CITY OF NEW YORK

DEPARTMENT OF PARKS

1916



THE CITY OF NEW YORK DEPARTMENT OF PARKS

ANNUAL REPORT

ANNUAL REPORT FOR 1916

DEPARTMENT OF PARKS

OF THE

CITY OF NEW YORK

PARK BOARD

Cabot Ward, President,
Commissioner for the Boroughs of Manhattan and Richmond.

RAYMOND V. INGERSOLL,

Commissioner for the Borough of Brooklyn.

THOMAS W. WHITTLE,

Commissioner for the Borough of The Bronx.

JOHN E. WEIER,

Commissioner for the Borough of Queens.

Louis W. Fehr,
Secretary.

Carl F. Pilat,

Landscape Architect.



SONG AND LIGHT FESTIVAL Central Park, September, 1916

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THE PARK BOARD

Increased Scope of Work.

The work of the Park Board showed a decided broadening in scope during the year 1916. A reflex of this was more frequent and prolonged sessions and a greater variety of subjects considered, than in former years. As in 1915, the extensive subway construction in all boroughs made it necessary to take up with the Public Service Commission of the First District many questions regarding the protection of park property. But there was another class of cases where an increasing tendency was shown to secure action by the Board. Under the Charter, as explained in the 1915 report, each member of the Board has administrative jurisdiction in the specific borough or boroughs to which he is appointed commissioner. This being the case, the scope of matters treated by the Board as such, until recent years was largely concerned with action on contracts entered into by any one member, and the question of such park ordinances and rules as were applicable to the entire city system. However, a special effort has been made from the beginning of this administration to standardize, in so far as was possible, all forms of park work and administration, and there has naturally resulted a frequent interchange of views on administrative problems between the different commissioners as members of the Board. This has worked out most helpfully when any one borough had made a special study of a particular phase of park work and devised a new and successful administrative or technical method, the application of which could benefit generally the other sections of the City Park administration.

This year the members of the Board have more frequently sought advice of one another regarding administrative problems that had previously been entirely considered and decided within the single administrative unity of each borough. Thus there has resulted an increasing tendency on the part of the members to ask the Board to take up as a Board and decide administrative matters of particular difficulty which arose wholly within the jurisdiction and power of a single commissioner.

Pelham Bay Park Franchise.

An excellent example of this is the question that arose regarding extension of transportation facilities in Pelham Bay Park in The Bronx. The completion of the new subway extension near the southern boundary of this valuable city park asset brought before the Board of Estimate and Apportionment, the matter of the city's granting franchises to railway companies, not only for the purpose of rapidly conveying park users to that section of the Pelham Bay area, but also for the purpose of providing an outlet from the subway terminal for those living to the north and west of Pelham

Bay Park, who would otherwise have no method of reaching this new transit facility. The Park Board, at the request of Commissioner Whittle of The Bronx, took up this question with the Bureau of Franchises of the Board of Estimate and Apportionment. Negotiations are still in progress as to the method by which the one extension approved by the Park Board (namely, that running easterly across the park from 212th Street in The Bronx, to connect with the old City Island mono-rail), shall cross the existing Pelham Bay Parkway. But the Board, while recognizing the necessity of providing some outlet for the City Island population, has definitely rejected the other plans suggested for running street railways through the surface of the park.

In this connection it is interesting to note that during the year a thorough investigation was made by the authorities in St. Louis and San Francisco of Fairmount Park in Philadelphia, where a surface trolley line circles through the interior of the park itself. The result has been that both these cities, through their park authorities, inaugurated a campaign to oppose similar trolley franchises suggested for their large parks, and instead of trolley lines, bus routes run by the city have been successfully inaugurated and maintained, so as to provide transportation for park users.

In general, it is clear that the best opinion in this country is against such street railway encroachments as providing serious detriment to the country aspect of the parks, and the consequent depreciation of the very asset acquired by the city in securing a large contiguous park area.

Bronx Park Land Exchange.

Another example of the character of the subjects the Board has dealt with is the arrangement made by the Board with the Public Service Commission, upon the request of Commissioner Whittle, for exchange of a long and narrow tract of land in the vicinity of 180th Street and Bronx Park. Not only was an advantageous exchange effected, but an agreement providing for landscape treatment satisfactorily to the Park Department was entered into by the Commission.

Enforcement of Park Ordinances.

Through its Secretary, the Park Board paid special attention in 1916 to the question of enforcement of park ordinances. The creation of a municipal term of the Magistrates' Court, with a special day for hearing park cases in the Municipal Building, made it possible to bring the Board into closer touch with the work of the Magistrates' Courts, with their decisions in the prosecution of park offenders, and the effect of these decisions on the city's park conservation. The large number of cases handled made it possible to observe the workings of particular ordinances, and to discover the technicalities upon which magistrates are often obliged to discharge offenders. Ordinances, which had thus proved ineffective, were submitted to the Corporation Counsel, and the advice of the city's Law Department

was obtained in efforts to make the ordinances more closely fit the problems of park protection and public safety, which they were enacted to meet. In some cases objection was raised to this process of tightening up the park ordinances, but the Board took the position, in which it was sustained by the Corporation Counsel, that under Section 810 of the Charter, it had the right to legislate unless there was in existence an ordinance to the contrary passed by the Board of Aldermen.

The Chairman of the Aldermanic Committee on Codes co-operated most heartily with the Board, and was successful in a large number of cases in having the Board of Aldermen adopt verbatim ordinances as passed by the Park Board.

New Ordinances.

On February 24th, the Board adopted, for regulation of the Bronx Zoological Park, a separate set of regulations, which had previously been adopted by the New York Zoological Society. This action of the Board gave the force of a city ordinance to each of the regulations to the Bronx Zoological Garden.

The question of the rate of speed of automobiles on park drives became serious in the early part of 1916. The previous highest rate of speed permitted under the park ordinances was eight miles an hour. The reports showed that this was frequently exceeded, and that it was impossible to procure convictions since the magistrates regarded the park regulation as unreasonable and impractical, and the police were also lax in restraining reckless driving in the park since their experience had shown that the courts would not enforce the park speed regulations. The situation was rapidly becoming dangerous when, on March 2d, the Park Board took up the question, and after discussion the Secretary was instructed to draft an ordinance, which would embody the views of the Corporation Counsel. Accordingly, on March 9th a new ordinance was adopted which provides for a speed of 15 miles an hour.

Development of the Ocean Parkway section of Brooklyn led the Board, on motion of Commissioner Ingersoll, to adopt on March 9th an ordinance which applied rules restricting properties beyond the thirty-foot building line of Ocean Parkway and defined the proceedings to be followed similar to existing conditions on Riverside Drive and elsewhere.

Amendments.

Amendments of the park ordinances were also secured to permit fishing under permit in Kissena Park, similar to the regulations already in force as to Prospect Park, Brooklyn.

Changes in the park ordinances were also secured providing for better control over permits for selling goods or taking photographs in the parks, and also to prevent undue obstruction and noise by vehicles in the vicinity of park areas where concerts or other meetings were being held. The Board took up the question involving the authority of the individual Park Commissioners to prevent the erection of sign boards within 350 feet of park areas. Investigation and report by the Secretary made it clear that the attitude of the courts was unfavorable to this prohibition and that legislation must be secured before the park administration can control this matter effectively. Legislation will be requested by the Board to this end.

A new ordinance was adopted by the Board on July 27th, with a view to preventing the disturbances which had resulted in the past from bringing quantities of alcoholic beverages into the park. At the same meeting Sub-Division 2, Section 17, of Article I, which reads as follows:

2. Do any obscene or indecent act or any act tending to a breach of the public peace,

was amended by dividing it into two sections as follows:

- 2. Do any obscene or indecent act.
- 12. Do any act tending to a breach of the public peace.

This change was made to meet the objection of the Magistrates who had ruled that owing to the former wording it was impossible to hold persons committing acts tending to a breach of the public peace which were neither obscene nor indecent.

At the meeting of August 3d, the Board adopted ordinances, rules and regulations of the Department, applying to camp sites in The Bronx. These modifications were intended to regulate the large and rapidly developing camping areas on park territory in The Bronx, providing at the same time a better enforcement of health regulations.

After consultation with the Corporation Counsel, the form of ordinances suggested by the Secretary for the regulation and facilitating of organized play in park territory, without undue destruction of landscape features, was adopted.

