured by the fact that at times players hold a mallet in one hand and an open umbrella with the other.

Cross Country Running.

Although the usual demand was made by High School boys for use of the Cross Country Course in Prospect Park, it became necessary, because of the large amount of damage done in previous years to the young trees and shrubs, that runners be restricted from using the course inside the park, and provisions were made whereby the cross-country runners were permitted to run outside the park wall.

Field Hockey.

This invigorating game was played principally by High School girls, and is growing in popularity each season. The four Hockey Fields in Prospect Park, and the one at Bay Ridge Parkway, were used principally in the spring and fall seasons. The Board of Education provided a coach for each of these teams, who taught the girls hockey at our fields.

Students from the following played in Prospect Park:

- Bushwick High School.
- Central School of Hygiene and Physical Education.
- Erasmus Hall High School.
- Girls' Commercial High School.
- Girls' High School.
- Manhattan Training High School.
- Packer Institute.
- Pratt Institute.

Foot Ball.

Football fields were laid out and goals erected at the Parade Ground, McCarren Park, McKinley Park, Highland Park and Betsy Head Playground. Twenty-seven teams used the fields at the above parks.

Golf.

As in previous years, an arrangement was made by this department with the Marine and Field Club, whereby the public could use their 18-hole golf course located at Dyker Beach. By this department giving permission to the club to place three of their holes on park property, we were permitted to issue permits which entitled the bearers to use the golf course for a fee of 75 cents for week days, and \$1.50 for Saturdays, Sunday and holidays. The same fee is charged to the guests of club members. Golf is increasing in public favor very rapidly. This department issued 360 permits for the Marine and Field course in 1918; 437 in 1919, and 800 in 1920. Realizing that this game was meeting with increasing public favor, a section of Prospect Park, near the Miniature Yacht House, which had not been used very much in the past, was converted into a 9-hole golf course. This course will be opened to the general public in the spring of next year.

Ice Skating.

All ice skating in 1920 was done in the early part of the year and was enjoyed in ten of our parks. The lake in Sunset Park was used for skating on 31 days. Eight small parks were flooded especially for skating, the largest being the enclosure of the quarter-mile running track at McCarren Park. The lakes in Prospect Park, covering an area of 62 acres, were entirely frozen over and provided an excellent surface for skating. The facilities for ice skating in Prospect Park are ideal, and where the Boat House is

converted into a Skate House, and a red-hot coal fire is kept burning, around which the skaters gather to warm up after skating. A refreshment counter is maintained where hot coffee, sandwiches, hot frankfurters and rolls, at popular prices, are in big demand. Coats and wraps are checked for ten cents each, and ice skates are rented for 25 cents an hour. . The enclosure of the 220-yard running track at City Park was flooded and waiting for cold weather at the end of the year.

Ice Skating.

	Days
Amersfort	4
Bushwick Playground	22
Dyker Beach	23
Fort Greene	23
Gravel Pit	27
Highland	23
McCarren	20
McKinley	24
Prospect	22
Sunset	31

Lawn Tennis.

Three hundred and seventy-four courts have been laid out in various parks for the devotees of this game and over 3,000 season permits were issued. In Prospect Park, where 300 grass courts are located, there is a \$60,000 Club House for use of tennis players. The building is furnished with 368 private lockers for storing tennis paraphernalia, for which a charge of \$1 a season is made. A large section of the building is devoted to metal racks used for general lockers, in which about 1,000 people can store their nets, rackets, etc., at a charge of 50 cents a season. The 28 clay courts at Highland Park were kept in excellent condition and were almost in constant use. We have not sufficient courts at this park to accommodate the large number of people on Saturdays and Sundays, notwithstanding assignments are made for only one hour periods. The tennis courts were used from Decoration Day until Thanksgiving Day and were open until 8 p. m. each evening. Tennis tournaments for adults were conducted by this department at Prospect, Highland, McCarren, McKinley parks, and Betsy Head Playground. About 300 entries were received for the tournament and an entry fee of 25 cents was charged to purchase medals.

Miniature Yachting.

This is one of the most picturesque outdoor pastimes indulged in in Prospect Park. Several contests were held this summer among miniature yacht owners. A fee of \$1 was charged for storing yachts at our Miniature Yacht House and members of Brooklyn Model Yacht Club and Yankee Model Yacht Club were the principal users.

Skiing.

Due to numerous snow falls many folks were introduced to this delightful winter sport. About 75 permits for skiing in Prospect Park were issued. Nature has made Prospect Park an ideal place for skiing; the hills vary in grades and heights to such an extent that the small boy can find a place to practice with safety, and the most experienced adult can find hills high enough to give him the desired thrill.

Swimming Pool and Shower Baths.

The Bath House at Betsy Head Playground was open from 8 a. m. to 10 p. m. daily. This building contains 58 shower baths and 400 lockers. One side of the building was used for boys and men, and the other for girls and women. Towels and soap were provided for one cent each. The Outdoor Swimming Pool was open from June 20 to September 18th and pool is one of the largest in the East. It is 60 feet wide and 150 feet long, with a graduated depth of four feet at the shallow end, and eight feet at the deep end. There is a continual flow of fresh water and the tile sides and bottom are cleaned thoroughly twice a week. Life rings are hung at convenient points and a diving board is at each side. A charge of ten cents for adults and seven cents for children was made for use of the pool. A bathing suit, towel and soap were furnished to each bather. When the attendance was small instructions in swimming and diving were given by three swimming instructors. A great deal of time could not be devoted to instruction due to the fact that many times there were from 500 to 600 boys in the pool at one time, which required constant supervision to prevent accidents. The number who took shower baths was 424,164, against 458,721 last year. The swimming pool was used by 61,237, against 32,984 last year. Three swimming meets were held at the pool during July. The first was conducted by this department July 5th. The medals for this meet were furnished by Mayor Hylan's Fourth of July Celebration Committee. Two meets were held by the *Illustrated News*. One for girls on July 13th, and another for boys on July 20th. About 3,000 spectators witnessed each of these meets.

Walking.

The American Walkers' Association held several races, starting from the Parade Grounds and walking to Coney Island and return.

General Playground Activities.

The activities on our children's playgrounds are so varied and numerous that it would be impracticable to compile a record of the games played. The every-day activities include quiet games, singing games, competitive games, ingenuity work, use of apparatus and free play. Folk dancing has grown very popular as a girls activity and has been encouraged by the purchasing of a graphophone and dance records for each playground. Hun-

dreds of children from the public schools are brought to our playgrounds in classes by their teachers to play organized games.

Playground Children's Celebrations.

The feature of our playground work was the celebration of all the holidays in our local playgrounds. Appropriate programs were arranged by playleaders. The programs varied considerably according to the day to be celebrated and the season of the year. The usual events were singing of patriotic songs, Salute to the Flag, folk dances, recitations and competitive games.

The Baby Parades have grown to be an annual feature. Our playleaders were delegated to carry out the details of arrangements at their respective grounds. Once again there was keen competition among the parents and kiddies of the eight Brooklyn playgrounds. Each playground had its own parade and about 1,500 babies were entered. It was delightful to note the skill and thought displayed in the tiny paraders' costumes, producing the picture of a masquerade in miniature.

New Lots Playground had a big attraction. Two sets of twins and one set of triplets entered, while McCarren Park proudly boasted of an entry of six sets of twins. It was no easy matter for the judges, a group composed of a physician, a nurse and several women of the neighborhood to decide the prize winners. The prizes had been donated by interested citizens and several business houses in the vicinity of the playgrounds. They consisted of tiny rings, bracelets, dresses, shoes and other baby clothes and toys of every description. The Department furnished blue, red and yellow prize ribbons. The following factors were considered in making the awards:

The healthiest baby.

The general appearance of baby and carriage and the decoration of the carriage.

A departure was made from the regular routine. On June 5th each playleader arranged a June Walk, and brought the children from their playgrounds to the Picnic Ground in Prospect Park for a day's outing. The children brought their lunch and ate it in the grove set aside for this purpose. Informal games were played throughout the day. The intermingling of children from the different sections of the borough had the desired effect of getting them better acquainted. It was the first visit to Prospect Park for some of the children and every one had a pleasant outing.

Historic Pageant and Field Day.

The Historic Pageant and Field Day, held on August 28, was the biggest and most successful celebration that the children attending our playgrounds have ever staged. The performers brought very vividly to mind the value of playground work for educational purposes. About 5,000 people witnessed the pageant, in which 1,500 children took part, representing all playgrounds. Each group was costumed according to the part it played, which gave a most

unusual and interesting appearance. The pageant portrayed important events of American history, and interpreted them in pantomime and dance. The first picture showed the swarthy skinned Indians working busily about the tent and camp fire. A chief smoking his pipe and a squaw watching the cauldron. Through the entire program each group entered the center of the field with walk and gesture to help make the costumes picture more clearly the early settlers of our land.

The second part of the program was brought to a fitting climax by the Melting Pot Tableau, when all declared allegiance to America by throwing their native flower into the huge "pot" and joined their colors under the flag of our Country.

Special Celebrations.

The following celebrations were held in the parks. This department co-operated with the organizations making arrangements for the celebrations. Band stands and speakers' platforms were erected and decorated, benches were supplied, and sections of our various parks were staked and roped off.

May 1—McLaughlin Park—Unveiling of Memorial Monument erected by Sewanhaka Democratic Club, in memory of the Boys of the Second Assembly District who died in the World War.

May 2—Parade Ground—New York Guard—Provisional Regiment—Military Review.

May 22—Long Meadow, Prospect Park—Boy Scout Troop Rally—Scout Games—200 Boys.

May 25—Long Meadow, Prospect Park—Girls' Branch—Public School Athletic League Field Day. About 8,000 children and 10,000 spectators witnessed the May Pole Dance and Games.

May 26—Hockey Field, Prospect Park—Erasmus Hall Field Day—1,000 girls participated in Athletic Games.

May 28—Flower Garden, Prospect Park—St. Patrick Society of Brooklyn. One hundred and forty-first anniversary celebration of the birth of Thomas Moore.

June 11—Anniversary Day. About 100,000 Sunday School children took part in the Ninety-first Anniversary parades at various parks.

June 15—Long Meadow, Prospect Park—The Annual Festival of Kindergarten Children of Brooklyn. About 3,000 children took part in dances and 500 spectators witnessed this event.

Sept. 6—Labor Day—Band Stand, Prospect Park—Central Labor Unions of Brooklyn and Queens, held annual exercises. Attendance 10,000.

Sept. 18—Band Stand, Prospect Park—Antietam Day celebration "War Veterans and Sons" Association of U. S. A. Attendance 1,000.

Independence Day Celebrations.

This department co-operated with the Aldermen who arranged for the Band Concerts. Our Recreation Bureau arranged and carried out all details in connection with the athletic meets.

Betsy Head—Athletic Meet and Band Concert.
Bushwick Playground—Athletic Meet and Band Concert.
City Park—Athletic Meet and Band Concert.
Cooper Park—Band Concert.
Menahan St. and Evergreen Ave.—Band Concert.
Fort Greene Playground—Athletic Meet.
Highland Park—Athletic Meet and Band Concert.
Irving Square—Band Concert.
Linton Park—Band Concert.
McCarren—Athletic Meet.
McKibbin—Athletic Meet.
McKinley—Athletic Meet and Band Concert.
McLaughlin—Athletic Meet and Band Concert.
New Lots—Athletic Meet.
Prospect Park—Band Stand—Knights of Columbus Celebration.
Prospect Park—Long Meadow—South Brooklyn Board of Trade, Athletic Meet.
Red Hook Playground—Athletic Meet.
Sunset Park—Athletic Meet and Band Concert.
Tompkins Park—Band Concert.
Underhill Gore—Band Concert.
Wolcott and Dwight Sts.—Block Party and Band Concert.
Williamsburg Bridge—Athletic Meet.

Picnic Parties.

Permits were issued for over 60,000 children for picnic parties. Facilities were available for holding parties at nine parks, but the majority came to the Grove at Prospect Park where close to 50,000 children held their May parties and June walks. The grove is shaded with large trees and provides many conveniences. Special tables and benches are there for the parties who bring their luncheons to the grove. Several fountains provide plenty of drinking water, and a comfort station is at a convenient point. Although most parties have their refreshments sent to the grove, soft drinks, candy and sandwiches can be purchased at the Picnic House. The swings, seesaws, and giant strides on the plot near the Picnic Ground were enjoyed very much without charge. The Carousel, situated a short distance from the Picnic Ground, provided amusement for many children. A charge of five cents was made for each ride and picnic parties were given a special rate of five cents for two children, upon presentation of a picnic permit issued by this department.

Picnic House, Prospect Park.

Thirty-eight dances and parties were held at the Picnic House during the early months of the year. A fee of ten dollars an evening was charged for the use of the building. For the convenience of the organizations holding social events a piano was purchased in October; the fee was then advanced to twenty-five dollars an evening, for use of the building.

Recreation Pier.

The pier at the foot of Metropolitan avenue was opened under supervision of this department, during the summer months, and furnished a splendid place for the mothers and children of the neighborhood to enjoy the fresh air and cooling breezes at the river's edge.

Dreamland Beach Day Camp.

A section of the beach was reserved exclusively for mothers and small children. Baby hammocks were provided in a spot covered with canvas, which made a shady and comfortable resting place. Season permits to use the beach were issued to the following organizations:

Brooklyn Association for Improving Condition of the Poor.
Bryson Day Nursery.
Buffalo Avenue M. E. Church.
DeWitt Memorial Church.
Embury M. E. Church.
Faith Mission.
Knickerbocker Avenue Church.
Little Mothers' Aid Association.
Visiting Nurse Association.
Williamsburg Mission to the Jews.

McCarren Park Social Centre.

A Farm House, which is used during the spring, summer and fall months in connection with our garden work, was used as a social center during the winter months. Sixteen organizations held weekly socials and meetings. The building is divided into three sections—for socials and dances—for meetings and for a kitchen and dining room. A graphophone and piano were provided for dancing, and a gas range in the kitchen was used for cooking refreshments.

Children's Farm Gardens.

The department conducted four Children's Gardens containing 1,082 individual plots, 4 ft. by 9 ft. located as follows:

Betsy Head Playground.....	298 plots
Fort Greene Park.....	144 "
Highland Park	140 "
McCarren Park	500 "

These gardens provided healthful outdoor recreation for about 2,200 children. The children were instructed in every operation required in grow-

ing vegetables. The majority of the children who frequented our gardens would never have had an opportunity to learn how vegetables grow if it were not for these gardens. In the spring, as soon as the soil was dry enough, the gardens were plowed and harrowed—plots and paths were then laid out and spaded and raked. Boys and girls were registered and assigned to plots and given their first lesson in planting by the School Farm Directors. Seeds were then distributed, and the principal vegetables planted were beans, beats, carrots, corn, kohlrabi, lettuce, radishes, and swisschard. A number of other vegetables were grown in observation plots. Two plantings were made in each garden and a new set of children were assigned for the second planting. All vegetables were taken from the plots as soon as they matured, and a general harvest festival was held at the end of each planting season. A large gathering of parents and friends attended the exercises. Silver, bronze medals, and books on gardening were donated for prizes by interested citizens, and awarded the children for regular attendance, the best cultivated plots, and for growing the largest vegetables. During October and November lessons were given on bulbs. Hyacinth, tulip and narcissus bulbs were set out at the gardens. Demonstrations of grafting and pruning were also given. The children made cuttings of begonias, geraniums and other porch and window box plants, which they took home to care for. Many classes from public schools in the vicinity came to the gardens for nature study lessons, and received instructions regarding the growing and planting of vegetables. Manual Training and Domestic Science was also taught the children who visited the gardens. The canning and cooking of vegetables was included in this work, and parents and others were invited to participate in these classes. Vegetables from our Children's Farm Gardens were exhibited at the Children's Garden Exhibition held at the Brooklyn Botanic Garden, and the children from McCarren Park and Betsy Head Playground were awarded first and second prizes, respectively.

Model Backyard Gardens.

Model backyard gardens, 25 ft. x 40 ft. were planted at the four Children's Gardens, and at the nursery in Prospect Park. Information and advice was given to hundreds of people at these gardens regarding the planting of vegetables. To encourage the planting of home gardens this department had 10,000 pamphlets printed and distributed in the public schools of Brooklyn. A diagram of a Model Backyard Garden, and hints telling when, what and how to plant were printed in this pamphlet.