The limits of this report do not admit of a further detailed description of the many other questions taken up in the revision of park ordinances successfully undertaken during the year. It is sufficient to state that the new Code is better calculated to secure the greatest possible use of park areas to the people, without the consequent destruction of the very features which made the parks valuable to the citizen.

Among administrative matters taken up by the Board was a proposed modification of the \$1,000 a month restriction on open market orders, Section 618 of the Charter. This had proved an obstacle to emergency purchase of supplies. The Board instructed its Secretary to follow up the drafting of legislation to remove this restriction.

At a subsequent meeting a communication was received from Mr. Mc-Goldrick, Assistant Corporation Counsel, stating that the matter had been taken up, and a bill prepared establishing a Department of Purchase, copy

of which had been referred to the President for his report. The Secretary reported that this matter had been referred to the City Chamberlain for report and recommendation. The Board, however, was unsuccessful in securing action.

Development of Inter-City League.

The results of the formation of the National Municipal Recreation Federation, considered in the 1915 Park Board report, have been most satisfactory. This association was formed for the purpose of promoting friendly rivalry between all forms of sports conducted upon municipal grounds in the large cities of the United States.

It was believed that by providing competitions for those who were ambitious to develop themselves in one or another line of sport, and by restricting the competition to those who made use of municipal facilities, the number of our young citizens practicing these sports would be greatly increased, and the general health conditions of the community thereby immeasurably advanced. The results have proved the plan to be a sound one. It was clear that the incentive would be far greater when it was realized that it would not be possible for champions trained at country clubs or elsewhere, and who had better facilities and equipment, to come in and compete at the last moment for municipal championships. This is also the spirit and rule of our park sports associations.

As to New York's participation in the inter-city championships, entries were obtained through the public park lawn tennis championship elimination tournament, which took place in the month of July, covering all boroughs of the city. As a result of the contests in the park courts, our city championship team was chosen and after defeating the teams of several eastern cities, competed at St. Louis with the championship team similarly selected to represent players from municipal tennis courts in western cities.

Tennis and golf were the two sports tried out during the year 1916, and it is hoped, as a result of the success obtained, that soccer football and other popular municipal games may also be included.

The President of the Park Board of New York was elected President of the National Municipal Recreation Federation at its recent 1916 Convention, held at Baltimore.

Problems Affecting Design.

To the Landscape Architect's bureau were presented an unusually large number of important problems, such as the park matters arising under the proposed changes in Riverside Drive and the matter of the re-formation of the Brooklyn Plaza.

Practically during the entire year the so-called "West Side Improvement Plans" were under discussion and modification. Since these plans affected the entire situation of the park areas adjoining the Hudson River in Manhattan, it was necessary for the Park Department to draft, con-

tinually, new plans and lay-outs and to analyze and report to the Park Commissioner of Manhattan the recommendation of the Port and Terminal Committee.

In addition to these, innumerable questions arose in connection with the subway work being conducted by the Public Service Commission in all parts of the city, as well as that being carried on for the completion of the new aqueduct by the Board of Water Suppply.

All these matters required both careful study and vigorous action in order to secure due park protection, proper landscape treatment and a recognition of park needs.

All this work was in addition to the ordinary duties of revising existing park lay-outs, arranging for new plantations and landscape treatment and considering and passing on the numerous projects for memorials and monuments proposed or being erected in the park areas of the several boroughs.

Owing to the special extensive activities carried on in addition to the usual duties of the force, additional funds were secured and an extra force of draftsmen added to the Landscape Architect's division, so as to make it possible to handle the pressure of work.

The photographer of the Manhattan and Richmond division was made the photographer of the Park Board, and his duties, purchases and assignments duly regulated.

Further details of the work of the Board will be found in the Minutes of the Board covering the year 1916.

Respectfully submitted,

CABOT WARD, President.

BOROUGHS OF MANHATTAN AND RICHMOND PART I.

THE PARK SYSTEM

PARK DESIGN.

Greater Utility in Design.

The conditions of life in a modern city are such as to force questions of recreation more and more upon the attention of our civic authorities and our citizenship. The matter is all the more vital in cities like New York, where we have to face such extreme conditions of over-crowding and congestion. To adequately meet the newly realized needs the municipality should provide parks that properly combine beauty and utility in their design.

Unfortunately the city parks in this country that were laid out in the early days of municipal development pre-empted large areas of recreation space in artificial design that not only caused a great deal of useless expenditure, but created highly artificial conditions which, while beautiful in themselves, took no account of future needs or the natural topography of the land.

While beauty is a necessity it can, nevertheless, be made consistent with practical necessities. Indeed, the true beautifying of recreation areas should consist in clothing the practical problem with a harmonious and appropriate form and setting.

In park work of this character it has too often been falsely considered that there was such a thing as abstract beauty divorced from the thing to be made beautiful. On the contrary, the practical need must first be considered and thereafter a translation of the needs in terms of the beautiful.

A city park should be so laid out that it can be most useful for the recreational needs of the greatest number of the community. For example, it should have paths that lead into the park at the most convenient points, broad enough to accommodate such a number of people as may use the park. The design should also be made to take advantage of the existing physical conditions and should not indulge in expensive operations that destroy the natural features and then create purely artificial conditions in their stead.

Many of the parks in Manhattan were laid out years ago without due regard for these fundamental principles, or any appreciation of the city's congested future, and it is quite clear that their design should be modified so that they may to-day perform their full usefulness to a population that is perhaps more than any other in need of the recreation that a park system provides.

Passing Through Parks.

The lower part of Manhattan is a case in point. It contains a number of what have been well called "passing-through" parks. Such parks should be designed with a view to the ready accommodation and convenience of traffic, making all other considerations secondary. Any expensive landscape development in such parks is a mistake. And yet, practically all of the park units of this class are so designed that by their lay-out they retard the proper passage of the continuous stream of humanity during the rush hours. A proper treatment would recognize traffic needs while still providing such simple planting and shrubbery as to convey a forceful park impression. A modification of the design of these "passing-through" parks and the accomplishment of the necessary changes would be a relatively inexpensive undertaking.

It is nevertheless true that in this matter, together with the question of general planning for future park development, this Department has not yet been able to convince the Board of Estimate and Apportionment of the necessity of securing a small fund through which the necessary designs and new lay-outs can be made on which to base estimates for the necessary changes in the "passing-through" parks. At the same time such a fund could be used to plan, develop and place on the city map, after due discussion, the future lay-out of the city's park system, connecting up the present scattered units and laying out the park future for hitherto undeveloped regions.

Parks and City Planning.

City planning and park building should advance simultaneously with city development. But, unfortunately, as a city we are shutting our eyes to the lessons of past short-sightedness and forgetting the importance of undertaking park planning in our outlying territory, for example, the rapidly developing Borough of Richmond.

The Department Should be Represented in City Plan Committee.

Under present conditions the department also works under an obvious disadvantage in planning new acquisitions of park lands and extension of the existing park system, so many units of which are practically isolated, without parkway and boulevard connections. Responsibility for planning new projects of such a nature under present procedure rests in the local improvement boards, the City Plan Committee or the Bureau of Public Improvements of the Board of Estimate and Apportionment. The Park Commissioner, strange to say, is not a member of any of these bodies. In other words, at present the park administration has no official opportunity to initiate acquisitions or extensions of park lands or parkways. One of the most important phases of park work, planning for the present changes and the future development, is thereby retarded.

The remedy to such a situation, without Charter revision, would be to make the Park Commissioner a regular member of the City Plan Committee. The Park Department would then have an opportunity to initiate and co-ordinate with the other phases of city planning, the park development plans which have been previously studied by the park authorities.

Landscape Architect and Park Viewpoint Needed in City Planning.

City planning projects are rarely inaugurated until a certain degree of interest is aroused by means of park work, and yet in undertaking this latter, too frequently in the history of New York and other of our large cities, extensive projects have been planned and developed without consulting any competent landscape designer. Instead we often find so-called city planning experts in complete charge, who, however admirable as engineers or architects, fail to appreciate very important aspects recognizable at once by an experienced landscape designer. No civic authorities should expect their city advisor to undertake actual park design without special training in the subject. The City should hesitate in accepting the advice of engineers on problems of park design except as to their engineering aspects. The architect, also, despite his artistic training, is apt to have a point of view which is disproportionately architectural.