Band Concerts.

The budget appropriation of \$14,600 for music made it possible for the department to arrange seventy park concerts, and to provide music for the Children's Pageant, and the Spring and Fall Playground Boys' Athletic Championships. The regular park program was supplemented by eighteen concerts given under auspices of Mayor Hylan People's Concert Committee.

Some very high class vocal, cornet and violin solos were rendered in connection with these special concerts. Bands consisting of 15 musicians and leader were used in our small parks; and 35 musicians and leader in Prospect Park. The rates prescribed by the Musical Mutual Protective Union were paid to the musicians. \$7 a man, and \$15 for the leader in our small park concerts; and \$8 a man and \$25 for the leader for Prospect Park engagements. The concert season commenced at our shady music grove in Prospect Park, on Sunday afternoon, May 2d, and terminated on Sunday, September 19th. During July and August, Saturday afternoon concerts were rendered in addition to the Sunday concerts. Fourteen mid-week evening concerts were given by the Police Band and the Goldman Concert Band. An average of 7,500 people attended the Prospect Park concerts. A total of 250,000 people attended all the concerts given in our parks. The small park concerts began on June 27th and ended on September 19th. Portable band stands were erected, and additional benches were provided for the concerts in our small parks.

Attendance at Band Concerts:

Bushwick Park	13,500
Carroll Park	5,600
Ft. Greene Park.....	14,000
Ft. Hamilton Park.....	1,900
Irving Square	4,800
Lincoln Terrace Park.....	3,000
Prospect Park	97,100
Saratoga Park	7,000
Sunset Park	13,800
Tompkins Park	6,000
Winthrop Park	10,000
Prospect Park (Mayor Hylan's People Concerts).....	68,000
Total.....	<u>244,700</u>

Motion Pictures.

A series of 15 motion picture entertainments were given in ten of our small parks during September and about 35,000 people attended these outdoor shows. The films exhibited contained several reels depicting scenes in our parks and activities in our playgrounds. Educational and Comedy films were also shown. A number of slides were flashed on the screen inviting the public to take advantage of our facilities for recreation. Our department has a first-class motion picture machine, booth, screen, and other equipment necessary to conduct these entertainments. A licensed operator was engaged to set up and operate the machine.

Community Christmas Tree.

A forty-foot Christmas Tree was erected in the centre of the main Plaza at Prospect Park during the holiday season. The tree was decorated with 600 red, white and blue, also green and purple electric light bulbs.

RECREATION PERMITS ISSUED 1920

	Athletic Meets	Base- ball	Cricket	Croquet	Cross Country	Field Hockey	Foot- ball	Golf	Model Yachts	Picnic	Tennis	Tents	Field Days
Bedford										1			
Bensonhurst										1		1	
Betsy Head	6										125		
Canarsie		1								21			
Dreamland												10	
Dyker Beach								800					
Fort Greene										2			
Highland		50					6			7	1,800		
McCarren	12	148					1				126		
McKinley	3	8					2			85	282		
Parade Grounds		900	12				27						
Prospect				136	5	7			20	491	1,268		14
Sunset		14								115	46		
Total	21	1,121	12	136	5	7	36	800	20	721	3,649	11	14

Apparatus in Playgrounds	Baby Swings	Buck	Climbing Ladder	Climbing Pole	Flying Rings	Garden Swings	Giant Strides	Horizontal Bars	Horizontal Ladders	Large Swings	Merry-go-round	Parallel Bars	Rock-a-bye	Sce-Saws	Side Horses	Slides	Tether Pole	Traveling Rings	Vertical Ladder
Betsy Head Boys		1	2	2	4			2	1	12		1		12	1			6	1
Betsy Head Girls						8	1			12			1	8		2	2		
Bushwick Boys			2	2	6	6	1	1		6		1				1	2	8	
Bushwick Girls	16									12			1			2	2	6	
Canarsie						4	1							4					
City	12					4										2			
Fort Greene Boys						3				6				8			1	6	
Fort Greene Girls	8							2		12		3		8	1				
McCarren No. Boys		1	1	1	8	2	1			12			1	8		1		6	
McCarren Girls	32									12				8					
McCarren So.	6									24		3		4		1		6	
McKibbin Boys			2	1	8		1	3		12				8		1	1		
McKibbin Girls	8			6	4		1	1	1	12	1	1			1			6	1
McLaughlin Boys		1								12							2		
McLaughlin Girls	24			1	2			1				1						6	
New Lots Boys			1							18				4					
New Lots Girls	32					6				12				16					
Prospect							2	2		6							1		
Red Hook Boys		1	1	1	4					6		1						6	
Red Hook Girls	8					6				6				4			2		
Total	178	4	9	14	36	44	14	11	3	183	1	9	4	84	3	10	11	62	2

BETSY HEAD BATH AND SWIMMING POOL ATTENDANCE, 1920

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Shower Bath Bathers—													
Men	18,347	14,617	20,099	21,521	26,276	15,213	.....	.....	9,073	32,884	20,753	20,947	199,730
Women	19,605	16,648	23,474	23,589	27,277	23,547	17,838	6,350	12,150	22,437	17,909	3,618	214,442
Total	37,952	31,265	43,573	45,110	53,553	38,760	17,838	6,350	21,223	55,321	38,662	24,565	414,172
Swimming Pool Bathers—													
Men .....	.....	.....	.....	.....	.....	4,758	21,897	31,874	3,386	.....	.....	.....	61,915
Women .....	.....	.....	.....	.....	.....	898	5,582	6,342	814	.....	.....	.....	13,836
Total .....	.....	.....	.....	.....	.....	5,656	27,679	37,216	4,200	.....	.....	.....	75,751
Shower Baths—													
Soap Sold Men.....	2,392	1,929	2,974	4,017	5,944	4,223	.....	.....	1,861	5,320	4,451	3,944	37,055
Soap Sold Women....	420	319	501	672	1,013	906	608	273	383	720	544	549	6,908
Total	2,812	2,248	3,475	4,689	6,957	5,129	608	273	2,244	6,040	4,995	4,493	43,963
Swimming Pool—													
Soap Sold Men.....	.....	.....	.....	.....	.....	4,758	21,897	31,874	3,386	.....	.....	.....	61,915
Soap Sold Women....	.....	.....	.....	.....	.....	898	5,782	6,342	814	.....	.....	.....	13,836
Total .....	.....	.....	.....	.....	.....	5,656	27,679	37,216	4,200	.....	.....	.....	75,751
Shower Baths—													
Towels Loaned Men..	3,047	1,925	3,518	5,009	7,355	4,820	.....	.....	2,086	5,519	4,831	4,241	42,351
Towels Loaned Women	1,271	912	1,323	1,893	2,634	2,144	1,683	683	927	2,096	1,822	1,646	19,034
Total	4,318	2,837	4,841	6,902	9,989	6,964	1,683	683	3,013	7,615	6,653	5,887	61,385
Swimming Pool—													
Towels Loaned Men...	.....	.....	.....	.....	.....	4,758	21,897	31,874	3,386	.....	.....	.....	61,915
Towels Loaned Women	.....	.....	.....	.....	.....	898	5,782	6,342	814	.....	.....	.....	13,836
Total .....	.....	.....	.....	.....	.....	5,656	27,679	37,216	4,200	.....	.....	.....	75,751

Facilities for Outdoor Sports	Baseball Diamond	Basket Ball Court	Bathing Beach	Boating	Bowling Green	Bridle Path	Coasting Hills	Crickets Fields	Croquet Fields	Cross Country	Golf Links	Hand Ball Court	Hockey Field	Ice Skating Rink	Miniature Yachting	Rugby Fields	Running Track	Skiing	Soccer Fields	Swimming Pools	Tennis Courts	Wading Pools
Bay Ridge Parkway.....	1	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	2	..
Betsy Head Boys.....	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	6	1	..
Betsy Head Girls.....	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..
Bushwick Boys.....	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..
Bushwick Girls.....	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..
City.....	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	2	1
Cooper.....	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Dyker Beach.....	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Dreamland.....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Fort Greene Boys.....	1	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Fort Greene Girls.....	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	28	1
Highland.....	6	1	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	3	16	..	..
McCarren No. Boys.....	8	1	..	..	..	..	..	1	..	..	..	1	..	1	..	2	1	..	1	..	1	..
McKibbin Boys.....	1	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..
McKibbin Girls.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
McKinley.....	1	1	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	6	..	..
McLaughlin Boys.....	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..
McLaughlin Girls.....	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
New Lots Boys.....	1	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
New Lots Girls.....	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	2	..
Ocean Parkway.....	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Ocean Pkwy., Ave. P.....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Parade Ground.....	25	..	..	1	7	1	3	7	1	1	1	..	4	1	1	5	..	1	5	..	300	1
Prospect.....	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	2	..
Red Hook Boys.....	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
Red Hook Girls.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Sunset.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	4	..	..
Total.....	50	14	1	1	7	2	6	8	1	1	2	4	5	10	1	9	4	1	11	1	373	3

PLAYGROUND ATTENDANCE 1920

First Quarter.

	January	February	March
Betsy Head	13,200	20,645	32,165
Bushwick	26,405	13,240	20,975
Ft. Greene	9,495	8,645	8,735
McCarren No.	6,792	7,486	15,486
McKibbin	31,950	39,690	76,805
McLaughlin	3,195	14,770	19,425
Prospect Croquet .....	.....	.....	375
Red Hook	5,248	1,035	3,146
	114,880	120,271	193,742

Second Quarter.

	April	May	June
Betsy Head	27,855	40,005	34,560
Bushwick	30,185	65,120	44,220
Dreamland .....	.....	.....	100,000
Ft. Greene	19,740	32,145	20,120
Highland .....	.....	7,250	73,700
McCarren B. B. ....	.....	.....	20,565
McCarren No.	10,405	65,770	80,366
McCarren So. ....	.....	.....	11,350
McCarren Ten. ....	.....	.....	8,050
McKinley .....	.....	.....	2,500
McKibbin	49,025	70,805	75,540
McLaughlin	47,550	71,595	69,560
New Lots	25,980	48,370	43,570
Parade Grounds	130,000	195,000	215,700
Prospect Croquet	600	950	1,575
Prospect Hockey .....	.....	9,950	1,500
Prospect Picnic .....	.....	23,400	30,725
Prospect Ten. ....	.....	.....	25,500
Red Hook	12,796	18,875	10,727
Sunset .....	.....	.....	600
	334,136	649,235	873,428

Third Quarter.

	July	August	September
Betsy Head	85,975	80,850	25,900
Bushwick	72,685	56,450	53,493
Dreamland	605,000	723,250	152,200
Dream Day Camp	3,625	4,375	1,750
Fort Greene	43,185	29,415	32,465
Highland	41,700	45,925	65,875
McCarren B. B.	44,000	51,980	18,775
McCarren No.	22,770	17,420	13,890
McCarren So.	20,325	10,395	7,750
McCarren Tennis	18,725	15,200	4,500
McKibbin	98,575	91,100	51,535
McKinley	9,000	6,025	1,490
McLaughlin	35,273	25,650	50,400

	July	August	September
New Lots	77,850	57,690	50,275
Parade Grounds	163,000	155,000	97,000
Prospect Croquet	750	800	1,175
Prospect Hockey .....	.....	.....	600
Prospect Picnic	16,000	111,112	9,800
Prospect Tennis	16,525	18,500	7,500
Red Hook	39,590	50,425	40,700
Sunset	10,270	6,500	2,054
Williamsburgh	40,763	47,954	10,275
	1,465,586	1,606,016	699,502

Fourth Quarter.

	October	November	December
Betsy Head	57,300	48,850	59,800
Bushwick	64,535	43,307	44,645
City .....	.....	.....	10,365
Fort Greene	40,865	25,440	30,350
Highland	30,700	12,000	.....
McCarren No.	18,460	13,890	12,970
McCarren Soccer	225	900	225
McKibbin	89,215	78,650	70,130
McLaughlin	74,578	50,400	35,673
New Lots	22,600	21,580	18,560
Parade Grounds	68,000	14,700	.....
Prospect Croquet	2,700	970	850
Prospect Hockey	950	725	.....
Prospect Tennis	2,700	2,076	.....
Red Hook	37,763	30,861	20,760
Sunset	500	100	.....
	513,088	344,448	304,328

Recapitulation of Attendance.

Playgrounds	7,218,060
Children's Farm Gardens	232,563
Betsy Head Shower Bath	434,164
Betsy Head Swimming Pool	61,247
Band Concerts	244,700
Motion Pictures	36,400
Ice Skating	197,290
	8,424,424

The above does not include bathers using our beaches, equestrians using bridle paths, people boating on lakes, vehicles using road and parkways, or people using parks for quiet recreation.

ENGINEERING SECTION

General.

The year 1920 was one in which considerable advancement was made in the permanent paving program for Brooklyn's parkways and park drives. Three sections of permanent sheet asphalt pavement on concrete foundation was constructed over a roadway area of 43,645 square yards at a total cost of \$252,890.

The pavements were constructed on the East Drive Prospect Park; Park Circle at Ocean Parkway entrance and on Ocean Parkway Traffic Road, between Kings Highway and Avenue "W." The relief given by the permanent paving was so great that the roadway repair forces were able throughout the year to keep the remaining temporary pavements, the area of which is very large, in fairly satisfactory condition, considering the fact that these old pavements were constructed long before automobile traffic.

The old parkway pavements are merely water bound broken stone or gravel surfaced with asphalt or tar oil, which forms a mat varying in thickness from $\frac{1}{2}$ to $\frac{3}{4}$ of an inch. In wet weather and during the winter season this protection mat is readily penetrated by the chains on auto wheels thereby permitting the moisture to enter the pavement proper and rapidly disintegrate it. During the warm summer months the surface mat, on account of its plasticity, is pushed into rolls by the impact of the great number of autos, continuously using the parkways. This damage requires an expenditure for labor and materials entirely disproportionate to maintenance cost of latter day pavements from the standpoint of satisfactory service rendered.

It has been recommended to the Board of Estimate and Apportionment that all antiquated parkway pavements which cannot last a reasonable length of time, be replaced with up-to-date standard permanent pavement. It is believed that sufficient funds will be provided for this work for 1921. In view of this, surveys, plans and specifications have been gotten under way during the fall and winter, so that there will be no delay.

Great emphasis is being laid upon permanent paving of the main roadway of Ocean Parkway, from Prospect Park to Coney Island, for its full width of 70 feet, and the Board of Estimate and Apportionment have been requested to provide sufficient funds for paving at least a 40-foot central strip for its full length in case funds cannot be allowed for the entire full width paving. It is also proposed for 1921 to pave the balance of the East Drive, the East Lake Drive and the South Lake Drive, Prospect Park; to pave Ft. Hamilton Parkway with a 20-foot central strip from 62nd street to 7th avenue; to pave Pennsylvania avenue with a 20-foot central strip from Belmont avenue to New Lots road and to build a stone-faced concrete sea wall in front of the park property at Coney Island adjoining the walk to Brighton Beach, as the temporary wooden bulkhead supporting



PROSPECT PARK
SECTION OF NEW PAVEMENT ON EAST DRIVE

the walk at this point has been twice badly damaged and partly washed away by heavy seas during two storms in the last three years.

Improvement of East Drive, Prospect Park.

The contract for paving the East Drive, Prospect Park, was awarded on December 24, 1919, at an estimated amount of \$127,044.25. Construction work started on May 1, 1920, and was completed on August 18, 1920. The entire old roadway including the hand-placed stone base, all of which was above the proper grade for a permanent pavement, was excavated and removed, and a six-inch Portland cement concrete foundation constructed for the new sheet asphalt pavement of one inch binder course and two inches of wearing surface. The items and quantities included in the contract, necessary to complete the work are as follows: Regulating and grading 10,470 cubic yards, concrete foundation, 4,108 cubic yards, sheet asphalt pavement including binder course, 24,781 square yards, cinders for gutter foundation 114 cubic yards. Although the automobile traffic on the East Drive of Prospect Park has been nearly as great as most of Brooklyn's busiest thoroughfare, owing to the drive being practically the highway for autos between the Flatbush and down town sections of Brooklyn, it is to be noted that this pavement is the first of permanent character to be constructed in Prospect Park or within any park in Brooklyn.

Improvement of Park Circle Roadway.

The pavement on roadway of Park Circle, at Ocean Parkway and Prospect Park Southwest, was of two types. The outer circumferential roadway was a permanent pavement constructed a few years ago while the inner circumferential roadway, which was subjected to the greatest amount of the traffic of all classes at this point was an old fashioned water bound broken stone pavement. This old pavement no longer could be properly maintained and funds for the roadway improvement were secured in time for the survey to be made and plans and specifications prepared in the early part of 1919, so that work of constructing a standard sheet asphalt pavement on a concrete foundation was completed in the early Spring of 1920. The cost of this improvement, which was started on April 1, and completed on May 19, was \$28,229.35. The contract items and quantities were 1,713 cubic yards of regulating and grading, 999 cubic yards of concrete foundation, and 6,091 square yards of sheet asphalt pavement including binder course.

Improvement of Ocean Parkway Traffic Road.

Funds were secured during 1919 for continuation of permanent pavement on the traffic road of Ocean Parkway, which ended at Kings Highway. Between Kings Highway and Coney Island the roadway was very badly worn and rutted old macadam, which could not be temporarily resurfaced nor sufficiently repaired out of the yearly funds allowed for roadway main-



PROSPECT PARK
NEW PAVEMENT AT PARK CIRCLE ENTRANCE

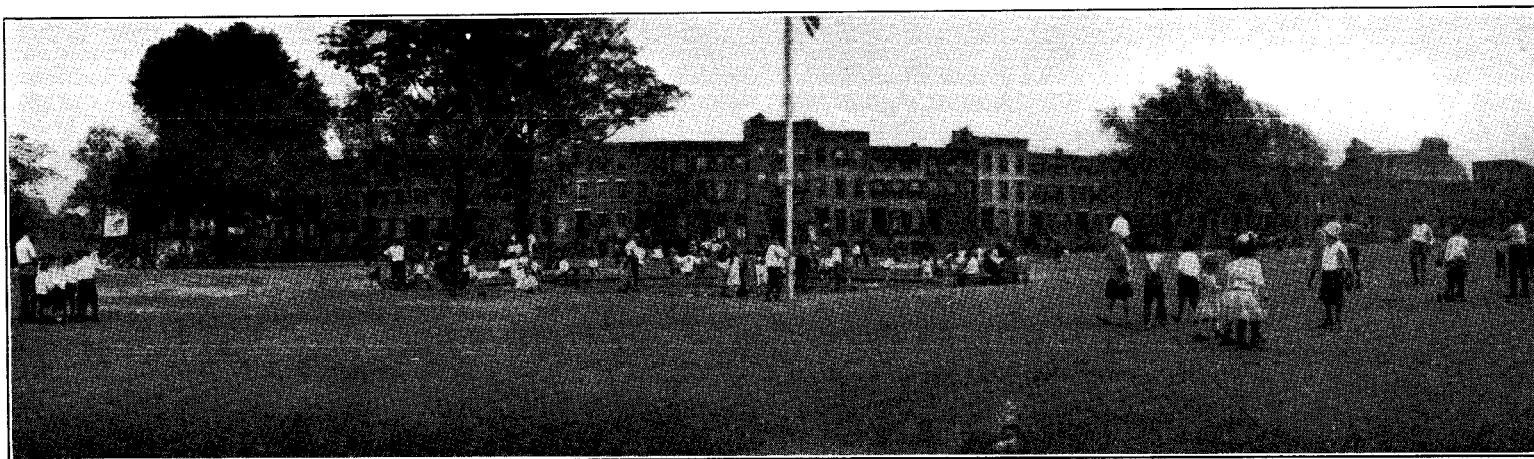
tenance, so as to withstand the 10 and 15-ton auto trucks. Surveys, plans and specifications were completed for a standard sheet asphalt pavement on a six-inch concrete foundation, on the roadway for its full width of 25 feet from Kings Highway to Avenue "W," beyond which point a permanent pavement could not be laid until such future time as the Sewer Department has completed its drainage plans, and the Board of Estimate have established legal grades conforming thereto for surfaces of intersecting streets. The construction work which started on August 5th, 1920, was completed on November 23, 1920, at a cost of \$97,616.08. The work comprised the following: 3,571 cubic yards of regulating and grading, 596 linear feet of 12" drain pipe, 9 roadway drainage catch basins, 2 overflow basins, 30 linear feet of bluestone heading stones, 8,355 linear feet of new bluestone curbing, 500 linear feet of old curbing redressed and reset as heading stones, 2,205 square feet of cement sidewalks, 2,129 cubic yards of concrete for roadway foundation and 12,773 square yards of sheet asphalt pavement including binder course.

Prospect Park Walks Improvement.

Further improvement of walks in Prospect Park was made this year. Sections of old scrimshaw and worn out asphalt walks adjacent to the permanent Honor Roll, near the Menagerie, and between the Lincoln road and Willink entrances and between the Willink entrance and Ocean avenue entrance, were regulated, the old base patched, borders edged and resurfaced with 1½ inches of new sheet asphalt pavement. The quantity of paving was 23,515 square yards at a total cost of \$6,349.05. This expenditure was all that was available for work of this character for 1920, and with completion of the contract there remained practically no walks in Prospect Park in bad condition and but small areas in need of repair for 1921. This very good condition of walk pavement in Prospect Park can be accounted for by the general walk improvement program established a few years ago, which has been strictly adhered to, and although it was impossible to secure sufficient funds to entirely complete the work in any one year a reasonable amount was provided each year and expended for this work, with the satisfactory result that 1920 saw all bad walk pavements in Prospect Park eliminated.

Redesign and Construction of City Park and Playground.

The reconstruction of City Park as a combined park and playground, started on May 20, 1920, and by July 4, 1920, the first section of the park to be used as a playground for small boys and girls was cleared of all debris, regulated, surfaced, equipped with apparatus and opened as a playfield. All walks, plazas, buildings, lawn areas, trees, wading pool, drinking fountains, lighting systems, drainage systems and irrigation systems had also been restored by this date, and the entire park with exception of the three plots still under construction, opened to the public. A neighborhood



CITY PARK

RESTORED AFTER BEING USED BY NAVY DEPARTMENT

celebration was held in commemoration of the event of redesign, reconstruction and reopening of the park. Band music was furnished during the day and evening, dancing was enjoyed by the younger folks and prizes were awarded the successful embryo athletes who competed in various events during the afternoon. Considerable difficulty was encountered in getting reconstruction work under way, as the Navy Department who had control of the premises since the start of the World War, attempted to turn the property back to the City, in a condition that was not in accordance with the signed agreements permitting occupation, and which would have put the City to an additional expense of \$25,000.00 in excess of the restoration amounts agreed upon. However, in view of the inaction of the Navy Department upon the Park Department's claim for additional damages, and the great need of that section of Brooklyn for a park and playground, the Corporation Counsel, upon request of the Park Commissioner, permitted this Department to enter upon and take formal possession of the premises on May 18, 1920. Revenue bonds in the amount of \$25,000 covering the additional damages by the Navy were provided by the City to this Department to permit carrying on the reconstruction work, and the Corporation Counsel was requested to bring claim against the Federal Government in this amount. All work of demolition and reconstruction is being carried out by the engineering, mechanical and labor forces of this Department as under the circumstances it is the most rapid and economical method. In the operation of clearing the premises preparatory to construction operation, over 3,000 cubic yards of plain and reinforced concrete had to be excavated by blasting, and by hand labor, and removed. At the close of work for the winter of 1920, the entire park and playground had been practically completed, with exception of the playfield plot on Navy street, which awaited the surfacing of the athletic field and the planting of shrubs and vines, and installation of the balance of outdoor apparatus. All sections, however, were in use over the winter season, and the skating pond of $\frac{1}{8}$ mile in circumference, even though of unfinished surface as an athletic field, was flooded and opened for skating. The section along Flushing avenue has been opened as a rest section for mothers and babies. An elliptical concrete walk was constructed in the centre surrounded by trees and shrubbery, and an entrance walk made from the central park plaza; the entrance walk being covered for its full length with an ornamental pergola with seats, all heavily planted with wisteria and other species of flowing vines. The wading pool was in such demand during the hot days immediately following the opening of the park, that it had to be enlarged with an extra section. The balance of the work still to be done on the park and playground, will permit of it being completed early in 1921. The demand already made on the playground, gives promise that it will not alone be one of the most up to date combined parks and playgrounds, but also one of Brooklyn's most active play areas.

Williamsburg Playground Improvement.

Housing conditions have been so acute for the last two years that the Sinking Fund Commissioners and the Comptroller of the City of New York have withheld approval of the removal of tenement buildings encumbering the site of the proposed playground. This play area is so urgently needed in this congested section, that the Sinking Fund Commissioners and the Comptroller have been again appealed to by this department to make suitable arrangements in regard to the building so that the designs for the playground, which have already been completed and are now held in abeyance, can be put into effect during 1921.

Reclamation of Coney Island Concourse Lands now Under Water.

During 1919 a resume of the history of Coney Island Concourse Lands, which now are under water, was prepared and forwarded to the Board of Estimate and Apportionment. In the resume the Board was informed from the records of this department as to the method by which part or practically all of this immensely valuable water front property came under control of private owners whose land adjoined the original City land, and the Board was requested to investigate the subject and to authorize the Department to assert its claim, to take possession and reclaim the property. Upon authority of the Board of Estimate and Apportionment signs claiming ownership of the property for the Park Department were erected at different points along so much of the beach as still remained above the mean high water line; repair work was done to one of the jetties on the land in dispute and the property patrolled and kept free from papers and other litter by a park representative; pending the appropriation of sufficient funds and further advice from the joint Committee of the Board of Estimate and Apportionment in regard to the reclamation of the land under water.

Additional Coal Cellar for Botanic Garden.

A contract was advertised for construction of a reinforced concrete addition under the Washington avenue sidewalk to the coal cellar of the Brooklyn Botanic Garden, but the lowest bid received exceeded the appropriation available for the work. The Board of Estimate and Apportionment refused to grant additional funds for the work on account of the very high cost of labor and materials and all bids were rejected. The plans and specifications have been revised to cheapen construction cost if possible and the contract will again be readvertised in 1921, when it is expected that prices will be lower.

Brooklyn Heights Park Reconstruction.

In the early part of the year, the heavy retaining wall on Furman street, fronting the property on the north side of the Brooklyn Heights Park at the foot of Pineapple street, overturned and fell into Furman street.

This sudden release of the enormous pressure behind the very high wall and the action of the falling of the wall, so weakened the Furman street wall and the northerly boundary wall of the park property adjoining that both were in an unsafe condition. Surveys immediately were made of the premises, numerous sets of check levels were taken, and the walls were examined at regular periods. It soon became obvious that a serious movement was taking place in the walls; and that they were no longer safe at their old height to withstand the load imposed; they were then condemned and work was started on their demolition.

The work was carried out by the Department's forces and the north wall entirely removed to the new low grade established by the property owner on the north. The back of the park was regraded to a safer slope and the Furman street wall taken down from its old height to meet the grade of the property on both sides. Large quantities of excavation were required to be removed from the rear of the park wall which was over six feet in thickness and 25 feet above Furman street. A suitable drain was installed in the lowered wall for the winter season and the finished grading, sodding and wall coping will be completed in the spring of 1921.

Miniature Golf, Prospect Park.

The public demand for a golf course or putting green in Prospect Park has been so great for the last few years that it was decided to grant this accommodation. Numerous inspections were made of the entire park but no desirable place for a full-sized course could be found, as the locations suitable in size and contour could not be used for the purpose. The only unused part of the park that offered any encouragement was the Peninsula in the large lake, near the Well House drive; a miniature nine-hole practise course was constructed here, in the late fall of the year and it is expected that with rapid maturing the new sod on the greens, under special cultivation and fertilizer treatments, that it will be possible to open the small practise course very early in the year. The nine greens, which are 60 by 60 feet in dimension, excepting one which is on a slight grade, have been constructed to a level plane; the drives from hole to hole, while not long, have been so arranged to clear trees and shrubbery with careful play. It is proposed to later construct, at the end of the course a large net for driving practise and to add more features to the course as opportunity permits.

Permanent Honor Roll, Prospect Park.

Ground was broken and work started on the permanent Honor Roll in Prospect Park for Brooklyn's heroes who sacrificed their lives in the World War. The site selected was one of the most beautiful in Prospect Park; on the edge of the large lake, adjoining the formal flower garden on one side and at the foot of the wide walk surrounding the big open Carriage Concourse, connecting with the newly-paved East Drive, between Lincoln road and Ocean avenue entrances. The memorial will upon completion be

dedicated to the memory of Brooklyn's fallen heroes, through the magnificent generosity and public spiritedness of Mr. William H. Todd of 95 Maple street, Brooklyn, who has volunteered to defray the entire cost of the sculptural and architectural work and the complete cost of the construction, which will be one of the most beautiful in Brooklyn. The erection of the granite and the temporary setting of the stone is completed; the work of final setting, jointing, pointing up, relief grinding and polishing is under way and with completion of the altar and walk paving and tree and shrub planting this spring the unveiling will be made possible at an early date.

Menagerie Improvements, Prospect Park.

The menagerie section of Prospect Park has remained in an undeveloped and unfinished state for a great number of years; one of the reasons for this was its inaccessibility, as there was no carriage or automobile road leading to it, and but one main walk. An effort was made a few years ago to arouse public interest in the Prospect Park Zoo and to secure sufficient funds by popular subscription to erect a suitable Zoo building. This was successful and the first section of the proposed new Zoo building was erected and the upper floor and main entrance completed. Cages were installed on the upper floor, exhibits placed on display and the building opened to the public. The old bridle road leading from the East Drive, was resurfaced and turned into a carriage road. No improvements were made to the site or surrounding grounds and the rear of the building, the first floor and north side remained unfinished and barricaded. The surrounding grounds, elk paddock, pony yard and poultry yard were in an ungraded condition, glutted with falling down old frame shacks, and the enclosures, partitioned and surrounded with badly rusted and rotted remains of wire mesh fence. Last year the new sheepfold was constructed, and this year it was decided to take the entire menagerie situation in hand and bring this section to a proper condition of maintenance, usefulness and appearance with regard to proper development and embellishment as other sections of Prospect Park. The work required to carry out this programme to completion will comprise the following: Building of retaining wall, construction of new asphalt tile and cement walks, proper enclosing of southerly side of Zoo building, completion of first floor of Zoo building, construction of entrance platform and front and rear stone steps, constructing interior first floor exhibit cages for alligators, snakes, eagles and other birds of prey; construction of outdoor flying cages and alligator cages and pools, grading of entire grounds around Zoo building and animal paddocks, construction of sanitary buildings built to proper lines and gardens for pony house and fowl house, repairing and interior and exterior painting of all existing buildings, cages and fences, construction of a new bear cage, construction of a pedestrian plaza in front of animal paddocks and the laying out of a walk from the plaza along the paddocks to connect with the boulder bridge and to connect the upper and lower menagerie levels,

constructing a main walk from menagerie across the line of the East Drive to connect with east side of the park by way of Lincoln road and Willink entrance, widening the resurfaced roadway now leading from East Drive to menagerie and construction of a large concourse at end of this widened driveway for parking autos and carriages at the menagerie proper, construction of a service road for menagerie trucks and carts, pruning all existing foliage in vicinity and removal of all dead trees and shrubs, landscaping, finished grading, top soiling, seeding, trees, shrub and vine planting of all open ground and fencing in all planting areas and menagerie enclosures. This work was started with the Department's forces in the fall immediately after the close of the active park seasons and carried on through the open winter months. It is hoped to have practically all the work done by spring, 1921, when the forces will have to go back to regular maintenance sections. A great amount of the work above outlined already has been accomplished.

Storehouse Courtyard and Roadway Improvement.

Construction work was started on courtyard and driveway on east side of storehouse in Prospect Park adjacent to 7th street entrance. The storehouse was erected about ten years ago to enable the Department to properly house and disburse the large quantity of miscellaneous stores, costing between \$25,000 and \$50,000 per year. A lower floor was provided under the east side of building at an elevation below grade of the surrounding grounds and the bordering roads, which resulted in the basement being unfit for use on account of drainage conditions and lack of roadway outlet. The new courtyard is being constructed at an elevation below the floor level and is also being provided with a drainage system. This improvement not alone provides ample room for trucking by means of the courtyard and new roadway, but also permits the lower floor of the storehouse being made sanitary and put to practical use, and insure the safety of the building which was endangered by the continual basement flooding. This work, which includes grading and planting of adjoining grounds, which were not in a satisfactory condition, is being carried out by the Department's forces and will be completed by spring of 1921. The roadway and courtyard are being paved with Belgian blocks on a sand cushion and the walls constructed of random coursed field stone set in a mortar bed.