It is only by the greatest care that the priceless city assets as embodied in our municipal parks can be protected in the future against the many desiring the opportunity of "developing them."

In last year's report of this department there was emphasized the need in New York of tying up our present scattered park units, and it is desired once more this year to reiterate with all possible emphasis that New York has individual parks and parkways that are wonderfully perfect in their conception, but they are unrelated. Even in these times, when the City is under financial stress, the relatively small appropriation needed should be provided to carefully consider park development and planning for the future. A park is not a unit in itself and may not be developed independently of city design or of the other park areas which comprise the city plan. Far from being a collection of isolated units the park system in its design should be made to express conformation with the park system as a whole.

Many Units Now Isolated.

In New York this lack of fixed policy has led to some very unsatisfactory results. Besides the examples given in our 1915 report, there should be mentioned especially the failure to systematically extend the hillside park to the west of Riverside Drive and north of Fort Washington Park, until it reaches the upper chain of parks and parkways.

(In another part of this report the proposed curing of these conditions through the projected gift of Mr. John D. Rockefeller, Jr., is fully described.)

Another striking example occurs in the Borough of The Bronx, where Macomb's Dam Park is isolated from the nearby Franz Siegel Park and the Concourse, and although the Grand Concourse Boulevard runs two squares to the west, there is no link between this and Claremont Park, or between Claremont Park and the nearby Crotona Park. Or, again, between Crotona Park and Bronx Park. Each of these units is separated by one or more narrow city-built streets without park connections.

How easy it would have been ten years ago, through foresight and park planning, to have provided for the future linking of all these parks by means of parkways at relatively small expense. Even now it should be possible to create some natural link or chain between them.

These are merely a few typical examples of the lack of correlation, the existence of which is necessary to bring the park system into the best and most extensive use.

Value of Park Asset.

There is no other city in the world where possibilities are greater and where the existing structures are more worthy of a fine setting and environment. Where the City has been provident in park matters there is universal appreciation. No enlightened citizenship can fail to realize the value of Central Park and Prospect Park, and the great natural beauties forever preserved in the parks of the Borough of The Bronx. It is impossible to over-state what these park acquisitions have done to make New York a better place to live in. The value of our parks in maintaining good health conditions is something difficult to over-estimate. We must always be grateful that such advantage has already been taken of our extraordinary river frontage, including Riverside Drive, "The Shore Road," Eastern Parkway and innumerable smaller parks.

Correct Design Invaluable.

With full appreciation of the priceless benefits we derive from our park possessions how easy it is for us to realize to-day what a wonderful asset the City would possess if Blackwell's and Randall's Island had been planned as future city parks. Frequently fine acquisitions have been laid out with such faulty execution that funds which could profitably be employed towards developing and co-ordinating the park system have been ill-spent on useless construction and ornamentation that have actually hampered, instead of assisted, the best use of the park area. Take, for example, Riverside Drive, from 136th to 155th Streets, the southern end of the expensive Grand Concourse, which is wholly unconnected with the park system of Manhattan. Or, again, the expensive pergola structures in playground parks, like Thomas Jefferson Park. This latter park, with its location in a congested region, might even now be easily converted not only into a modern and complete recreation ground, but also into a community center of great beauty and potentiality. We can well imagine in such development

the value of proper athletic and community center buildings, useful as well as beautiful, instead of the costly pergolas in this and other parks, which are entirely unsuited to the best park use and development.

In fact, the making after due study of a proper park plan for the future would also be of immense benefit toward the solution of our play-ground problem, as well as our general park situation. The matter was discussed on page 42 of the 1915 Report.

Where we have, as in New York, a limited park area in our congested regions, it is of immense importance that provision be made so that on any given date throughout the year the various classes of population seeking different forms of recreation in the parks may be distributed in the best possible manner.

Areas Served by a Park.

Besides the efforts we are making in this direction, described in the report just mentioned, the preparation of a park plan should take into consideration the question of areas of a city effectively served by a park. This question is well stated in an article on Park Service that appeared in "Landscape Architecture," a quarterly, for July, 1915:

"Other things being equal, twice as many people can find room to use a two-acre park as can use one acre. Intensity of use and access are, however, complicating factors; the larger the park, the less intensively it will be used. Furthermore, the greater the distance to the park, the less intensive the service it will render.

"Methods of access, coupled with distance, may be divided into four main types, children walking, adults walking, and adults going by car, adding a longer ride by car for all-day excursions. These correspond to our four most efficient types of recreation facilities—playground, recreation centers or small parks, large parks and wild reservation.

"Children will not normally and regularly walk more than one-quarter to three-eighths of a mile to a playground. Recreation centers attain their maximum usefulness at a size of twenty to twenty-five acres. People living in the heart of the city will go several miles to a large park, and on holidays and Sundays ten miles or more to a large tract of wild country.

"A park is found to serve at its highest intensity up to a distance of three-tenths of a mile from it—the average maximum distance children will walk; at a somewhat lower intensity up to one mile—which adults will normally walk; at a low intensity up to three miles—approximately the distance people will go for short excursions; and, for wild parks, at a very low intensity up to ten miles or even more—which people will traverse for all-day trips.

"This does not mean that the less intensive uses are of proportionately minor importance, for it is nearly as important that the opportunity be given a family to visit a large park once a week as it is that the children shall live close to a playground for daily use. Moreover, diminishing land values in outlying districts and diminishing maintenance charges make such a distribution of park areas a practical one.

"An inversion of this relationship applied within the park area would indicate that, as we proceed from the boundaries, the use becomes proportionately less intense, and it therefore becomes possible to give increasingly the "landscape" treatment, the rural quiet and the seclusion from others, for which the park is chiefly sought by those coming from afar."

There is no doubt that the value of design in park buildings is still largely underestimated by those in authority in our American cities. What we need above all is "directed development in planning and intelligent progress in park work rather than hazardous growth.

Park Areas and Development of City.

New York City is certain to see numerous changes within the next few years. Not only will the application of the heights and buildings restriction law influence and bring rapid changes in the city's distribution of population, but the opening of the new subway system will also bring immediate and fast changes in our distribution of population. It will come upon us before we are in any way prepared to handle the resulting park and city plan problems in a far-sighted manner.

New York, with its unrivaled park possibilities, should not be unwilling to learn before it is too late. No one would for a moment minimize the importance of the commercial use to which the vast majority of our congested river fronts in New York Harbor should be put, but I believe we have certain unique river frontages which provide recreation opportunities if properly seized for the sake of the city's recreation future. We should therefore restore as much of this frontage as possible, so that it will be available for intensive park use.

Here again careful planning will prevent us from repeating some of the serious mistakes of the past. If reasonable hope can be realized for connecting up and making the best use of our present park areas, New York would undoubtedly have equalled or surpassed the great European cities, and the park asset would more than ever have justified itself before its owners, the great public, as well as countless annual visitors to this great metropolitan city.

No Fixed Policy of Acquisition.

We have as examples to follow recent demonstrations of public spirit and enterprise such as the new Bronx River Parkway. In fact, in the acquisition of new park areas New York is well to the front. But, unfortunately, the land acquired has not always had the right character, nor has it been situated relatively in the right place. Our parks have included many of the most beautiful features still remaining in the vicinity, but they have not always been acquired in integral parts of a clearly defined and comprehensive scheme. It is only fair to state that other cities have been more far-sighted in this latter respect; for example, Kansas City, already quoted, Minneapolis, Chicago, St. Louis, Cleveland, etc. These cities have long since decided on definite plans requiring park space, whereas New York has had the disadvantage of working without any such system.

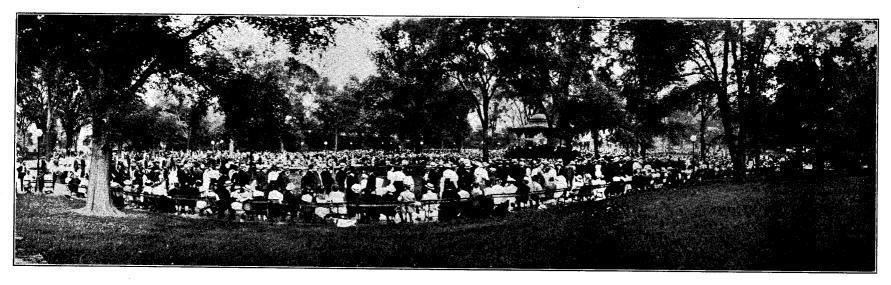
London, until recently, was in the same situation as New York, but despite the outbreak of the war a large staff is employed in preparing plans for a complete future park system. The illustrations given in the last annual report of this department show how sadly we need similar action here. Our present result is that the parks form a number of detached units, beautiful in themselves, but lacking cohesion and communication.