Free Ice Distribution to Poor by Mayor's Committee.

The Engineering Bureau again took charge of distribution of the free ice to Brooklyn's poor families for the Mayor's Ice Committee, of which Commissioner John N. Harman was Chairman for Brooklyn. This being the second year of operation, it was handled readily and progressed more rapidly and smoothly, although last year it was carried out to satisfactory completion at a minimum cost of operation for a very large daily distribution. Thirty-six stations were operated. The total quantity of ice distributed for the season was 2,177 tons, equaling 217,686 pieces of an average

weight of 20 pounds. The total cost of each piece distributed free to the poor, including actual cost of ice, office expenses, salaries, stationery and all other charges was 8 1/3 cents. The locations selected for distributing stations were accessible to practically every poor family in Brooklyn. The Commissioner regularly inspected the stations and checked up on the work of distribution and actually assisted in cutting distribution. All families were investigated and provided with monthly distribution cards, which daily were punched by the station attendant. The work was advertised free by the Brooklyn daily papers regularly, and contributions and assistance in the work were volunteered by a great number of Brooklyn's religious, charitable and civic associations as well as number of public spirited citizens, to whom thanks is acknowledged, and Mr. Philip Berolzheimer, the City Chamberlain, who initiated the good work, directed its operations and rendered financial assistance necessary for its carrying out.

STATIONS FOR FREE ICE.

Station Number	Location	Boundaries
1	McLaughlin Park	Tillary and Lawrence Sts.
2	P. S. No. 13	Degraw near Hicks st.
3	P. S. No. 133	Butler and Fourth
4	P. S. No. 124	Fourth and 14th st.
5	Red Hook Playground	Pioneer and Richards
6	Betsy Head Playground	Hopkinson and Dumont
7	New Lots Playground	Sackman and Riverdale
8	McKibbin Playground	White and McKibbin
9	Cooper Park	Morgan and Maspeth
10	McCarren Park	Driggs and Manhattan
11	P. S. No. 84	Glenmore and Watkins
12	Fort Greene Park	St. Edwards & Myrtle ave.
13	P. S. No. 54	Walworth and Myrtle
14	Underhill Gore Park	Underhill and Atlantic
15	P. S. No. 6	Warren and Smith st.
16	Sidewalk	On Water near Gold
17	P. S. No. 37	So. 3rd and Berry
18	Willow Place Mission	Columbia Pl. near Atlantic
19	Police Station	Greenpoint near Manhattan
20	P. S. No. 141	Leonard and Boerum
21	Bushwick Park	Knickerbocker and Starr
22	P. S. No. 86	Irving and Harman
23	P. S. No. 83	Schenectady and Dean st.
24	P. S. No. 82	4th ave. and 36th st.
25	P. S. No. 10	7th ave. and Prospect
26	Linton Park	Dumont and Miller aves.
27	City Park	Navy and Concord
28	Snyder Avenue Police Station	Snyder and Bedford
29	P. S. No. 8	Poplar and Hicks sts.
30	P. S. No. 131	Ellery and Throop
31	P. S. No. 91	E. New York and Albany
32	23 Fourth st.	4th st. near Smith
33	P. S. No. 37	N. 7th st. near Berry
34	P. S. No. 117	Bushwick and Stag
35	P. S. No. 60	4th ave. and 20th st.
36	P. S. No. 85	Evergreen and Covert

Rebuilding of Timber Bridge, Coney Island Creek, Ocean Parkway.

The timber bridge on Ocean Parkway, spanning Coney Island Creek, was practically rebuilt by the Department forces. The bridge is 40 feet in span and 210 feet in width; it was constructed years ago and since then twice repaired. Creosoted timber, which was previously purchased for this work, was used mostly throughout rebuilding as the unimpregnated timber previously used had rotted very badly, including girders, floor beams and piles due to continual wetting and drying caused by tidal changes. The work comprised in the bridge reconstruction was entire removal of the old deck, reinforcing of road bulkheads, raising and placing of new floor beams, reinforcing, bracing and stiffening piles, bulkhead, girders and floor beams and relaying a new deck. All timber was given two good coats of pitch. Lack of funds prevented the driving of new piles and construction of new roadway and wing bulkheads, which will have to be done within the next few years. On account of this, signs have been placed on the bridge roadway, limiting the load to ten tons.

Department Motorization.

This was the first year for carrying on transportation work by means of motors. Under the motorization programme prepared by this Department and included in the budget for 1920, an allowance of approximately \$50,000 was made for purchase of motors, miscellaneous equipment, supplies and operation for the first year instead of an appropriation of \$75,000 which would have been required for hired carts and teams at increased rates. Nineteen one and one-half ton trucks and four two-ton trucks were purchased; the estimated usable period of which is six years. The allowance for motor operation after the first year will be from \$20,000 to \$25,000 less per year than the first year, in which a saving was made of approximately \$25,000, or a total estimated saving for the six-year period of over \$200,000. Arrangements have been made for proper and timely repairs to all vehicles. An emergency repair truck was equipped for roadway work and for hauling in crippled trucks. Air pumps, gasoline pump and storage tank are being installed so as to keep the equipment up to the highest standard and permit full use of all vehicles. The change in transportation system has not only benefited the City financially, but also the Department directly by decreasing the running time of supply and material delivery with the consequent increase in quantity delivered in a given time and allowed of a greater number of operations at the same time. The regular maintenance force have become used to working with faster-moving vehicles, which advantage has reflected itself in the improved appearance of park properties without increasing the usual number of employees.

Borough Hall Park Improvement.

The sidewalks of Borough Hall Park, located in one of Brooklyn's most prominent sections, are old-style bluestone flagging which have become

very badly cracked, broken and out of line and grade, and on account of their character could not be kept in good repair. An appropriation of \$10,000 has been secured for regulating and grading the entire sidewalk area and for laying a standard concrete walk. Surveys and plans have been completed and will be forwarded to the Board of Estimate and Apportionment for approval, so that the work will be completed early next year. Coincident with the walk work, all other necessary adjustments will be made to the premises.

New Sewer at Sea Breeze avenue and Ocean Parkway.

A new sanitary and surface water sewer of twelve inch diameter, with one manhole, was constructed across the lower end of Ocean Parkway at Sea Breeze avenue. The old sewer, which was inadequate, had been broken in a number of places and could no longer be satisfactorily cleaned, thereby introducing stoppages in basins and drains going into the line, with unsanitary and flooded conditions resulting. The new line has entirely relieved the situation and will last for a very long period, having been set in a body of concrete.

Repairs to Parkway and Park Drives, Permanent Pavements.

Permanent repairs were made to the parkways' and park drives' pavements this year, in the amount of \$10,945.96, for 2,896 square yards of sheet asphalt topping, binder and concrete foundation. The roadways on which repairs were made are as follows: Eastern Parkway, north and south roadways, between the Plaza and Ralph avenue; Bushwick avenue, from Myrtle to Jamaica avenues; Pennsylvania avenue, from Jamaica to Belmont avenues; Parkside avenue, from Flatbush avenue to Park Circle; Ocean Parkway Traffic Road, from Park Circle to Kings Highway, and Prospect Park Plaza at Main Entrance.

Repairs to Parkways and Park Drives, Permanent Pavements under Guarantee.

The Eastern Parkway Extension roadways pavements, from Ralph to Bushwick avenues, Fort Hamilton Parkway pavement from Ocean Parkway to 62d street, and Prospect Park Plaza pavement, all under guarantee, were repaired without cost to the City and kept in good condition.

Repairs to Parkways and Park Drives, Temporary Pavements.

Approximately \$75,000 was again expended for labor and highway materials of broken stone, chips, grit, sand, liquid tars and liquid asphalts for keeping the great area of temporary pavements under park jurisdiction in repair. Ocean Parkway, from Prospect Park to Coney Island, the Prospect Park drives, Fort Hamilton avenue, from 62d street to Fort Hamilton, and Shore Road were most difficult of maintenance and required continual attendance of one to three patching gangs practically throughout the entire

year. The above roadways, as well as Bay Parkway, Bay Ridge Parkway, Dyker Beach and Bensonhurst Park drives, which are not so serious in maintenance, were kept in better condition than for some years heretofore, since the advent of general automobile traffic. This was made possible, to a great extent, by the relief to the road forces in the permanent paving of Ocean Parkway traffic road, Park Circle and the East Drive, which permitted of greater effort being made on other roadways.

Eastern Parkway Surface Restorations over new subways.

The Department has been furthering the completion of the subways on Eastern Parkway and restoration of surface areas, which have been in a very unsatisfactory condition since subway construction began. Complete information and outline specifications have been furnished to the Transit Construction Commissioner's office, covering all types of restoration, such as roadways, walks, cycle paths, planting areas and trees. Inspection also has been furnished for properly carrying out the work. The main roadway and cycle paths, which were restored last year, between New York avenue and Buffalo avenue, were taken over by this Department and properly maintained. The trees on this section will all receive the necessary treatment; that is, removal of dead trees, planting of new ones and pruning, fertilizing and mulching of all trees, when the Comptroller's office releases \$11,000 provided for this purpose. This amount represents the damages which the subway contractors were responsible for in connection with the trees.

GENERAL CORPORATE STOCK IMPROVEMENTS

Tentative plans, designs, specifications and estimates of costs have been prepared and forwarded to the Board of Estimate and Apportionment, with request for funds, for the following necessary corporate stock improvements for 1921.

ROADWAY IMPROVEMENTS.

	Estimated Cost
Fort Hamilton Parkway —Permanent paving, 62d street to Shore road	\$606,743.00
Lincoln Road —Permanent paving, Ocean to Bedford avenues.....	46,495.00
Bay Parkway —Permanent paving, Ocean parkway to Cropsey avenue.	564,538.00
Pennsylvania Avenue —Permanent paving, Belmont avenue to New Lots road, and resurfacing Jamaica avenue to Belmont avenue...	216,098.00
Highland Boulevard —Resurfacing old brick pavement with bituminous concrete	86,023.00
Shore Road —Permanent paving, 1st avenue to Fort Hamilton avenue.	447,994.00
Prospect Park —Permanent paving of balance of roadways.....	813,775.00
Ocean Parkway —Permanent paving of main roadway from Park Circle to Avenue "W," and semi-permanent paving of main roadway, from Avenue "W" to Coney Island.....	1,377,113.00
Total requested for paving	<u>\$4,158,779.00</u>

GENERAL IMPROVEMENTS, PARKS, PLAYGROUNDS, ETC.

	Estimated Cost.
Dyker Beach Park —Filling in of swamp area and raising grade of lands to park levels	\$277,200.00
Prospect Park —	
Constructing exterior walks	75,000.00
Resetting exterior curbing	10,000.00
Laying new asphalt walks	67,000.00
Williamsburg Playground —Construction of shelter house and comfort station	50,000.00
Lincoln Terrace Park —Construction of interior walks and installation of drainage system	80,000.00
Highland Park —Construction of permanent interior walks	60,370.00
McKinley Park —Construction of permanent interior walks and installation of water supply and drainage system	153,000.00
Canarsie Park —Reclamation of land under water and building of bulkheads	64,000.00
Bay Ridge Parkway —Grading, landscaping and construction of permanent walks	50,000.00
McCarren Park —	
Construction of permanent walks around plot No. 2	32,600.00
Development of plot No. 4	147,600.00
Development of plot No. 5	171,000.00
Gravesend Park —Complete construction of combined park and playground	219,500.00
Brighton Beach Sea Wall —Construction of stone faced concrete sea wall along Brighton path	38,130.00
Lincoln Terrace Park Addition —Complete construction of park	65,500.00
Lincoln Terrace Playground —Construction of playground complete	145,700.00
Shore Road —Filling out of banks and widening roadway between Bay Ridge avenue and 79th street	105,600.00
Parks—General —Furnishing and erecting urgently needed interior pipe-rail fences	100,000.00
Playgrounds—General —Furnishing and erecting urgently needed interior wire mesh fences	50,000.00
Total requested for parks and playgrounds improvements	<u>\$1,962,200.00</u>

MISCELLANEOUS WORK OF BUREAU

Applications for Permits.

Requests embodying and specifications for permits from contractors, builders, plumbers, architects and public service corporations, for pavement openings, building erection, projections, etc., are inspected and passed upon for enforcement of Parkway Laws and Park Board Ordinances.

Brooklyn Botanic Garden, Miner Construction.

Inspected and approved or disapproved work performed under open market order for Brooklyn Botanic Garden.

Measurement of Scow Trucks.

All scows and trucks with highway and botanical materials were measured, computed and vouchers for same certified.

Budget Work.

Statistical charts and budget detail and summary sheets annually prepared for estimated expenditures covering permanent pavement repairs under contract and open market order; labor and materials for repairs to temporary pavements and all contemplated major improvements. Tentative plans, specifications and estimates of cost yearly prepared for all corporate stock budget improvements.

ARBORICULTURAL SECTION

for

TREES AND SHRUBS, PARKS AND PARKWAYS

The work of this bureau varies with the seasons. During the winter, work of removing dead trees, pruning trees and removing dead wood, pruning shrubs, vines, was vigorously prosecuted. On account of the severe weather which prevailed some of our forces were engaged in shoveling snow, chopping ice, and sanding roadways, consequently many dead and unsightly trees in Prospect Park unavoidably were left standing.

During the spring all efforts were concentrated on planting. Trees, shrubs and vines available were distributed and set out where they were most needed. Due to railroad difficulties, we could not procure one thousand rhododendrons purchased from the Curtis Nursery Company of Calicoon, New York. These rhododendrons would have covered bare spaces so conspicuous in popular sections of Prospect Park.

All through the hot summer, trees, shrubs and vines planted in Prospect Park and all the small parks and boulevards during the spring, regularly were cultivated, fertilized and watered.

The spraying season opened somewhat earlier this year. Caterpillars of the Tussock moth variety were very numerous and considerable damage was done to trees. Suckling and boring insects were also abundant not alone on trees, but many species of shrubbery were attacked by them.

When spraying commenced, we found caterpillars had made considerable headway; and an uphill fight was waged against them. Over 5,000 lbs. of prepared arsenate of lead were used as a spray material. Prospect, and most of the small parks and boulevards were reached by spraying forces before the summer ended. 16,962 trees and 2,298 shrubs were sprayed. Many species of tree, shrub and plant destroying insects infest the parks and boulevards. Some feed on leaves and defoliate the trees and are known as caterpillars of the butterfly or moth family. A great variety of scale insects and various species of aphids known as plant lice, cling to stems, leaves, branches of trees, shrubs and plants and slowly destroy them by sucking the living sap. Others are known as borers of the beetle variety. These eat and bore into the wood, creating galleries and often cutting deep into and girdling large branches, causing them to break off. Each variety of insect requires a different method of attack and a different insecticide to destroy it.

Paracitic Fungii, a most destructive disease, appearing in many forms, is another source of trouble. Trees, shrubs, plants, grasses, etc., are often attacked by these devastating diseases. The species of plant attacked, should the disease be discovered at its source, would no doubt have a chance of being saved, and the scourge proportionately checked, if the proper remedy is applied at the first appearance of infestation.

During the fall, removal of dead trees, pruning, cultivating, fertilizing,

resoiling, brushing, spraying to exterminate suckling insects, repairing tree guards, etc., were extensively carried on.

The Lookout Hill section suffered through storms and vandalism during the year. To repair the damage, we have driven rough wood stakes into the ground, reinforced the washouts with heavy timber and branches, taken up large quantities of leaves, compost, etc., and filled up the gullies with this material. The entire section also should be resoiled to maintain a vigorous tree growth. Many young trees set out in this section a year ago have been pulled up and scattered around by mischievous boys; consequently over 60 per cent. of the trees are now dead or missing. Some method of protection should be adopted in order to save the woodlands from these constant raids.

The care of trees and shrubs on outside city parks is a matter of great importance, as they are existing under very unfavorable conditions. Dust, soot, gas odors, insects, and fungii retard their growth, and every effort is being made to help them. Fresh soil, compost, wood ashes and other beneficial fertilizers should be applied regularly and systematic cultivation, watering, pruning and spraying would help considerably.