Few, if any, of our playground plants have any tree or shrubbery borders to beautify the site and enhance the value of the surroundings to the children and their parents. It apparently was not felt by the previous generation of our park planners that this question had any importance to a playground.

An Investment Where Value Is Received.

Certain it is that in no other department of municipal expenditure can one get such a generous return for the citizens' investment. Imagine the conservation of physical and moral energy and moral atmosphere which our parks create. In view of this it is somewhat strange to find the wealthy citizenship of New York generous in gifts to other institutions yet far behind the other cities of this country in setting their mark on their dwelling place for all time, and making generous provision for the means which will raise the physical, moral and intellectual standards of life for generations to come. We must encourage our well-to-do citizens to make gifts to the park system as has been done in other cities. But this can only be done after we have a complete park plan. Here in a complete park scheme could be found New York's crowning opportunity. Here could be provided locations for every kind of memorial or gift suited to the capacity and measure of generosity among the rich. One could present a park area, another a classic bandstand, another a rest house, another a playground. No one need be denied the pleasure of erecting his own memorial in the hearts of those he serves, and this department calls on all civic associations to take this matter in hand so as to assist in bringing it properly to the attention of our generous-minded citizens.

I believe that the foregoing consideration makes it clear that from every point of view the City of New York would find it a paying proposition to begin at once a comprehensive study of its park problem and a coincident preparation of a city park plan for the future.



THE MALL, CENTRAL PARK

A Sunday Concert

Recommendations.

Furthermore, that this plan should take into consideration the city as a whole and the park system in its entirety. And lastly that this work should be prosecuted with the least possible delay, if we are to avoid having to remedy at great cost our failure to plan now for the future.

I therefore make the following recommendations:

- (1) That without further delay there be appropriated for the use of this department \$5,000 so that this work may be undertaken;
- (2) That such co-operation may be secured so that the work can be carried on in co-ordination with that now proceeding in the City Plan Committee;
- (3) That a Committee be appointed immediately upon securing the appropriation which will bring to the assistance of this project the expert advice of all those who have made a study of special features of our city planning or park development in the past.

Regularity of Fixed Income Means Continuity of Planning.

In few cities of this country, with the notable exception of Kansas City, is public opinion clear on the point that city planning and building development is almost invariably preceded by park development. The latter invariably forces other city development.

In many cities we have seen how the parks have conferred pecuniary benefits on the population as a whole, but this has only taken place when there has been a sufficiently assured park development so that the citizens could place more or less reliance on the character each park would ultimately have. Of course, the questions of appropriation play an important part in any such work and all park authorities must look with some envy on the City of Baltimore in the East, and a number of cities in the West where a fixed and assured income for the park system is provided. This method has evident advantages, speaking merely from the point of view of the future of the parks. It provides definite development for the park system. It eliminates the all too prevalent condition of park development depending upon political pull and tends to eliminate sectional favoritism in new purchases and acquisitions. It leads to expenditures in accordance with park requirements on a carefully laid out plan rather than for spending according to the then ill-considered expediency of the political situation of the moment. It enables the park authorities to prove to the public mind that even a distributed expenditure throughout all sections of the city may represent the most advantageous of all methods of park development.

A park system is the city possession as a whole, each section benefiting in proportion to its civic participancy. To secure the best results from the park system we must have continuity of planning and development, for a park system cannot be secured over night or even in a few years, and therefore a mistake once more becomes a serious matter because it cannot be remedied without long lapse of time.

A certain amount of regular income for the park system, therefore, conduces to honest policy of park development with civic betterment for its goal. It tends to make such reasons govern the appropriation for expenditures made because they can be then applied in accordance with carefully prepared estimates based upon accepted and published park plans, all progress being contributary to the acceptance of a sound policy and civic development.

Influence of Kansas City Park System.

The influence of a park system to revolutionize an American city that has all the disadvantages and the marks of a too rapid development until the park system came to its rescue is the municipality of Kansas City, Missouri. The report of the park commissioners of that city for 1914 and the general appreciation that the park system has been Kansas City's saviour are notable in our park development in this country. The report shows the growth of the city in the years 1893, 1909 and 1910 and side by side with it "the application of the park system which proved the mould into which the new city has flown." Not only has popular sentiment grown in Kansas City with the development of the system as originally planned, but large property owners have aided by little gifts of land. The city's population has willingly come forward to protect itself with park improvements and all this in sharp contrast to the early opposition to the parks and boulevards. To a large extent also the problem of congestion has been eliminated by the park development of Kansas City and there is no present indication that the next generation will have to deal with it. Centers of congested population growing more aggravated yearly were abolished to make room for parks and boulevards, and it is a fact that other centers of the same character do not take the place of those thus removed.

The fact that Kansas City boulevards have paid well in money values should also be mentioned.

- Comprehensive Park Plan Urged by Olmsted and Vaux.

In connection with the work of park planning, it is valuable to mention the report of January 24th, 1886, of Messrs. Olmsted & Vaux, and their description of the design proposed for Prospect Park, where they speak in strong terms of the necessity of just such a comprehensive park plan as we are proposing. They refer in an admirable way to the necessity of securing while the ground is inexpensive, parkways connecting the Brooklyn park with Central Park via bridge near Ravenswood and thence on to the Hudson River. This was at that time entirely practicable.

State Park Acquisition Initiated by Referendum.

The result of the recent State Referendum for a \$10,000,000 appropriation for park purposes gave the people of New York City their first opportunity of recent years to put themselves on record with respect to the policy of park acquisition.

The result of the discussion on the State Direct Tax hammered home to the voters of New York that in the State tax proposed for the Interstate Park, New York City would have to bear the burden of 80 per cent. of the expenditure. By voting to spend this money through the large majority obtained in New York City, our city dwellers deliberately voted to tax themselves \$8,000,000. Their enthusiasm for any park proposal is more striking when they realize that this money was appropriated to be spent on parks beyond the limits of New York City, the nearest to which is Palisades Interstate Park, whose center is two hours distant from the city by steamboat, and more than an hour by rail. This should convince any one that the acquisition of parks is thoroughly appreciated as to its value. Moreover, our history as a city shows that the acquisition of some of our most valuable park areas was due to practical considerations.

Lack of Continuity of Policy in the People's Use of Our Parks.

One great difficulty that any New York park administration has to deal with at the present time is the lack of a definite public opinion regarding the treatment and use of the park systems. There are a great many associations interested in park work, but their committees are too often found working each on its independent lines, instead of working together for a definite policy and plan.

It is to a great extent due to this state of affairs that our city is at present so divided into elements holding opposite or divergent views as to the function of parks, the use to which park areas should be put, and the scope, extent and limits of the operations of the Park Department.

Restriction and License.

There are still existing a number of associations who are living in the park atmosphere of many years ago, and holding that parks are intended for recreation in the sense of rest only. Such associations quarrel with any park management which introduces even the happy noise of children playing, or that of crowds and merry-makers or picknickers occupying the beautiful country side with which our park system abounds. Then there is the other extreme represented by numerous and powerful associations who believe that the parks should be indiscriminately used without restrictions applying to any portions of its territory. They refuse to consider the natural result of such treatment which, with the poor soil and growing conditions of our park system, would rapidly result in the destruction of the very features of the park itself which make it useful for recreation.

This latter type of association representing both rich and poor, deeply resents any regulations forbidding children to strip flower-beds and destroy shrubbery; violently objects to the temporary closing of worn areas or areas under restoration that they may obtain the required recuperation and retain their permanent usefulness. These associations on the other hand feel resentment and surprise when the results of such a policy begin to

show, and the parks, through lack of proper care and rotation, become stripped of the very beauty, the country aspect and the springy turf which makes them valuable for the children's use. They fail to realize that the restoration of park areas carelessly destroyed is a matter of many years.

These are two extremes which form the fountain head of countless civic movements which descend upon our body politic and approach the park authorities demanding an immediate change of system. It has been with the object of co-ordinating public opinion and securing a definite park point of view which would provide a medium between these extremes, that this department has taken steps during the year just past, to form a Park Protection Association.