Special attention was given to the following outside parks:

Bensonhurst, Bedford, Bushwick, Betsy Head Playground, Borough Hall, Cooper, City, Carroll, Dreamland, Ft. Greene, Fulton, Highland, Irving Square, Lincoln Terrace, Linton, McCarren, McKinley, McLaughlin, McKibbin Playground, Red Hook, Sunset, Seaside, Saratoga, Tompkins and Winthrop.

Trees and shrubs pruned, sprayed and treated thereon are as follows:

Dead trees removed, 615; trees pruned, 1,883; trees cultivated and watered, 2,254; trees sprayed, 8,199; trees planted, 429; shrubs removed, 83; shrubs pruned, 2,314; shrubs sprayed, 1,773; tree guards repaired, 763; total trees treated, 13,380; total shrubs treated, 4,170; total tree guards repaired, 763.

Trees and shrubs treated on the following parkways:

Bay Parkway, Bushwick Avenue, Bay Ridge Parkway, Eastern Parkway, Fort Hamilton Parkway, Highland Boulevard, Ocean Parkway, Plaza Street, Pennsylvania Avenue, are as follows:

Trees removed, 263; trees planted, 117; trees cultivated and watered, 231; trees pruned, 1,828; trees sprayed, 4,253; trees straightened, 54; trees brushed, 3,556; trees rubbered and staked, 235; shrubs pruned, 47; tree guards repaired, 278; stakes removed, 259; shrubs dressed, 47; total trees treated, 11,074; total shrubs treated, 94.

Trees, shrubs and vines treated in Prospect Park, are as follows:

Dead and dangerous trees removed, 909; trees planted, 828; trees pruned, 2,054; trees cultivated, 3,862; trees sprayed, 4,510; trees straightened, 258; trees transplanted, 3,823; trees rubbered and staked, 230; trees brushed, 2,011; total trees treated, 18,485.

Shrubs planted, 2,187; shrubs cultivated and watered, 1,587; shrubs

pruned, 6,433; shrubs sprayed, 525; shrubs transplanted, 227; total shrubs treated, 10,959.

Vines planted, 929; total vines treated, 929; total trees treated, 42,939; total shrubs treated, 15,218.

City Park is now under reconstruction and many old trees within the park and on the surrounding sidewalks are dying out. The trees were mostly Carolina Poplars and Silver Maples, two undesirable species for city or park planting. Shrubbery plantations were also destroyed during the war period while the park area was under the control of the Federal Government. The dead trees were removed during the summer and 30 Norway Maples set out on the curb line along the foot paths. Many trees and shrubs are still missing, and considerable planting will be carried on during the coming planting season.

Eastern Parkway is yet in chaotic state, owing to construction of the subway, where dead and dying trees are very numerous and many have become extremely dangerous. One section covered has been finished and turned over to the Park Department, but funds necessary for restoration and care of trees destroyed have not as yet been released to this department. Many large Elms became dangerous and had to be removed. This was done in September and October, and 66 trees were taken down, cut up and disposed of. It is contemplated to restore this section of the parkway to normal condition next spring. All trees will be pruned systematically, 1,200 cubic yards of top soil will be used and a liberal supply of fertilizer will be distributed among the trees where most needed.

The American Elms on Ocean Parkway need special treatment where deterioration is plainly evident, and a large number of stag-headed and decaying trees are awaiting removal. They must be replaced with young trees, and the cost will be much greater than if a system were adopted by which the trees periodically would receive a quantity of food materials to enrich the soil and make it suitable for the roots to feed on. Then the yearly mortality of the trees would be reduced considerably.

Financial aid in this matter is most imperative. Top soil, manure, compost, fertilizers, etc., are needed in large quantities, and to meet these requirements, a substantial appropriation annually has been requested. The twelve to fifteen thousand dollars, that is allowed annually for arboricultural and horticultural supplies is little, compared to what is needed. Insecticides, fungicides, trees, shrubs, grass seeds, plants, etc., and other incidentals are purchased from this account, and this leaves very little to pay for soil, manure and other fertilizers.

The working force is also inadequate, territory continually is added, and the increase in man power is not proportionate.

It may be interesting to know how many trees and shrubs constitute the arboreal display in parks and parkways of this borough. The census just taken reveals the following figures:

	Trees.	Shrubs.
City Parks	10,072	16,057
Prospect Park	26,146	100,000
Parkways and Boulevards.....	10,831	1,639
Total.....	47,049	117,696

Many trees missing on the various parks and parkways must be replaced and are not enumerated here.

ARBORICULTURAL SECTION, TREES ON CITY STREETS

This department has been unusually busy this year. We have not recovered entirely from the effects of labor shortage during the war, and in addition there has been a steady increase in demands for attention to trees by individual owners. We attended over 7,000 individual requests for tree work out of 9,586 applications, which was 2,645 more than received last year. A decade ago the number of applications was less than a thousand, and we were able to attend to them all, and also do a great deal of systematic work from street to street. A detailed account of our operations follows:

Trimming and pruning trees.

This is our most important work in connection with the care of the city's older trees. Only trained men can be used in this line, and not only must they be competent and fearless, but often expose themselves to great danger. We have been fortunate in that only two men have lost their lives in the history of the department in pruning of trees, but a great many have been severely injured, in spite of taking every known precaution. For these reasons men have to display rare good judgment in trimming a large tree. The trunk of a tree that shows age, disease, or wood-destroying insects, generally has branches in an equally unhealthy condition, and greater precaution, therefore, should be taken. All poplars, ailanthus, silver maple, catalpa and willow are either too soft or too brittle to depend on without special care, and silver and sycamore maples are especially subject to attacks of borers and therefore great care must be exercised. These borers have done great damage, and destroying them is a very tedious and expensive process. They can be held in check by judicious pruning at the right time of year, but we have not been able to undertake the work because our forces are engaged most of the time in removing dead and dangerous limbs and cannot be spared for a wholesale campaign against insects.

Removing dead and dangerous trees.

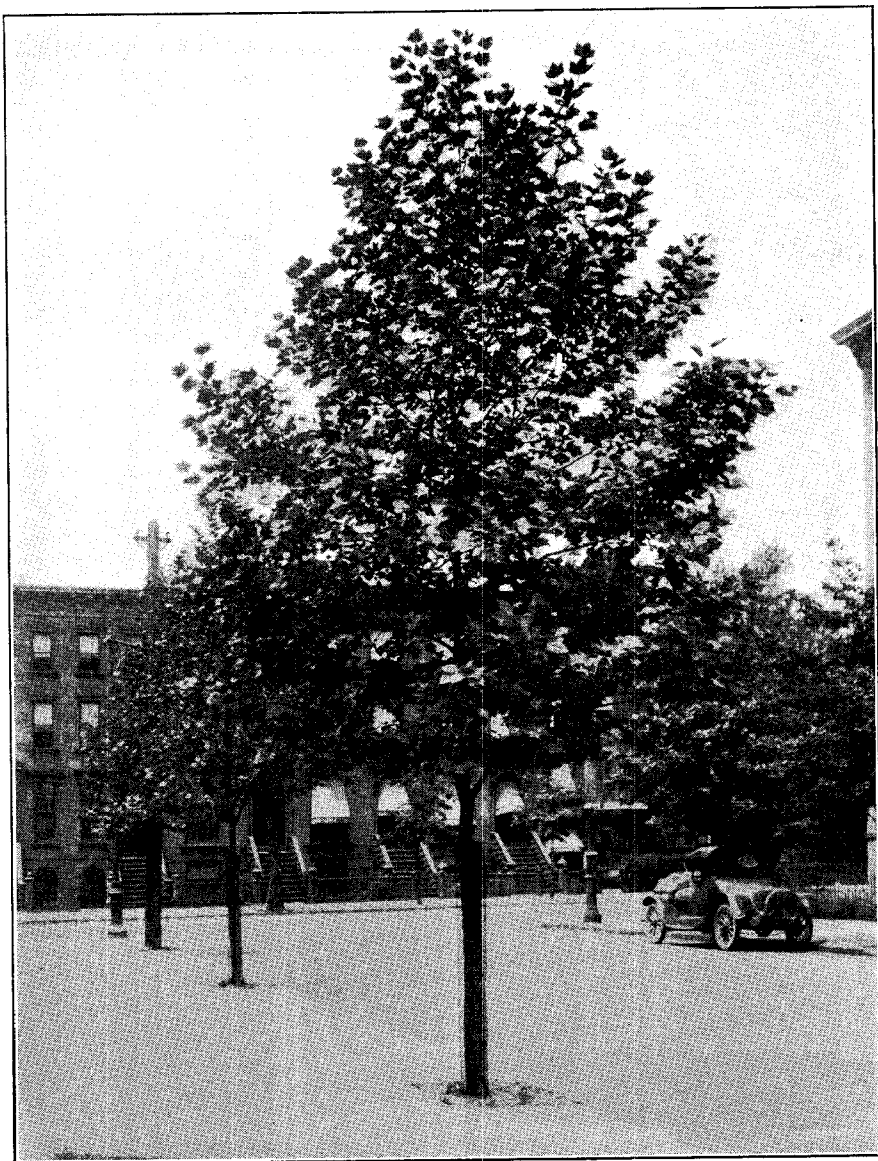
Many trees in Brooklyn are very old; many have been attacked by fungus and insects, or have succumbed to wounds made by horses, and much time must be devoted to their removal. Owing to overhead wire, trolley systems, etc., it is often very difficult to remove a tree. When a tree

is reported in dangerous condition, an inspector verifies the report, and the work is done at once.

Spraying.

Spraying for the Tussock Moth Caterpillar is carried on every summer, and the worst infested districts are given most attention. All requests, if received in time, are taken care of and the trees kept free from caterpillars. Unfortunately many applications are received after the caterpillars have reached maturity, and work at that time brings but a small percentage of efficiency. When caterpillars begin to crawl around they eat but little and are difficult to poison for that reason. The co-operation of the householder could be of signal advantage in fighting caterpillars, as this insect lays some of its eggs under rails and window sills. With a sufficiently large force egg masses could be scraped off in winter. Caterpillars could be greatly reduced if more spraying machines were employed, as the operation is done in a very short period of time, and with our small force the efficiency of the work is therefore very low. An infestation of the Gypsy Moth caterpillar was discovered in Fatbush during the summer, and the next day men were sent to destroy all insects. All trees in the infested area and surrounding it were sprayed thoroughly. The owner of a vacant lot at this location was required to have it cleaned of all old hedges, shrubbery, etc., which was done. The spraying and destruction of insects was so successful that few escaped and these were destroyed during the winter. This insect is very ingenious in secreting its eggs and we cannot say that it has been eradicated entirely, but with vigilant efforts next summer we do not believe it will become a menace. The seriousness of this Gypsy Moth pest is not to be underestimated. Millions of dollars have been spent in Massachusetts and adjoining states to control the pest, and nothing must be left undone to exterminate before it gets a footing. It should not be confounded with the Tussock Moth, however, which is harmless, compared with the Gypsy. Many such mistakes are made every summer and causes the department a good deal of unnecessary work. But in any cases of doubt the department is only too glad to ascertain the truth, and desires co-operation of every citizen. We are indebted greatly for such co-operation to Mr. Metcalfe, who first discovered the insect last summer. The following description of the moth will be of interest:

The female gypsy moth deposits eggs in clusters of four or five hundred, which are covered with brownish hairs from her body. This protects them from the elements and renders their destruction by fire quite difficult. The newly hatched caterpillars feed upon small leaves, making pin holes in them. During the warm part of the day they seek shelter in the bark or crawl to the ground, and do most of their feeding at night. The period spent in the caterpillar stage extends, on the average, from early in May to July 5th, or approximately seven weeks. The caterpillars, after they have finished feeding, change to pupa on the bark of trees, in rubbish or any sheltered



ORIENTAL PLANES
FOUR YEARS PLANTED

place. The moths later emerge, the females lay their eggs, which winter over, and the life cycle is complete.

The thanks of the Department are especially due to hearty co-operation of the Bureau of Entomology at Washington, represented by Mr. H. L. McIntyre, in charge of Scouting Extermination Work; we were ably assisted also by Dr. George G. Atwood and State Inspector Zimmer, of the State Department of Agriculture at Albany.

Treatment of Disease.

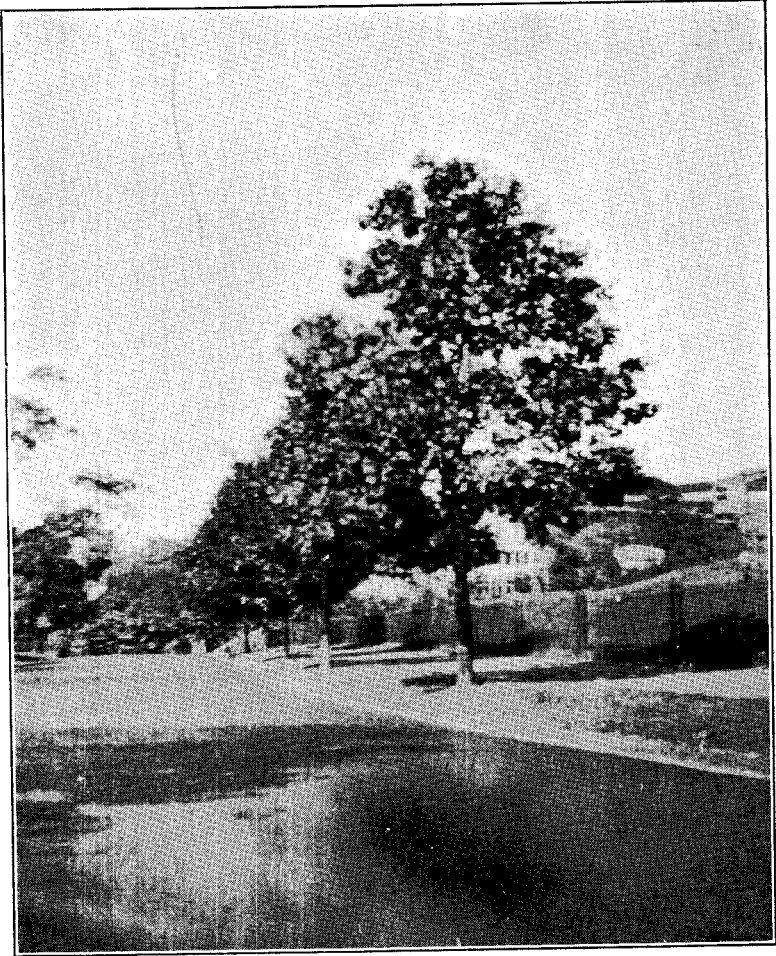
It is oftentimes worth while to fill cavities of valuable trees with cement, and great care and experience must be brought to bear to make it satisfactory. Private companies have exploited this business for years and more money is wasted in it than in perhaps any other line of tree work. The work always presents a pleasing appearance to the eyes after it is done, but whether it is well done or not cannot be seen, and the question of value and general health of the tree must be looked carefully into before it can be profitably undertaken. For these reasons the Department has undertaken very little of this expensive work and only when a very fine tree is involved.

Trees are subject to blights and fungous diseases of many sorts, and treatment along these lines is undertaken in a limited way, but expensive systematic work along these lines is not practicable without a much larger force. The lindens, horse chestnuts and western planes are especially subject to attack, and would benefit from several sprayings with fungicide, such as Bordeaux mixture.

Young Trees.

Planting young trees has been greatly appreciated, judging by the number of orders received during the last three years, in addition to the orders received on account of the mortality due to our recent excessively cold winters. The Oriental Plane, a most popular and desirable tree, has suffered to an extreme degree from effects of the weather. The previous good behavior of this tree makes us loth to abandon it altogether, although in some cases fifty per cent. of the trees were destroyed.

In order to give a young tree a fair chance it is highly desirable to give it a large opening in the sidewalk in which to grow. This makes it possible to cultivate the soil, to water it successfully and to give the sun and air a chance to do invigorating work. The plan adopted by the Department is to make the opening three by four feet, as openings any smaller are not advisable. A larger opening would be better, but on many streets much objection has been made to larger openings. Grass plots around trees look nice when they are kept in good condition, but they are not advisable, as the tree needs all the fertilizing elements in the soil and the moisture which the grass takes away. Then, too, watering a grass plot is very different from that required to water a tree. Grass can be watered a trifle every day in

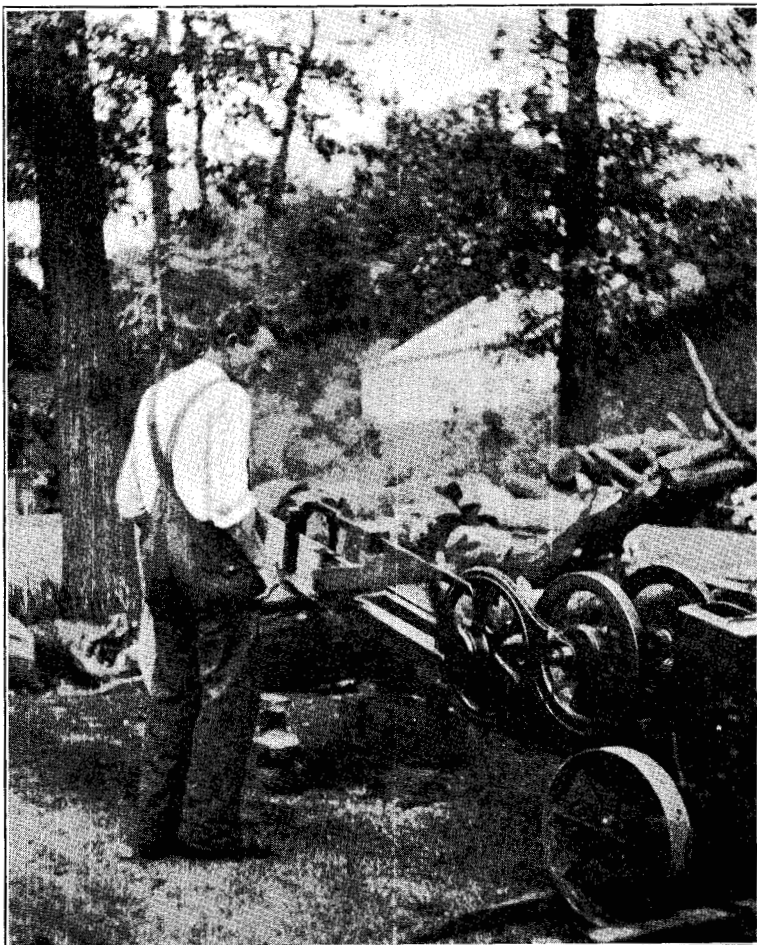


RED OAK AS AN AVENUE TREE

the summer with beneficial results, even if the water only goes down a few inches, but this will do a tree no good whatever, as it gives the roots a tendency to grow toward the surface, where they are dried out more quickly and destroyed. Grass will grow, too, if it gets a daily watering that is altogether too much for a tree, as keeping the soil constantly drenched sours it, and causes tree roots to rot. The only proper way to water a tree is to give it a good soaking, so that the water will sink down at least two feet, and then give no more water until the soil has a chance to dry out. In this climate a thorough soaking once a week is plenty, but it should be thorough and there is hardly any danger of too much at one time. When the top soil has dried a little, say the next day, the soil around the tree for the depth of two or three inches should be stirred or cultivated. If this could be carefully attended to, and the soil were not tramped down, the rain would in most years be sufficient to keep a tree in flourishing condition. This unfortunately, is hardly possible in a city street; but the more often the surface of the soil is stirred the better for the tree.

The use of an iron grating to cover the soil is very desirable, but as this is a rather heavy expense it is seldom adopted in Brooklyn, as the gratings alone usually cost much more than the price the Department charges for a tree. The advantage of the grating is that it protects the soil from being tramped upon and also prevents the dirt from being tracked over the sidewalk, and gives the rain a better chance to penetrate to the roots of the tree. With the use of grating a much larger opening can be made, which will, of course, cost more in proportion, but will be much better for the tree.

In planning for the planting of a block or more of trees, a much better effect can be produced by planting the trees at regular distances apart than by planting them in haphazard fashion—just where the owners happen to want them. A considerable saving in money can also be effected by regular planting. This requires, however, a certain amount of concerted action among neighbors, which is always more or less difficult to obtain. But if even two or three residents can get together on a block the difficulties are not insurmountable. Suppose, for instance, we have a block about two hundred feet long to be planted, and that the houses are on eighteen or twenty foot lots. Now, if every householder wants a tree the result will be too close planting, and eventually the street will be too much shaded and too damp for health and comfort; and it will be practically impossible to do anything to alleviate this condition, for co-operation of neighbors is much more difficult to get in removing trees than in the planting of them. If, on the other hand, only eight or ten out of the twenty or so residents are willing to pay for trees, and each one insists on a tree in front of his particular house, the result is very unsatisfactory; the trees being all crowded together perhaps at one end of the block or on one side, or in some other way equally out of harmony. Now, if those eight or ten neighbors will get together they will find that as few as eight trees will make a very good



MOTOR SAW IN USE AT PROSPECT PARK

showing on such a block, the eight trees costing \$80; and if there are ten contributors, the total cost will only be \$8 per person. The trees then can be planted at uniform distance apart and the result will be a handsome block of trees.

The above calculation is based on planting trees fifty feet apart, which is really a little further apart than necessary. In most city streets thirty or forty feet is more suitable. But whatever the distance the factor of prime importance is regularity, as far as that is possible. In an old street it is usually not possible to space with absolute accuracy, on account of pipes, fire hydrants, lamps, etc., but a fairly close approximation can be secured.

In Brooklyn we have lately been planting a great many trees of the species known as Oriental Plane, or Sycamore, or Buttonball. These trees thrive very well under adverse conditions incident to city life of a tree, but are not as hardy as the Norway Maple, which is used extensively. Other species are entirely satisfactory, but most of them are of slower growth, such as the Gingko, the Red Oak, the Pin Oak, the Linden and many more.

The ten dollars the Department charges for planting trees covers the replacing of the tree if it dies, a wire guard, a cubic yard or more of top soil and (in connection with the owner) looking after the tree in the future. It is practically impossible to get such service for anything less than the sum charged. Some florists and nurserymen will put in a tree for a lower price, and some irresponsible individuals will put in some kind of a tree for fifty cents.

Now that the department has planted over eight thousand young trees the work of caring for them becomes a very considerable item, and interferes seriously with the time that might be devoted to the older trees. The care of these old trees is, as already stated, a very important matter, but it is deemed still more important to get young trees growing throughout the Borough.

Memorial Trees.

Hundreds of trees have been planted throughout the borough as a memorial to our soldier dead. Bedford avenue for its entire length has been devoted to this purpose. It seems impossible to find any other object so fitting and beautiful for the purpose as a tree, and all over the country the same plan is being followed to remember those who died in France. A tree has been planted in Brooklyn for every soldier when relatives applied for it and a temporary tablet has been placed on every tree recording the name of the soldier, his rank, circumstances of death, etc. It is planned to have permanent guards to protect the trees. The Board of Aldermen already has been asked for an appropriation for this purpose.

The following is a summary of work done during 1920.

Trees trimmed	6,509
Trees removed	1,219
Trees sprayed	18,165
Trees scraped	2,385
Young trees cared for.....	8,000
Young trees planted.....	1,043
Young trees winter-killed and replaced.....	845

HORTICULTURAL SECTION

Greenhouses, Nursery, Flower Gardens

The greenhouses in Prospect Park consist of 2 Cacti Houses, 2 Orchid Houses, 1 Store House, 1 Fern House, 6 Propagating Houses, 2 Potting Houses, 1 Show House, 1 Palm House and 1 Cold House. These buildings contain species of a very large variety of plants, all of which were given very careful attention. Many people visited the greenhouses, including numerous out of town visitors who came to see our special displays. Hundreds of school children were brought by teachers to study plant life.

The Easter Chrysanthemum Shows were very elaborate and beautiful and approximately 100,000 people visited these displays.

About 140,000 plants of numerous species were grown in our greenhouses, which were used for flower beds in various parks. About 75,000 hardy plants also were grown and planted in shady nooks, and on slopes where plants of this special type were required.

The twenty-one flower beds in the Formal Flower Garden, and the beds of the Old Fashioned Garden, Lefferts Mansion, Litchfield Mansion, and in the Rose Garden, were laid out as usual and given careful attention. Many beds were planted and cared for in our smaller parks.

Approximately 15,000 vegetable plants were produced from seed and sent to the Children's Farm Gardens, conducted by this department, for planting. These consisted of cabbage, corn, lettuce, celery, onions, and peas.

The Golden Stairs, The Rose Garden, the Vale of Cashmere, and the aquatic plants in the pool were kept in excellent condition, and were admired by thousands of visitors. Thirty-eight vases were planted with pansies, and various other flowers. Flower beds and borders were laid out around the Lefferts Mansion.

The Music Stand was decorated with flower boxes containing a variety of flowers and vines.

At the north end of the large lake, 1,900 cubic yards of fill, and 200 cubic yards of top soil were spread and graded for a golf course. This section also was seeded and given careful attention, and undoubtedly will make an excellent course in the spring.

About sixty thousand people attended the Easter Show last spring and forty thousand people visited the Chrysanthemum Show this fall. The greenhouses are visited daily by hundreds of people.

In addition to the above work the following list of plants were propagated in Prospect Park Nursery:

Vegetable Plants in variety for School Farms.....	12,000
Flowering Plants, Herbaceous	21,000
Flowering Plants, Annual.....	29,000
Flowering Shrubs in variety propagated.....	45,000
English Ivy	8,000
Euonymus Radiens variety.....	8,000
Golden Privet	5,000
Azalea Amena	400
Evergreens Shrubs in variety.....	1,000

Chrysanthemums in variety.....	4,000
Altherlanherea in variety (plants from greenhouses).....	50,000
Acalphea	300
Begonia	1,000
Canas in variety.....	3,000
Coleus in variety.....	6,000
Centaurea	500
Fuschia	300
Geraniums	5,000
Salvia	2,000
St. Helenum	2,000
Pansies in variety.....	12,000
Pyrethrum	500
Vinca	800
Flower beds planted, bedding plants.....	33
Flower beds, tulip bulbs.....	17
Flower beds manured.....	33

MECHANICAL DEPARTMENT

General Structural Repairs and Maintenance.

The following is a list of general repair work carried out in parks, playgrounds and on parkways during 1920.

Amersfort Park.

Water supply and irrigation pipes repaired. Fences, catch basins, walks and shelter were repaired.

Bedford Park.

The Museum building, railing, steps, and lattice work of plaza were repaired and painted. In main building sashes were repaired, glazed and painted. Water pipes were repaired. Drains cleared. Roof and leader pipes were constructed.

Bensonhurst Park.

Repaired roof of shelter, settees, catch basins and steps; also drinking fountain and irrigation and water system in park. Sunday School Anniversary and reviewing stands were set up and decorated.

Betsy Head.

Repaired water and drainage systems; posts, flying swings and equipments. Repaired slides, awnings, drinking fountains and playground fixtures. Furnished stakes, signs and boxes. Repaired roof of bath building, furnaces, electric lights, toilets and swimming pool. Glazed sash. Repaired gutters and outlets. Made new coal bumpers. Maintained and kept in working order entire water system.

Bushwick Park.

Repaired roof, gutters and leader, toilet seats, urinals, and drain pipes; also drinking fountain. Irrigation and water supply pipes repaired. Erected and decorated speakers' stands.

Bushwick Playground.

Repaired roof and playground fixtures, drinking fountains, drains and water supply system catch basins, iron fences, toilet seats, cistern and urinals. Glazed and painted building.

Bay Ridge Parkway.

Wire, tennis court fence repaired, also seats and posts painted. Irrigation water supply system, catch basins and drains cleared. Repaired drinking fountains. New cement pipes furnished and set for draining Second Avenue bridge. New signs, basin covers and settees prepared and set out.

Canarsie Park.

Repaired plumbing at toilet, drinking fountain, water supply and irrigation system. Repaired baby swings ladder and playground fixtures. Erected and decorated reviewing and speakers' stands.

Carroll Park.

Installed new steam pipes at shelter. Repaired roof, gutter, leader pipes and provided new outlets. Repaired toilets, drinking fountains. Irrigation and water supply systems, catch basins, drains and electric lights in shelter; also painted and glazed building and repaired iron fences.

Cooper Park.

Repaired plumbing at toilets. Put in new damper for steam heater. Repaired and glazed sash. Electric work repaired. Drinking fountains and irrigation pipes repaired.

Coney Island and Dreamland Beach Park.

Repaired plumbing ladies' toilet Coney Island Beach and built new cesspools. Repaired shelter runways, awnings and flooring and drinking fountain. Shelter at Dreamland Beach repaired, glazed and painted. Installed steam pipes. Made new board walks. Repaired drinking fountain and board fence. Furnished and set new signs.

Dyker Beach Park.

Comfort station plumbing work repaired. Building glazed and painted and sluiceway repaired. Painted and repaired posts and fences. Furnished and set signs.

Eastern Parkway.

Built and erected newspaper booths. Repaired settees and drinking fountains.

Ft. Hamilton Park.

Repaired irrigation and water systems; also plumbing work at toilets.

Ft. Greene Park and Playground.

Repaired plumbing at comfort station, cleaned drains and installed new washout closets. Repaired drinking fountains, irrigation and water supply systems. Iron door at Monument repaired. Playground fixtures erected. Decorated stands and platforms and glazed and painted sash.

Fulton Park.

Repaired plumbing at toilets, glazed and painted sash and repaired irrigation and drainage systems.

Highland Park.

Repaired plumbing at toilets and roofs and gutters, including new glazing and replacements to irrigation system. Set up and decorated special concert stands.

Irving Park.

Repaired roof, leaders and gutters and toilet plumbing.

Linton Park.

Repaired iron fence and plumbing in toilets.

Lincoln Terrace Park.

Painted and glazed shelter and repaired irrigation and water supply systems.

McCarren Park.

The following repairs were made: Painting, glazing, plumbing work, structures repaired, electric lights, roof, leaders and gutters, playground fixtures, running track, drinking fountains, water supply system, irrigation pipes, farm garden tools and boxes, shower baths and iron fences repaired.

McLaughlin Park.

Repairing shelter doors and partitions and glazed and painted building. Changed electric lights. Repaired baby swings and frames and merry-go-round.

McKibbin Park.

Repaired plumbing and toilets, fixed backstops and playground fixtures and glazed and painted building.

McKibbin Street Playground.

Repaired doors, sash and plumbing at toilets and drinking fountains and playground fixtures.

New Lots Playground.

Repaired plumbing at toilets, drinking fountain and drain pipes. Repaired 8 flagpoles, awning frames and playground fixtures.

Ocean Parkway.

Repaired seats, basins, drinking fountains, sheds, stable, harrows, scrapers and tools.

Prospect Park.

Made 100 baby swings, 160 tree poles, 20 auto truck bodies and 7 cabs. Installed new water pipes in Parade Ground building. Made new lockers for hardware street storehouses, also at stable; made doorway and partitions for basement of storehouse; installed electric lights in Boat House; alterations and repairs at Mansion and Music Stand. Repaired windows Farm House, and alterations at Gate 5 shelter; repaired water main at Park Circle and roof of Mansion; repaired roof and platforms of Rustic Boathouse on Peninsula; repaired and glazed and painted greenhouses and made 50 new hot-bed sashes; repaired iron fences Menagerie cages, Elk house enclosures and toilets; repaired Picnic shelter with new metal ceiling and repaired doors and sash; repaired heating plant for Rose Garden and altered shop heating system; repaired stalls at stables and the sheds and toilet; repaired and set up skate houses and made platform for skating; repaired playground fixtures, jumping hurdles, spring boards and poles; made new auto repair pit at garage shops; repaired catch basins and bridges throughout the park; repaired fences, railings and painted the same; repaired plumbing at toilets and the drinking fountains and irrigation pipes; repaired wagons, carts, trucks and rolling stock; repaired settees, screen door sash, chairs, tables, desks and signs; made new signs for entire park system; made new newspaper booths for Eastern Parkway; made new attendants' shelter for City Park.

Red Hook Park and Playground.

Installed wash basin and repaired plumbing at toilets, drinking fountains, irrigation and water supply pipes, also repaired playground equipment and painted and glazed shelter.

Saratoga Square Park.