Our Present Policy.

The present administration is making every effort to leave behind it such a clear record of the reasons for its actions and its belief, as regards lines of future park development, that executives who follow may not make changes lightly without, at least, understanding the significance of the plans and realizing the necessity for continuity if the parks are to fulfill their service to the modern city. Frequently, in the past, park work that had been carefully planned and fostered for years has been ruined by a new executive who took action before he had acquired the experience necessary to form a mature judgment of park needs and consequently has been unconscious of the fact that the action would impair the usefulness of the park during the next decade.

After experience such officials often have acquired a sympathetic knowledge of the subject and have reached the point of exchanging the watchdog attitude, that does not allow for any changes, for a progressive one of city advancement; or an attitude of such unrestricted use that widespread vandalism and ruin which cannot be repaired for many years, is at length replaced by a sound policy of judicious development so as to get the greatest and at the same time the best use of the parks for the greatest number of citizens. But this change is apt to take place only when a term of office is expiring and new recruits become departmental chiefs.

In this country this has resulted over and over again in a wasteful expenditure of time and energy on the part of landscape architects and of park designers who have to begin once more educating on fundamental principles of park design. What is so difficult for the inexperienced in park work is to visualize the design as it will be in the future and estimate its usefulness not alone as of to-day, but taking into account the city development and the citizens use of these areas for years to come.

THE CITY BEAUTIFUL

Extension of Service.

During the last year it was definitely decided that this Department should greatly extend the field that was formerly considered the scope of its activities, so as to provide a leadership, a rallying-point and a clearing house for a great number of city-wide efforts to improve what might be termed the beauty, comfort and happiness of life in the city. As these movements have been sporadic in New York and have not succeeded in doing their part in city improvement, it was felt that the department should assume responsibility.

Leadership in Civic Affairs.

The Park Department, I believe, should further develop this matter and undertake the much-needed leadership in this class of civic endeavor that has been neglected, as far as the city authorities are concerned. For example, it is the view of the present Park administration that the windowbox campaign organized and developed by some of our civic associations should be fostered and assisted as a departmental duty by the Department of Parks. And this quite apart from the fact that the window boxes will be in a majority of cases on buildings that are far removed from park areas and park jurisdiction. A beginning has been made along this line which will be put into effect during the spring of 1917, by which the Park Department is to advertise freely that at certain points in each of the parks, great and small, the department will maintain a supply of the proper soil for window boxes which it will give to citizens and to children who bring from their teachers or parents satisfactory evidences that this is the use to which they wish to put the mould thus obtained. This will naturally stimulate the window-box campaign and make it clear that the Park Department wishes to take full responsibility for being the city's agency to co-operate in city endeavors along this line. Incidentally, the park system by such a method may be relieved from the present practice of window-box enthusiasts who dig the necessary earth for their boxes out of some park area, thus destroying a beautiful lawn or play field for the children, leaving it resembling the vicinity of a beaver dam or a plot infested with moles.

Flower Markets.

A kindred subject which should be properly under Park Department encouragement is the question of flower markets. In this matter New York City is not only far behind European municipalities, but also many of our own sister cities in this country. It is proposed to call a conference of those interested in the flower markets and the securing of suitable locations that are adjacent or not adjacent to park areas and thereafter have the Park Department supply whatever co-operation and leadership is needed to

secure the results so long demanded by those interested in this phase of city development.

Local Improvements.

In line with this extended view of the field which the Park Department should occupy, we have made every effort during the year to encourage the movement for improving the condition of streets and avenues. Not only have we approached this through our highly successful tree-planting campaign, which will be discussed fully in another portion of this report, but through stimulating the united efforts of property owners and lessees to improve the appearance of their block, neighborhood or avenue by securing the repainting of buildings, the elimination of ugly structures and excrescences, and the securing from the city authorities of street improvement. It is amazing to see what wonders have been accomplished by a little paint, soap and water and a touch of local pride in some of the worst looking street blocks when attacked by the concerted action of the neighborhood spirit. The Sixth Avenue Association has set a good example in offering prizes for competition to the best block improvement of this character.

Billboards.

Another matter in which this department has made a practical beginning and should develop further is the question of ridding our park areas and their vicinity of unsightly advertising signs and other encroachments. Last year's report will show where we made a successful beginning by ridding city-owned property of such unsightly nuisances, but the Park Department should not stop here and should play a prominent part in urging all citizens to co-operate in a movement to secure the removal of objectionable encroachments and eyesores in all parts of the city. Also to secure proper legislation which will give to our authorities having jurisdiction over both highways and parks, similar powers, the enforcement of which has effected such notable results in the State of Colorado, and its capital city, Denver.

The failure of a number of our state courts not only in New York, but elsewhere, to fully support efforts to deal with this class of problems of our rapidly developing cities, has left both legislatures and cities in a difficult position. Wherever possible, therefore, constitutional conventions and new constitutions should provide amendments to meet these newer needs of our municipal populations. They should, for example, put beyond question the power (now denied in some quarters) of the legislature and municipal authorities exercising delegated legislative powers to allow different regulations in different parts of the same city, depending on the character of the locality affected. The "zoning" or "districting" of cities should clearly be legalized so as to foster the specialization of districts—to their general advantage as well as to that of the whole city.

Permanency of Real Estate Values.

A reasonable permanency of values and certainty of the future, not only important to the permanent real estate owner and the taxing authorities in its bearing on the borrowing capacity and financial security of a community, but the park situation and its surrounding localities are very vitally concerned. At present a helplessness exists with respect to neighborhoods such as parks and squares and important avenues of scenic beauty for the creation of which the public has spent large sums of money. these may today be marred by the most incongruous and disfiguring structures. In New York unsightly structures are allowed to surround our parks and public squares so long as they do not actually imperil the bodily safety of the citizens or exhibit what is positively indecent. They frequently defy regulation from the point of view of what is appropriate to the place, although the public should in some way be able to protect the neighborhood of its public buildings, squares and parks from exploitation for the benefit of a few. The enormous gas tank adjacent to our Riverside Drive viaduct is a shocking example of how a structure may seriously impair the value of an asset on which the city has spent millions. It was hoped that by the creation of a market and distribution point on the blocks lying to the north of Manhattan Street and west of Broadway, the elimination of this unsightly gas tank along the Riverside Park viaduct might be automatically secured. This department assisted in that movement as much as possible, because it would at the same time relieve the park system of the future from unsightly outshore structures to the west of Riverside Drive north of the viaduct. Meanwhile the City Charter sections on this subject have been held by the Courts to be inadequate as far as the powers of the Park Commissioner are concerned. The need of some more effective control by the Park authorities as to areas and structures, encroachments and street signs adjoining parks is clearly imperative.

Control of Eyesores.

It is most important that our American communities be made to realize that the suppression of hideous sites and the promotion of beautiful artistic effects in public places entails a far smaller invasion of private rights than does much of the legislation regarding public health, safety and morals already enacted and in force. Offensive noises and smells have been for a long while considered susceptible of suppression in thickly populated districts. Although these statutes are usually upheld on the theory of safeguarding the public health, they have, in fact, little bearing on the health of the normal person, but a great deal to do with his physical comfort and convenience, as well as peace of mind. Now objects may be offensive to the eye, as well as to the nose and the ear, as a man's æsthetic fitness is constantly appealed to through his sense of sight. When governments like that of New York City have spent millions on parks, boulevards and other

forms of civic beauty, the first aim of which is to appeal to sense of sight, why then should not the Government interpose to protect from annoyance this most valuable of man's senses, as well as to protect him from offensive noises and smells. It would seem that the doing away with ugliness and deformity, and the building up of the beauty of the city, are closely allied to the establishment of rules for the neighborhood on the maxim of the "greatest good to the greatest number," so that they might include regulation of private property to gratify the collective sense of fitness and civic pride. This Department looks to the near future when our State courts may abandon a conception of police power that utterly ignores public æsthetics, and follow the lead of the courts of some western states in this regard.

While there is not as yet such urgent demand for æsthetic betterment in this State as there has been for a number of other lines of civic endeavor where success has been obtained, there is still little doubt that with courageous leaders sentiment can be crystallized through organizations and agitation in the press so that if necessary a constitutional amendment on this subject can be procured and legal protection for the beauty and artistic side of life obtained. The growing appreciation of the uselessness of spending millions only to have the asset thus obtained wantonly ruined would seem to render such a campaign indispensable.