Repaired plumbing at toilets and the drinking fountains and catch basins. A new roof was put on building with new gutters and leaders.

Seaside Park.

Repaired plumbing and toilets and painted and glazed them; repaired drinking fountains, irrigation and water supply system. Made wheelbarrows and signs.

Sunset Park.

Repaired fences, set new tennis posts, repaired drinking fountain, irrigation and water supply system and catch basins; repaired roof of shelter and plumbing at toilets and painted and glazed building.

Tompkins Park.

Repaired plumbing at toilets; installed electric lights; repaired iron fence, drinking fountain, irrigation and water supply system.

Winthrop Park.

Repaired plumbing at toilet; painted and glazed shelter; repaired drinking fountain, iron fence, irrigation pipes and water supply system, also catch basins.

Miscellaneous Jobs.

Repaired, glazed and painted sash at Bushwick High School. Reconstructed part of Brooklyn Heights Park at the foot of Pineapple street; repaired and reset flag stones and coping, Borough Hall Park; repaired drinking fountain, Division avenue; repaired fountain, Bergen street and Bedford avenue. 972 horseshoeing jobs were done and 1,560 saw filing jobs completed.

WORK OF SPECIAL DEPARTMENT POLICE

The three Department employees detailed to special police work in addition to the regular City police, accomplished very good results, as shown by tables of arrests and convictions for violation of park ordinances, vandalism and other more serious offenses.

TITLES OF APPROPRIATION ACCOUNTS, 1920

Personal Service—

Salaries Regular Employees—

Administration, Operation and Maintenance.

Engineering.

Care of Trees.

Care of Parks and Boulevards.

Salaries Temporary Employees—

Children's School Farms.

Wages Regular Employees—

Care of Parks and Boulevards, Trees, Baths and Comfort Stations.

Care of Menagerie.

Wages Temporary Employees—

Operation and Current Maintenance of Park Properties, Including
Minor Additions and Alterations.

Patching and Resurfacing Park Drives and Parkways.

Care of Trees in City Streets.

Operation of Playgrounds and School Farms.

Supplies—

- Forage and Veterinary Supplies.
- Fuel Supplies.
- Office Supplies.
- Laundry, Cleaning and Disinfecting Supplies.
- Educational and Recreational Supplies.
- Botanical and Agricultural Supplies.
- Motor Vehicle Supplies.
- General Plant Supplies.

Equipment—

- Office Equipment.
- Motor Vehicles and Equipment.
- Educational and Recreational Equipment.
- General Plant Equipment.

Materials—

- Highway Materials.
- Other Materials.

Contract or Open Order Service—Repairs and Replacements—

- Pavements and Walks.
- Motor Vehicle Repairs.
- General.

Transportation—

- Shoeing and Boarding Horses, Including Veterinary Service.
- Carfare.

Communication—

- Telephone Service.

General Plant Service—

- Music.
- Contingencies.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES

Central Museum

- Salaries.
- Expenses for Other than Personal Service.

Children's Museum

- Salaries Regular Employees.
- Expenses Other than Personal Service.

Brooklyn Botanic Garden and Arboretum

- Salaries and Wages.
- Expenses for Other than Personal Service.
- Special Permanent Improvements.

Arrests made	350
Convictions	350
Fines	\$533

In certain of the above cases, on account of the seriousness of the offences, prison sentences were imposed instead of fines. The operations of the above forces have been of great assistance in keeping the parks exceptionally free during the last year of vicious characters and vandals.

WORK OF REGULAR CITY POLICE ASSIGNED TO PARKS.

The following is a list of violations of the Park Ordinances for which summonses were served and their dispositions:

Violations	Number	Conv.	Dis.	Fines
Annoying females	28	26	2	\$55.00
Walking on lawns	486	481	5	637.00
Climbing park wall	93	91	2	95.00
Breaking Shrubbery	194	192	2	192.00
Ball playing	377	373	4	442.00
Riding bike on Walk.....	21	20	1	38.00
Climbing trees	31	30	1	20.00
Bathing in lake	4	4	..	35.00
Fishing in lake	22	22	..	47.00
Picking flowers	39	39	..	30.00
Parking auto on Br. Road	160	158	2	310.00
Parking auto aft. 12 p.	171	171	..	386.00
Parking auto aft. 10 p.	16	16	..	80.00
Horse unattended	19	19	..	60.00
Horse grazing	14	14	..	28.00
	1,675	1,656	19	\$2,445.00

There also were served 106 summonses for no lights on autos, violation of Traffic Regulations with a total fine of \$327 and 373 summonses served for park speeders, 272 convictions and 1 discharge, with a total fine of \$678.

Condition of Corporate Stock, Assessment Bond, Special Revenue Bond and Special Accounts as at December 31, 1920.

Title Account	Total Authorization	Net Vouchers	
		Registered Based on Cancellations and Adjustments	Adjusted Credits Unexpended (E—F)
Improvement of Botanic Garden	100,000.00	99,998.80	1.20
Repaving Eastern Parkway	174,316.00	172,475.33	1,840.67
Repaving and Improving Park Circle	55,000.00	54,535.85	464.15
Repaving Fort Hamilton Parkway	110,000.00	109,132.68	867.32
Architects' Fees	20,000.00	19,335.66	664.34
Engineers' and Architects' Fees	11,000.00		11,000.00
Brooklyn Institute of A. & S.—Sections F and G	400,000.00	380,197.96	19,802.04
Repaving drives, etc.	284,696.33	281,256.64	3,439.69
Removal debris, etc. Dreamland Park	25,000.00	23,047.56	1,952.44

Title Account	Total Authorization	Net Vouchers Registered Based on Cancellations and Adjustments	Adjusted Credits Unexpended (E—F)
Removal Old Iron Pier, Seaside Park	7,000.00	6,468.00	532.00
Constructing Groynes	16,745.83	15,840.03	905.80
Repairing East Drive, Prospect Park and Park Circle	163,150.00	154,970.64	8,179.36
Developing and Improving Public Park—Johnson Ave., Leonard, Lorimer and Boerum Sts....	30,000.00	.....	30,000.00
Extension of Underground Coal Cellar at Botanic Garden and Arboretum	6,598.00	17.55	6,580.45
Permanent Pavement Ocean Parkway Traffic Road, between Kings Highway and Coney Isl- and Creek	150,000.00	108,063.96	41,936.04
Permanent Pavement Ocean Parkway main road, and erecting sidewalks, between Avenue W. & Coney Island Creek	150,940.00	572.98	150,367.02
Raising grades Ocean Parkway of Cycle and Bridle Paths, between Avenue W. and Coney Island Creek	54,360.00	372.98	53,987.02
Improvement of Plaza at 15 St. Entrance Pros- pect Park	18,476.04	18,295.71	180.33
Total	1,777,282.20	1,444,582.33	332,699.87
<i>Borough Accounts</i>	2,103.41	.....	2,103.41
<i>Special and Trust Funds.</i>			
Maintenance and Improvement Public Parks			
Brooklyn Heights	11,146.49	10,857.35	289.14
Restoring and Repaving	54,442.31	45,046.20	9,396.11
Planting Trees—City Streets	77,019.80	73,650.41	3,369.39
Contributions to Botanic Garden Improvement Fund	100,000.00	99,998.80	1.20
Damages to Trees and other departmental prop- erty	698.00	.....	698.00
Payment of Navy Dept., Restoration City Park.	16,666.26	16,660.19	6.07
Total	259,972.86	246,212.95	13,759.91
<i>Special Revenue Bonds.</i>			
Operation Betsy Head Playground	14,475.00	13,682.34	792.66
Urgent Highway Repairs	11,000.00	10,878.59	121.41
Deficiency in Budget Item 1916-1295	2,000.00	1,724.25	275.75
Deficiency in Budget Item 1916-1308	3,000.00	2,924.37	75.63
Repaving Fort Hamilton Avenue	8,200.00	8,161.34	38.66
Deficiency in Budget Item 1917-1293	3,355.46	3,223.81	131.65
Deficiency in Budget Item 1918-1280	215.28	202.28	13.00
Deficiency in Budget Item 1919-1282	4,842.45	4,842.29	.16
Deficiency in Budget Item 1919-1280	315.81	312.24	3.57
Deficiency in Budget Item 1920-1282	27,375.00	26,436.06	938.94
Deficiency in Budget Item 1280	502.50	481.50	21.00
Deficiency in Budget Item 1275	357.00	357.00	.....
Restoration of City Park	20,000.00	19,767.49	232.51
Difference between Civil and Military Compensa- tion	1,702.50	1,486.26	216.24
Payment of increases in rates of Compensation, etc.	23,944.22	18,456.00	5,488.22
Payment of that share of the increases of rates, etc.	34.73	27.46	7.27
Total	121,319.95	112,963.28	8,356.67

PARKS UNDER JURISDICTION OF THE DEPARTMENT OF PARKS, BOROUGH OF BROOKLYN.

Park.	Location.	Area in Acres.	Length of Interior Walks in Miles.	Length of Interior Drives in Miles.	Appraised Valuation.
1. Amersfort Park	Ave. J, E. 38th St., Ave. I and E. 39th St.....	3.56	.041	....	\$64,500
2. Bedford Park	Kingston and Brooklyn Aves., Prospect and Park Places..	4.10	0.50	....	325,000
3. Bensonhurst Park ...	Bay Pkway. and Gravesend Bay, 21st Ave. and Cropsy Ave.	13.00	0.24	0.12	240,000
4. Boro Hall Park.....	Joralemon, Court and Fulton St.	1.70	....	....	3,314,000
5. Bk. B. Garden Arboretum (Incl. 12.69 acres of Bk. Ins. A. and S. Lands)...	Eastern Pkway., Washington and Flatbush Aves., and Malbone St.	61.39	2.45	....	9,885,000
6. Bk. Heights Parks....	Columbia Heights fronting on Furman st. ....	.86	....	....	131,500
7. Bushwick Park	Knickerbocker and Irving Aves., Starr and Suydam Sts.	6.86	.65	....	305,000
8. Canarsie Park	Skidmore, Sea View and Denton Aves., E. 88th and E. 93d Sts., Byrne Pl. and Jamaica Bay	30.50	0.10	....	115,000
9. Carroll Park	President, Court, Carroll and Smith Sts.	1.90	0.29	....	165,000
10. C. I. Concourse Lands (Exc. of Seaside Park)	W. 5th St. and Sea Breeze Ave., and Atlantic Ocean...	59.70	0.22	....	1,132,000
11. Cooper Park	Maspeth and Morgan Aves., Sharon and Olive Sts.....	6.10	0.52	....	140,000
12. Cooper Gore	Junction of Metropolitan and Orient Aves. ....	.15	....	....	7,000
13. Cuyler Gore	Cumberland and Fulton Sts., and Greene Ave. ....	.08	....	....	25,000
14. Dreamland Park	W. 5th and W. 8th Sts., Surf Ave. and Atlantic Ocean....	14.70	....	....	839,500
15. Dyker Beach Park....	7th Ave. and Bay 8th St., Cropsy Ave., 14th Ave. and Gravesend Bay	139.80	.95	....	778,000
16. Fort Greene Park....	DeKalb Ave., Washington Pk., Willoughby and St. Edwards Sts. and Myrtle Ave.	38.90	1.51	....	3,098,500
17. Fort Hamilton Park..	4th Ave., 101st St., Ft. Hamilton Ave. and Shore Rd.	4.60	0.35	....	539,000
18. Fulton Park	Chauncey and Fulton Sts., and Stuyvesant Ave.	2.00	0.20	....	143,500
19. Grant Sq. Gore Park..	Bedford and Rogers Aves., and Bergen St.	0.019	....	....	1,000
20. Gravesend Park	Includes value of buildings on land, 18th and 19th Aves., 55th and 58th Sts.	6.92	....	....	55,700
21. Highland Park	Jamaica Ave. and U. S. National Cemetery, Boro Line, Reservoir and Warwick St. Extension	40.85	1.45	0.51	491,500
22. Highland Park Addition	Heath Pl., Highland Park, Vermont Ave., Private Property and Highland Blvd.	5.19	....	....	200,000
23. Irving Square Park...	Wilson and Knickerbocker Aves., and Weifield and Halsey Sts.	2.98	0.38	....	281,000
24. Lincoln Terrace Park..	Eastern Pkway., Buffalo and Rochester Aves., and President St.	7.60	0.61	....	151,200
25. Lincoln Terrace Park Addition	President and Carroll Sts., Rochester and Buffalo Aves., and Eastern Pkway., Portal St. and E. New York Ave..	7.40	....	....	150,000
26. Linton Park	Bradford St., Blake, Dumont and Miller Aves.	2.29	0.30	....	81,000
27. McKinley Park	Ft. Hamilton and 7th Aves., and 73d St.	8.50	....	....	201,210
28. Milestone Park	18th Ave., N. of 82d St.	0.007	....	....	400
29. Prospect Park	Prospect Park W. and Flatbush, Ocean, Parkside Aves and Prospect Park S. W.	526.00	16.10	6.90	30,766,000

Park.	Location.	Area in Acres.	Length of Interior Walks in Miles.	Length of Interior Drives in Miles.	Appraised Valuation.
30. Hed Hook Park.....	Richards, Verona, Dwight and Pioneer Sts.	5.28	0.69	....	182,000
31. Saratoga Sq. Park....	Saratoga and Howard Aves., Halsey and Macon Sts.....	3.20	0.36	....	223,600
32. Seaside Park	Ocean Pkway., Concourse, W. 5th St. and Sea Breeze Ave.	10.30	0.61	....	625,000
33. Stuyvesant Gore Park.	Stuyvesant and Vernon Aves., Broadway .....	.08	....	....	6,000
34. Sunset Park	41st St. and 44th Sts., 5th and 7th Aves.	24.50	1.53	....	844,500
35. Tompkins Park	Tompkins, Greene, Marcy and Lafayette Aves.	7.80	0.65	....	460,000
36. Underhill Gore Park.	Underhill and Washington Aves., and Pacific St.....	.10	....	....	6,500
37. Vanderveer Park	E. N. Y. and Pitkin Aves., Barret and Grafton Sts.....	.21	0.08	....	15,000
38. Winthrop Park	Nassau and Driggs Aves., Russell and Monitor Sts.....	9.10	0.94	....	505,000
39. Woodpoint Gore Park.	Bushwick, Metropolitan and Maspeth Aves. ....	.05	....	....	1,000
40. Unnamed Park "A"...	Eastern Pkway., Washington and Classon Aves.....	0.155	....	....	7,000
41. Unnamed Park "B"...	Roebling St., Division and Lee Aves. ....	.14	....	....	14,500
42. Unnamed Park "C"...	4th and 5th Aves., and 94th St.	0.018	....	....	1,000
43. Unnamed Park "D"...	Myrtle, Wilson and Bushwick Aves.	0.0033	....	....	400
44. Unnamed Park "E"...	Engert and Mecker Aves., and Monitor St.	0.005	....	....	500
45. Unnamed Park "F"...	Chauncey and Fulton Sts., and Lewis Ave.....	0.01	....	....	1,500
Total		1,048.6173	31.02	8.70	\$56,520,010

COMBINED PARKS AND PLAYGROUNDS AND PLAYGROUNDS UNDER JURISDICTION OF THE DEPARTMENT OF PARKS, BOROUGH OF BROOKLYN.