Billboard Legislation.

A method suggested by legislation, introduced at Albany this year, of attacking the unsightly billboard nuisance is most interesting. The bills that were considered and narrowly failed of adoption authorized municipalities to tax street advertising signs and the corporations that make a business of erecting and renting them. This method proposed to eliminate billboards from all neighborhoods where they are objectionable by making the tax on them prohibitive, on the theory that advertising space of that character is invaluable. It would seem that, pending a change in the State constitution, this method is worth trying in view of that successfully applied in the attempt to tax some of our city liquor dealers out of business in the same manner.

There is ample precedent for the enactment of this legislation in the experience of European cities. In many of them outdoor advertising has been regulated and taxed by the authorities, and the scheme has been notably successful. It has proved no mean revenue raiser. The public has been protected from flaring sensational signs which cannot by the remotest stretch of imagination be deemed to improve even a city landscape. The official regulation in some of these cities has gone so far as to indicate or outline the character of posters to be used, and the quality has been raised distinctly, with probable benefit to the advertisers, even if they are not permitted to monopolize space, as is the custom in our cities.

Set Back Lines.

This department has done everything in its power to encourage and develop the movement which has been proceeding throughout the year for the establishment of proper set-back lines or courtyards. This movement is particularly applicable to the outlying boroughs, where development and building is proceeding on a large scale. The report of the Committee on City Plan and the communications from the Secretary of the Committee and the Chief Engineer of the Board of Estimate and Apportionment are valuable as setting forth the present status of this matter.

New Type of Park Bench.

The department has had a number of conferences with the American Posture League, with a view to securing a better type of park bench. One of the results already achieved has been the gift of a small number of the new type of bench by the League to the city parks. Meanwhile, the available supply of park benches still remains wholly inadequate, since no appropriation has been made for park benches since 1906, while at the same time the population using the parks has almost doubled.

Public Education in Use of Park System.

This department believes it of great importance to take steps which will result in a better use of the existing facilities which the park system affords and a better distribution of population on any given day of the year, according to individual tastes and needs. In other words, the park system should be brought before the people, so as to allow them a better selection of the different types of recreation afforded.

To this end we are proposing to get out pamphlets showing the best route than can be followed in making a tour of the city parks, so that the greatest amount of continuous boulevards may be encountered and the least amount of city street traffic in making such a tour. Also a pamphlet setting forth the recreation facilities, the means of transportation and the best way of reaching the outlying parks, both within and without the city limits. This to include such outlying parks as the Inter-State Park, the Essex County Reservation and the canoe trips that can be taken on the Passaic River, and other nearby rivers that run through wild and undeveloped territory.

Meanwhile, in another section of this report, will be found a list of the parks and parkways in the Borough of Manhattan, together with their buildings, uses and cost.

Canoeing.

What the city greatly needs is a nearby municipal canoe area, to provide for this excellent form of municipal recreation. The splendid recreational results obtained can be best seen in such cities as Detroit and Cleveland. In the near future land should be acquired lying in the neighborhood of the Harlem River Canal, between Inwood Hill Park and Isham Park,

which would make the best possible municipal canoeing station, with the outlets for canoeing which are afforded by the Harlem River Canal and its adjacent waters and lagoons leading into the Hudson River.

Roof Playgrounds.

This department is making a special effort to arouse interest in the campaign to make better utilization of the roofs of tenements, apartment houses and private dwellings as playgrounds or gardens for rest. The architects of the city have been communicated with in an effort to show them how very slightly the expense would be increased and the necessary changes made to secure these roof playgrounds where buildings already exist, and the plan for such roof areas in buildings now being constructed. If this movement can be given any wide-spread impetus the city would be greatly relieved from the congestion of children on the streets, thus taking them away from the dirt and heat and danger of automobile and other traffic.

Several model roofs have been already provided with trees, shrubs and vines, seats and pavilion, and flat roofs have been converted into gardens, by building the projecting brick walls higher and planting vines and bay trees. Incidentally great beauty can be added to the city with roofs provided with verdure.

It is quite clear that New York at present makes too little use of its roofs as recreation spots. I feel sure that if we can arrange to have architects and prospective builders visit roof playgrounds already installed, a great change in method and practice could be secured.

Civic Art Committee Co-operates.

In the matter of co-ordinating the movements toward beautifying the city, the department received a great deal of valuable assistance from the Civic Art Committee of the Women's Municipal League, under the efficient chairmanship of Mrs. Frederick Hodgdon. The circular sent out by that organization is a model as to how such matters should be undertaken, and the program of its committee is most valuable as showing the different lines of endeavor that should be jointly prosecuted, so as to improve the general appearance of the city. The following suggestions are of special value to arouse interest in a clean-up and paint-up campaign:

- 1. To study the report of the Commission City Planning.
- 2. To try to arouse interest in a "Clean-up and Paint-up" campaign.
- 3. To endeavor to improve the appearance of back yards and roofs.
 - 4. To urge the removal of unsightly objects.
- 5. To improve vacant lots by converting them into playgrounds or gardens.

- 6. To try to secure a more intelligent regulation of signboard advertising.
- 7. To arouse interest in a "Block Improvement" movement and in a "Block Beautiful" contest.
- 8. To help the Park Department in every possible way in its effort to care for the trees already growing.

Better Lighting.

We have also pointed out to the Department of Water Supply, Gas and Electricity that, while for park purposes light should not be offensively glaring, nevertheless, at many points there is insufficient lighting under the present system.

Waste Receptacles.

We have also planned to improve the design of receptacles for waste paper in the parks. These should not be over ornamental, but should provide adequate attention to the utilitarian feature, since lack of consideration for human health, comfort and convenience automatically renders the parks less worth the effort and cost of their acquisition.

Park Protection Day.

In order to assist the department's campaign against vandalism and littering of the parks, as well as to increase the knowledge of our citizens in the facilities offered by our park system, this department plans to have in the spring of 1917, a "Park Protection Day," including demonstrations by the playgrounds, and all phases of park work and a parade showing park activities.

Boy Scouts Help Protect Parks

As another measure to reduce existing littering and vandalism, and also to eke out the inadequate supply of police detailed to preserving the parks, this department requested the Boy Scouts to do regular service in the city parks. The Manhattan troops of Boy Scouts of America have responded most heartily, and beginning with a trial of several Boy Scout units in Central Park, the system has been greatly extended to other park units. Every effort has been made to make use of the local scout unit in neighboring park areas. The entire plan has proved a great success and has not only developed rapidly, but is doing much to reduce the thoughtless vandalism of certain elements of the community, who thus render the parks less useful to their fellow citizens.

Historical Markers.

The City History Club is also performing a very valuable function, which is much appreciated by the Park Department, which work includes lectures and tours for the city children, conducted with a view to pointing

out the historical associations connected with the points of interest in the city parks, and the value of the parks to the citizens, together with an understanding of the facilities they offer, and the harm done by thoughtless destruction.

Anti-Litter Campaign.

The Anti-Litter League is another movement in which this department has taken enthusiastic part. A number of sections of the city have already been organized with a boy responsible for each city block, and it is expected that the movement can be pushed with substantial results.

American Scenic and Historic Preservation Society.

The department has found of inestimable help the support and cooperation of The American Scenic and Historic Preservation Society, both in the matter of preventing attempted park encroachments, and in the questions of the acquisition of new parks, both within and outside the city limits.

PARK ENCROACHMENTS

The present administration regards it as particularly the duty of the park authorities to protect the park system from the kind of encroachments that have in the past impaired its usefulness. Park authorities everywhere should be watchful in this matter, but especially so in New York, where, despite its large park area of 7,963.765 acres this city is far behind other large municipalities in the percentage of park lands to the population. This is even more strikingly true regarding the available Manhattan park area (1,548.128), where the crowded conditions make it absolutely necessary to preserve every foot of park space.

During 1916 there were an unusual number of efforts to preempt park territory, which required prompt and firm action to prevent the success of these inroads. As a rule these movements must be defeated before they acquire too much headway.

1-HYGEIA ICE COMPANY LEASE.

Several times during 1916 the Sinking Fund Commission has considered granting a lease to the corporation known as the "Vermont Hygeia Ice Company" for a section of land along the water front immediately adjacent to and west of the existing Riverside Drive, at the point where the latter approaches the Dyckman Valley and where it turns east to join Broadway.

The corporation, if granted this lease, proposed to build large warehouses on this area, including property which it owns on the adjacent upland immediately adjoining the Drive.

The Park Commissioner has appeared at all meetings and vigorously opposed the granting of this lease, maintaining that the erection of a cold

storage or other plant at this point would seriously handicap future city plans for the development of parks, as well as do untold damage to the existing park asset.

It was urged that Tryon Hill, which is included in the proposed Rocke-feller park gift and is immediately east of the proposed site, and also Fort Washington Park and the park lands which should be taken in in the future between Riverside Drive and the river at this point would be forever robbed of their park aspect.

Attention was especially called to the fact that the city is now in the process of condemning land for a park strip on the easterly side of Riverside Drive directly opposite the strip on which it is proposed to erect the ice company's structures. To the contention that this matter should be left to the Art Commission, this Department replied that the Art Commission passes on the designs of buildings proposed, and is not in a position to consider, as can the Park authorities, the injury that may be wrought by any structure to adjoining park territory.

For years this department and all forward-looking citizens on city plan development have agreed that it is absolutely necessary for the city to take the land north of the existing Fort Washington Park, between Riverside Drive and the river, for park purposes. This need was once more recognized when the districting plan recently adopted by the Board of Estimate and Apportionment indicated this area and section of land as that to be restricted from manufacturing or business purposes. The city has spent millions of dollars for its parks and the future park development necessary in this region, and it is, therefore, inconceivable that much of the city's investments be now ruined by granting a long lease of this character.

The Dyckman Valley is a narrow one and although the city has, in its judgment, definitely laid down that this valley shall be used in the future for commercial development, and the park system be carried over or around it, similarly to that done in the case of the Manhattan Valley, it is, nevertheless, of great importance that up to the edge of the valley itself the park lands be protected from untold damage by encroachments.

It is also considered important that since the banks leading down to the river at this point are very steep in places, access to the future shorefront for pleasure and recreation purposes, as well as to the commercial area immediately opposite the Dyckman Valley, be preserved from that valley out to its limited water front. Such access would be blocked by the proposed buildings placed on the filled-in Riverside south of the valley.

Within the next forty years changes will surely take place in this vicinity. Therefore the Dyckman water front facing the valley should be carefully worked out as to its commercial uses, so as to allow for the handling of building materials and other trade purposes. In view of this it would not be sound to allow a long lease for purely manufacturing purposes at this point, apart from the question of this being an eyesore and a detriment to the park asset.

Thus far the lease has not been approved, and meanwhile the Park Department will exercise constant vigilance to defeat this project.

2-PROPOSED WIDENING OF CENTRAL PARK WEST.

For several years the unusual lay-out of the street surface of Central Park West, from 59th to 110th Street, has been the cause of unsatisfactory conditions which have led to a large number of accidents. These accidents have resulted in a loss of life unusually high compared to others of our busy traffic streets. To relieve this situation a number of suggestions have been made to the city authorities, the majority of which propose to enlarge the roadway to the east of the existing tracks by cutting off a portion of all of the existing esplanade walk, which forms the western boundary of Central Park. Now the roadway itself, forty-eight feet from curb to curb in width, is ample to care for traffic requirements, but unfortunately, both of the street car tracks are laid on the extreme easterly side immediately adjacent to the park curb, and this arrangement is the cause of the dangerous conditions existing. This department has consistently held that the proper solution for these conditions would be the moving of the easterly tracks, so as to place them to the west of the existing westerly or southbound tracks. Such action, together with a cutting off of only seven feet from the easterly or park boundaries, would leave the two resulting tracks in the center of a broad street, with equal facilities for north and south bound traffic on each side of the street railway. This will allow sufficient roadway so as to contain two lines of travel to the east, as well as to the west, of the resulting street car tracks, one for slow and one for fast traffic.

Meanwhile civic and commercial associations, aroused by the dangerous existing conditions, urged that it would be a difficult matter to secure cooperation from the street railway company to transfer their tracks, and therefore ask as an immediate remedy that the entire park area up to the Central Park wall be taken in for street purposes.

This Department, in opposing these measures, pointed out the tremendous value of the city asset contained in the shaded walk or esplanade on the west side of the park, shaded with its rows of trees. This is a feature of city life which has been thought so valuable in other cities of this country and Europe that millions of dollars have been spent in securing it. Furthermore, the plans which propose to take in the park fail to take into consideration the enormous expense and disastrous results that would be brought about by the necessity of constructing as a portion of the plan a new park sidewalk within the present park wall. The unity of the Central Park plan is such that to change one feature involves disturbance over a very large area. Besides the topography of the park, inside the wall, is so varied as to require an enormous expenditure in the rock cuts and the fills necessary for any such work. At the same time the landscape features of the park would have to be changed and readjusted on a large scale. However, the advocates of such plan have succeeded in securing the intro-

duction of a bill which, if passed, would give the Board of Estimate and Apportionment the decision as to whether such plan should be carried out or not. This Department is opposed to such action for the reasons stated above, and also because it incidentally takes away from the Park Commissioner the proper authority at present placed in him by the City Charter.

The Park Commissioner sent the following telegram at the time the bills came before the Legislature:

"To New York City representatives in The Senate and Assembly:

"I urge your active opposition to a bill just introduced into the Senate which would make it possible to reduce the area of Central Park by cutting a strip from its western boundary. This office has other solutions which meet the situation on Eighth Avenue without destroying the most valuable of the city's assets. Any proposed solution which would cut off a strip from the western side of Central Park would not only reduce the park area, but seriously interfere with the landscape effects which were planned by Olmsted & Vaux, and which have won the admiration of the entire world as a piece of landscape architecture. This measure is not only dangerous, but unnecessary, and if it should be carried out, I have no hesitation in stating that a few years later would see the restoration of this park feature. One of the greatest authorities on matters of this character has stated as his opinion that if this plan should be carried through the whole area in a few years would be again restored to its present aspect at enormous expense."

The protection of the city park system is sufficiently difficult as it is, without giving in to the insistent efforts to weaken the authority of the park representatives over existing park area. It is clear that it is not realized by the majority of those seeking relief of this problem that the sidewalk and trees along the outside of the Central Park wall form an intimate and necessary part of the design of Olmsted and Vaux.

This subject is admirably considered in the report presented recently to the Board of Estimate and Apportionment by Mr. Nelson Lewis, Chief Engineer of the Board of Estimate and Apportionment.

The park authorities believe that, despite the evident need of remedying the existing dangerous conditions of the street known as Central Park West, the methods suggested would do untold and unnecessary damage to this valuable park asset. From information received, I am confident that the street railway company, if convinced that the city will only agree to the method of shifting the present eastbound track, would not only cease its opposition, but will contribute an even larger sum than the \$100,000 already offered for this purpose.

I might also point out in this connection the unnecessarily broad sidewalk (25 feet) to the west of Central Park West, which would allow, if necessary, of cutting back the curb some distance without any curtailment of pedestrians' needs.

These matters will undoubtedly develop to a great extent during the coming year and all further discussion is therefore reserved until the next report.

3-MORNINGSIDE PUMP HOUSE.

The controversy between this department and the Board of Water Supply on the question of the erection of a high structure in connection with the new aqueduct is fully set forth in the 1915 report of this department.

At the beginning of the year under review this matter became so acute that the Mayor of the City deemed it wise to refer it to the Board of Estimate and Apportionment for consideration. At the hearings before the latter Board the arguments presented by this department were successful and the Board supported our contentions. They therefore directed those in charge of the construction of the new aqueduct to take down the permanent structure which they had erected under the guise of a temporary permit from this department, and to construct the required pumping station so that the installation should be entirely below ground with sufficient covering to allow of the restoration of that portion of Morningside Park.

After waiting a reasonable time to allow the Board of Water Supply to comply with this decision, the Park Department addressed repeated communications to the said Board, inquiring what steps were being taken to carry out the directions of the city authorities and how soon this department could expect the entire removal of the exising unsightly structure.

The Water Board has now replied, submitting plans for the underground structure, which have been revised and approved by this department. The Board has now promised speedy action in the construction of the underground chamber, and they have let a contract which provides for the entire removal of the overground structure by July 1, 1917, together with a restoration to park conditions of all the disturbed area.

4—ANOTHER ATTEMPTED ENCROACHMENT.