Combined Park and Playground.	Location.	Area in Acres.	Length of Interior Walks in Miles.	Length of Interior Drives in Miles.	Appraised Valuation.
1. City Park	St. Edwards and Navy Sts., Park and Flushing Aves....	7.50	0.42	....	\$491,000
2. McCarren Park	Berry, Lorimer, Leonard, Bayard and N. 12th Sts., Nassau, Driggs, Manhattan and Union Aves.	38.42	1.35	....	1,321,000
3. McLaughlin Park	Bridge, Tillary and Jay Sts...	3.30	0.32	....	367,500
4. Williamsburg Park	Boerum, Leonard and Lorimer Sts. and Johnson Ave.....	1.83	....	....	119,550
Total		51.05	2.09	....	\$2,299,050

Playground.	Location.	Area in Acres.	Length of Interior Walks in Miles.	Length of Interior Drives in Miles.	Appraised Valuation.
1. Betsy Head Memorial Playground	Livonia, Dumont, Hopkinson Aves. and Douglas St., and Dumont, Blake, Hopkinson Aves. and Bristol St....	10.50	.76	....	\$370,000
2. Bushwick Playground..	Putnam Ave., bet. Knickerbocker and Irving Aves.....	2.80	0.04	....	68,000
3. McKibbin Playground.	Seigel, White and McKibbin Sts.	1.37	....	....	70,000
4. New Lots Playground.	Sackman St., Riverdale, Newport and Christopher Aves...	2.29	0.07	....	73,000
5. Parade Ground	Coney Island, Parkside and Caton Aves.	39.16	0.22	0.11	1,500,000
6. Red Hook Playground.	Richards, King, Dwight and Pioneer Sts.	2.29	....	....	52,000
Total		58.41	1.09	0.11	\$2,133,000

Other Property.	Location.	Area in Acres.	Length of Interior Walks in Miles.	Length of Interior Drives in Miles.	Appraised Valuation.
1. Gravel Pit	N. W. Cor. Ocean Pkway....	2.71	....	....	\$75,000
56 GRAND TOTAL	Total	1,160.7873	34.20	8.81	\$61,027,060
Seeley St. Storeyards.....	Seeley St. and Prospect Ave. (Temporary).				

PARKWAYS AND STREETS UNDER JURISDICTION OF DEPARTMENT OF PARKS, BOROUGH OF BROOKLYN.

Parkways and Streets.	Location.	Miles.	Area in Acres Between Property Lines.	Appraised Valuation.
1. Bay Pkway.	Ocean Pkway., bet. Avenues I and J, Bensonhurst Beach	2.56	30.99	\$1,000,000
2. Bay Ridge Pkway....	Ft. Hamilton Ave., bet. 66th and 67th Sts. to 1st Ave., bet. 66th and Wakeman Pl.	1.40	40.89	717,700
3. Buffalo Ave.	Eastern Pkway., bet. Rochester and Ralph Aves., to E. N. Y. Ave., bet. E. 96th and E. 97th St. ....	.12	1.98	31,000
4. Bushwick Ave.	Myrtle Ave., bet. Ditmars Ave. and Charles Pl. to Jamaica Ave., bet. Sheffield and New Jersey Aves.	2.24	31.41	500,000
5. Eastern Pkway. Ext..	Ralph Ave., bet. Union St. and Lincoln Pl., to Bushwick Ave., bet. De Sales Pl. and Stewart St.	1.39	18.35	1,300,000
6. Eastern Pkway.	Prospect Park Plaza to Ralph Ave., bet. Union St. and Lincoln Pl.	2.50	21.12	3,000,000
7. Ft. Hamilton Ave....	Ocean Pkway. and Prospect Ave. to Ft. Hamilton	4.27	48.15	1,000,000
8. Highland Blvd.	Bushwick Ave., bet. Dahlia and Gillen Places, to Highland Park .....	.67	9.00	150,000
9. Lincoln Rd.	Ocean Ave. to Bedford Ave., bet. Lefferts Ave. and Maple St. ....	.30	2.61	138,900
10. Ocean Pkway.	Prospect Park Circle to Coney Island Concourse	5.50	140.00	4,000,000
11. Parkside Ave.	Prospect Park Circle to Flatbush Ave. at Robinson St. ....	.68	8.15	433,900
12. Plaza St.	Prospect Park Plaza .....	.38	4.31	229,400
13. Pennsylvania Ave. ...	Jamaica Ave., bet. Sheffield and New Jersey Aves., to Jamaica Bay	2.50	19.24	630,100
14. Rockaway Pkway.	Buffalo Ave., East New York Ave. to Canarsie Beach, bet. E. 96th and E. 98th Sts.	3.12	40.90	773,000
15. Shore Rd.	First Ave., bet. 66th St. and Wakeman Pl. to Ft. Hamilton	2.65	119.30	5,000,000
Total		30.28	576.60	\$18,903,900

BROOKLYN BOTANIC GARDEN

The use of the Botanic Garden (under general administration of Brooklyn Institute of Arts and Sciences) continues to increase, and this institution each year is becoming more interesting and of greater educational value. The general attendance for the year, registered at the entrances turnstiles, was over 312,500. Nearly 23,000 public school pupils, accompanied by teachers, visited the Garden for instruction, and in addition, the attendance of Botanic Garden classes was over 19,000 children and adults. Public lectures were attended by over 13,000 children and adults.

The plantations have been enriched by addition of about 500 new kinds of plants, the herbarium by over 7,000 specimens, and the library by over 1,000 publications. Over 450 current periodical publications on plant life,

horticulture, and gardening are now received by the library. These activities of the Garden are chiefly financed by private funds and all are open free to the public daily.

During the spring the lily pools in the conservatory garden were completed and planted. These pools were a gift from three anonymous friends of the institution. One of the pools is heated so that *Victoria regia* and other tropical and sub-tropical forms may be grown.

The city appropriation for labor for 1920 was sufficient to cover the work of general up-keep only until April 23. After that date all wages had to be met from private funds borrowed from income originally for other purposes. The laboring force necessarily was reduced to only sufficient to maintain the larger portion of the grounds, and no new work was possible on several undeveloped acres.

MUSEUMS

Central Museum

of the

Brooklyn Institute of Arts and Sciences.

Direct subway communication with the Central Museum was not established until November, 1920. Deprived of this advantage for the greater part of the year, the attendance at the Museum, nevertheless, shows an increase of 29,928 over 1919.

Of the total attendance for the year, 29,180 were pupils and teachers of the schools. The attendance of teachers has been much increased by development of a plan made in co-operation with the Board of Education through Mr. Frank Collins, Director of the Art Departments of the Elementary Schools. The plan calls for progressive series of illustrated lectures to be given to the Art Teachers of the city each month in the Museum on the History of Art. These lectures, first given in the Museum to the Art Supervisors and Art Teachers of the city, have been repeated by these teachers, the Museum furnishing a topical outline and the necessary slides, to the four upper grades of all schools having lanterns. At the initial lecture, teachers from thirty-two schools were present and later 23,500 children saw the pictures and heard the story. The number of schools having lanterns has now increased to 70 and the number of children interested in the course has increased in the same ratio.

A list of Museum Exhibits correlated with the curriculum of the High Schools and another list especially prepared for the course in Reading and Nature Study in the Grade Schools was sent out in September to principals of various schools with a note from the Museum Docent, offering services in explaining and applying the meaning of the exhibits. This seems to have awakened the attention of the schools to the possibilities offered by the Museum for study and for supply of illustrative material. The Girls', the Girls' Commercial, the Boys' Commercial, the Washington Irving High

Schools (Manhattan) and the Training School for Teachers have shown special interest and are sending classes in increasing numbers. The classes from Elementary Schools also are visiting the Museum to see material illustrative of the monthly Art talk. The Egyptian Collection, the casts of Greek Sculpture, the Roman mosaics and Roman glass have received much attention and the flint arrow heads and stone mallets of pre-dynastic Egypt have aroused unexpected interest.

Thus it will be seen that constant endeavor of the Museum staff is to tie the Museum close to the schools and from its collections supply object training not provided for in the school equipment.

Similarly like other departments in the Museum, the Department of Art suffers for the want of room. The two main galleries with the two adjacent smaller rooms are totally inadequate to afford exhibition space for collections at the present stage of their development. It has forced the crowding of older European paintings into one of the smaller galleries without segregation into diverse schools which is necessary for a proper comprehension of the history of painting; it also has forced the system of rotating the exhibits in the modern European and American galleries which never allows the collections to be shown at their full strength. It also compels the total dismantling of one or the other of the two larger picture galleries (sometimes both) and the relegation of the Museum's permanent works to the store rooms whenever special loan exhibition is planned. This is true also of the space for proper display of Museum sculpture. All this will be obviated as soon as the long wished for sections "F and G" are completed and turned over to the trustees by the City. Nevertheless, the activities of the department continue and the friends of the Museum and the public in general are encouraged to contribute to the treasures stored in the building.

On January 20, a memorial exhibition of the sculpture of Helen Farnsworth Mears was inaugurated. On April 5 there was a special exhibition of the works of Whistler's paintings, etchings and lithographs for the Rembrandt Club of Brooklyn, preceded by a lecture on Whistler by Royal Cortissoz. "Varnishing Day" of the Ninety-fifth Annual Exhibition of the National Academy of Design took place on April 6. This exhibition was given in the galleries of the Brooklyn Museum on invitation of the Museum Governing Committee in consequence of a fire that destroyed the galleries of the Academy in the Fine Arts Building on West 57th street, Manhattan, only a short time before the Academy's annual spring exhibition. 936 works in painting, sculpture and prints were displayed, many more than the Academy's own galleries could accommodate. 3,627 persons were present on opening day and the exhibition during the six weeks of continuance was attended by over 72,000. On November 29 there was a first view and reception in the Print Galleries and Library for the Fifth Annual Exhibition of the Brooklyn Society of Etchers.

The installation of Mrs. Robert W. Paterson's collection of paintings and objects of decorative, and of a group of paintings, the property of Miss

Julia E. Peck, contributed still further to the interest of the year's special exhibitions.

In addition to many occasional and miscellaneous gifts and loans from friends, the Museum came into possession of a collection of valuable objects under the Will of Samuel E. Haslett, of Brooklyn. The collection consists of art books, paintings, early American furniture, eighteenth century silverware, old china and glass, and Oriental rugs. The silver formed part of an exhibition of 103 specimens of early American table silver opened on December 19, to commemorate the Landing of the Pilgrims on the same date in 1620.

Acquisition and an exhibition have been the keynote of the work of the Print Department during 1920 and there is every evidence that the appreciation of prints by Museum visitors increase steadily year by year. The beauty, the practical size and moderate cost of good prints make an appeal to people who like to adorn their walls with pictures and also to connoisseurs with portfolios. From whatever viewpoint there are signs that the department is becoming the center of print interest in Brooklyn. Prints are frequently submitted to the Curator for identification and advice asked for framing, starting of collections, etc.

The collections of the Department of Ethnology consist of several units, each more or less complete in itself, and each representing a period of development since the foundation of the department in 1903. These units comprise: The American Indian material; Cliff Dwellers, Navaio, Zuni, 1903; Cliff Dwellers, Navajo, Zuni, 1904; Hopi, Northwest Coast California, 1905; California, Nabajo, 1906; Jenez, California, 1907; California, Vancouver Island, 1908; Oklahoma, New Mexico, Vancouver, California, 1911. In 1909 it was concluded, that however valuable these Indian collections might be in themselves, other fields would prove more immediately helpful through application of the collection to the needs of the American artists in connection with industry.

This led to the creation of the Oriental collections the second unit, derivate from: Japan, China, 1909-10; Japan (with Ainu collections), 1912; Japan, China, Corea, India, 1913-14. Work of collecting in the field ceased during the war, 1915-1919. The interval of five years was devoted by the Curator to study and installation of material already acquired and its utilization along the lines originally considered.

This practical employment of the Museum's collections led to an examination of other fields, nearer even than the Oriental, leading to the European ethnographical collections, the third unit, from: Czecho-Slovakia, Hungary and Roumania, 1920.

Expansions of the exhibitions within the Department of Natural Science has been limited by lack of space with which the Museum as a whole has had to contend since work upon the new wing of the building ceased in 1913.

Numerous gifts were received as usual. Of the number the following deserves special mention: A collection of uniform samples of marble

from many parts of the world; presented by Mr. A. E. Bockman. There are several hundred pieces in the gift, which is said to be the second in completeness among American collections. A second gift is that of a model ship hull, ship's paper, and several pieces of scrimshaw, from the Haslett Bequest. Another is a gift of an extremely interesting Dutch whaling print, dated 1602, from Mr. Allan Forbes, President of the State Trust Company, Boston, Massachusetts.

The usual zoological field work was carried out on Long Island, resulting in enrichment of invertebrate exhibits and development of the Money Hollow Rock group.

The outstanding field work of the year was the Peruvian Littoral Expedition, under direction of the Curator, Mr. Robert Cushman Murphy, which began in August, 1919, and terminated in February, 1920. As regards the objects of the trip, including acquisition of hydrographic and zoological information and of data relating to fisheries, the collection of specimens for study and exhibition, and of motion pictures illustrating remarkable wild animal life of the coast, all met with a large measure of success, thanks chiefly to the helpful cooperation of Chief of the Peruvian Government Department, which administers the Guano Islands. Transportation, assistance, use of government launches, and in three instances, of larger vessels, were accorded the Museum's representative, so that he had exceptional opportunities for conducting his investigations. The collections comprise specimens of practically the entire terrestrial life of the Peruvian Islands—plants, insects, reptiles, mammals, and birds, together with geological samples. They include also a series of marine fishes with much data relating to their growth and distribution and invertebrate material collected during tow-net hauls in the Humbolt Current. The photographs exceed 600 in number. Aside from scientific publications and popular account of the QUARTERLY, very definite benefit to the Museum has accrued from the Peruvian Expedition. The motion picture records have been shown not only here, but before meetings of distinguished scientific societies in New York, Washington and elsewhere. Of particular interest is the fact that the one reel film took an important place in the celebration of the Centenary of Ecuadorian Independence, held in Pan-American Union Building at Washington, D. C., on October 9, 1920.

The most important event of the year in the Library was the bequest to the Museum of the private library of the late Samuel E. Haslett. According to the inventory there are 7,131 volumes in the collection. These have been sorted and such as are especially germane to work of Museum departments will be placed on the shelves. The library is general in character but at least four or five hundred volumes refer to art and ethnology. The cataloguing of the Egyptological library of the late Dr. Charles Edwin Wilbur, referred to in last year's report, has been nearly completed, and the unbound books are now at the bindery. It is probable that the printed catalogue will be issued during the coming year.

Work with schools in close cooperation with the work of the Docent has been a distinctive feature of the year's work. This has involved numerous class room displays of books and plates, as; illustrative material available for use of supervisors of drawing in teaching design; exhibit of originals and reproductions of illuminated manuscripts and other distinctive lettering.

An exhibition of the Alfred T. White collection of Bibles and the Mary Benson collection of Illuminated Manuscripts was made in table cases in the Print Gallery during the spring.

The Periodical Room has served many purposes during the year. Mr. Greenberg's class in Art Appreciation held weekly meetings there for a number of months. The Docent has used it as a class room many times, often using the Library's large folio plates to supplement the Museum collections.

There were 35,517 visitors to the Library and Print Gallery, which was 2,906 more than in 1919. The highest attendance was in October, 4,303.

CHILDREN'S MUSEUM

The attendance for 1920 not only held its own but showed an increase of 4,219 over the previous year. Coincident with increasing attendance was a constant extension in the use of the Museum, particularly in intensive study of its collections.

Early in the year, classes and groups of children from public schools began regular work in Americanization, arrangements for their transportation having been made by the Woman's Auxiliary of the Children's Museum. These classes in the Museum under guidance of members of the Americanization Committee and the Staff of the Children's Museum made thorough study of our history and geography collections, the library books and other materials useful in giving foreign children a background for gaining American ideals. The work continuing throughout the year received very hearty endorsement of schools which benefited by the movement and members of the Board of Education in whose districts the work has been extended.

During the summer, through the generosity of the Woman's Auxiliary, the Museum was able to conduct a series of field trips from the Museum for a period of two months. Nearly every second day, boys and girls were conducted to places of interest in the surrounding country, where they were given definite instructions in Nature observation and study. Each trip was anticipated by careful preparation in the Museum and was followed by a day of studying and preserving the materials collected.

In cooperation with the Brooklyn Community Councils four Sunday afternoon musicales were given during July and August. The programs consisted of selections given by children students of music in this Borough and were enjoyed by an audience that filled the Lecture Room each Sunday.

Regular monthly meetings of the Executive Board of the Woman's Auxiliary of the Children's Museum and special meetings of Committees of the Auxiliary engaged in work for the Museum continued throughout the

year. The Bird Lover's Club of Brooklyn held its regular monthly meetings throughout the active year, and the Children's Museum League, the Tree Club, and the Woodcraft Councils have met once a week. There have been numerous receptions and teas given by the Woman's Auxiliary to Mothers' Clubs of Public Schools and to groups of women who were becoming interested in the work of the Museum.

Children's Museum lectures have attracted 25,101 children. Requests for special lectures have been declined repeatedly because the lecture room is too small to hold large classes seeking admission. To meet the public half way it has been necessary in instances to hold classes in the Lecture Room and the exhibition rooms simultaneously.



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