A remarkable attempt at park encroachments that acquired a good deal of headway before being defeated by the park authorities was the project of some film corporations to erect in Central Park a large marble structure as a mausoleum in which to preserve notable motion-picture films for future generations.

At that time the Park Commissioner took occasion once more to state emphatically that no possible arguments could be found to lead to the approval of any projects of such character. However meritorious in itself proposals may be, they are not justified if they involve the placing of a structure in the parks (Central Park in this case) that is not absolutely necessary and incidentally helpful to the park use itself.

Even our Metropolitan Museum of Art, it is recognized today, should never have had space given to it in Central Park that might have been devoted to recreation purposes or general park use. It is necessary to resist all such efforts, not only for the protection of our present park asset, but for the park asset of the future. This is even more urgent in Manhattan, when one realizes that there is only one acre of park land and breathing places to every 1,745 of population, whereas in Chicago there is an acre to every 260 inhabitants, and in Philadelphia to every 206 inhabitants.

Very frequently the proposals for placing new buildings in the park are very tempting, since they offer the specious argument that the parks will thereby be adorned without expense to the taxpayers. In these days, when it is so difficult to procure funds for necessary restoration and maintenance, such proposals gain added force. But it is the firm belief of this Department that it is infinitely better to struggle (even in the face of great difficulties) to obtain sufficient funds to keep the park system in such condition that it may be of the greatest benefit to the largest number of users.

This year there again came up, and was denied, the project to install sufficient structures on one of the large park greens so as to conduct summer opera performances thereon.

Attempted Invasion of Central Park.

It is interesting to give in this connection some of the projects for the invasion, physical change or dismemberment of Central Park advanced in the past.

A street railway (in the park); tents for circuses; a steamboat and full-rigged ship; a cemetery for distinguished dead; houses of worship for all denominations; a great central people's cathedral; a building for display of samples of goods for sale in the city; a regimental drill ground; an exposition building; tombs of celebrated heroes; a speedway inside of western wall; Academy of Design building; cutting up into building lots (R. B. Roosevelt, 1904); taking a 90-foot strip from east side and adding it to Fifth Avenue; opera house; outdoor theatre to accommodate 25,000 persons (Frohman and Maude Adams, 1911); central fire department building (1910-1911); several museums on reservoir site; transfer of Lenox Library (1912); stadium (James E. Sullivan, 1912); a Marionette Theatre; an incinerator plant, etc.

5-FORT GEORGE HILL.

Through the co-operation of the Bureau of Licenses a great number of the unsightly structures on Fort George Hill adjacent to High Bridge Park were removed, thus bringing so much nearer the much desired and needed acquisition of the Fort George territory as city park lands.

Useless Park Buildings Demolished.

Under the head of encroachments should also be mentioned the removal effected by this park administration of a number of structures in Central Park, notably the antiquated and unserviceable carrousel buildings

and the unsightly McGown's Pass Tavern, which was also structurally unsound and dangerous.

Other removals of this character, including the buildings in Fort Washington Park, are treated in detail in another section of this report.

6—SUBWAY KIOSKS, CITY HALL PARK.

Every effort was made by this Department in attempting to secure, through the aid of the Public Service Commission and the Borough President, the reformation of every part of the surface of City Hall Park, and as a result a very speedy restoration was secured of the areas encumbered for several years by the construction of the Broadway subway. At the same time we attempted to secure the replacement of the present high and unnecessarily bulky kiosks standing immediately in front of City Hall Park, with curb and simple iron railings such as are used in the entrances from the street, provided in the most recent subway construction.

However, after some discussion, Chairman Straus, of the Public Service Commission, decided that if the new type of subway entrance were substituted there would be involved a replacement which, under the contract of the Public Service Commission, could not be charged to the cost of construction. The Commission therefore held that it would not be possible to charge such improvement to the rapid transit account and the city, if it desired these improvements, would have to bear the expense through appropriation by the Board of Estimate and Apportionment. The Public Service Commission therefore declined to bear the cost of the change; neither was this Department able to succeed in securing funds for this purpose from the Board of Estimate and Apportionment.

The usual scrutiny was given, as in previous years, to all subway construction work throughout the city, so that this Department might interpose, wherever it was possible, to prevent undue destruction of park features, and where subway operations in park territory proved to be absolutely necessary to limit the area of destruction and provide for speedy and adequate restoration of the park features involved.

7—BROOKLYN BRIDGE STRUCTURE IN CITY HALL PARK.

Further efforts were made to secure the removal of the huge ugly steel structure stretching out over City Hall Park which is used to amplify the switching facilities of the Brooklyn Bridge trains. This is one of a number of illustrations where unsightly structures have been erected in the parks in the guise of structures for which temporary permits have been issued. Nevertheless, such structures have remained for many years to hamper and prevent a proper use of our limited park space. The temporary structure in this case still remains after a lapse of nine years. The Bridge Commissioner has recently informed this Department, that until the

Board of Estimate and Apportionment has acted favorably on the request for a large appropriation to defray the cost of the necessary changes to be made in the Brooklyn Bridge facilities, it will be impossible to remove this structure. The matter, however, could be greatly advanced if the Bridge Department could succeed in getting operated a loop connection between the Brooklyn Bridge and the Centre Street loop.

While it is clear that favorable action on these matters cannot be obtained at an early date, it is only by continued activity of this Department, aided by the efforts of civic societies, that the needed results can be obtained.

8-PERMANENT ENCROACHMENTS IN TEMPORARY GUISE.

In all of our large municipalities where public or semi-public projects are launched with a plan providing for encroachments upon park areas, or where Boards or public officials are granted, by the park authorities, temporary permits so as to provide for caring for emergency matters, we find that in almost every case the result is a later effort to turn a temporary privilege, given by the park authorities, into a permanent one.

For example, in San Francisco, in an emergency, the Park Board gave a temporary permit for a pumping station to provide water for many thousands of people who were housed after the San Francisco fire, on an area under the jurisdiction of the Park Department. It was represented at the time that this would not be permanent, for the water engineers could get water by gravity to this parkway after twelve months, and the pumping station would then be removed. But after several years had passed the Park Department was finally compelled by force to tear down the structures, and it was only then that the plant was finally removed.

The same process had to be followed in order to rid the San Francisco park system of the structures for camping and other purposes that had originally been put into the parks to provide for the refugees from the fire, and even then there were legal proceedings brought in an attempt to prevent the Park Department from razing these temporary habitations.

Similarly in New York, when furnishing other departments of the city government with temporary privileges in or across park property, it has been the almost invariable history that the Park Department has had to use a strong hand to obtain once more possession of the property.

9-TRANSIT FRANCHISES.

In this connection the Park Board has given a great deal of time throughout the year to careful study of the franchises pending before the Board of Estimate and Apportionment which proposed the laying of street railway lines through and across the undeveloped park lands of Pelham Bay Park. The policy of the present Park administration is, in general,

averse to the laying of street railways through park territory, its aim being to meet such cases by providing motor-bus transportation.

The history of the recent successful fights by the park authorities of St. Louis and San Francisco, which resulted in the installation of municipally-run bus facilities in lieu of the projected street railways, provides a notable chapter in the year's history of park protection.

10-TABERNACLE IN MANHATTAN SQUARE.

The efforts made by the park authorities to prevent the erection of a proposed Billy Sunday amphitheatre in Manhattan Square were successful, and the amphitheatre was finally erected on private property in the vacant lot extending to the west at Broadway and 169th Street.

Industrial Exhibition, Bronx Park.

An effort to secure for an industrial museum a large area in Bronx Park was also successfully defeated. The Department, however, seriously considered a request to allow the installation of an aeroplane landing place, including docks for hydroplanes, on the filled-in land lying to the west of the railroad tracks and Riverside Drive, and to the south of the Manhattan Street recreation pier.

Aviation Field on Riverside Fill.

There is undoubtedly a great need for a proper aero-field near the center of New York City. However, further consideration of this matter was postponed in view of the uncertain conditions existing regarding the projects under consideration for the elimination of the tracks of the New York Central Railroad along the Riverside Park.

SPEEDWAY LEGISLATION

In the 1915 annual report there was stated the efforts made to secure legislation which would eliminate those existing laws regarding the Speedway along the Harlem River, so as to make possible the treatment of this valuable water-side park area in a way that would open it up to the general public.

At present this area, acquired at the cost of over \$6,000,000 is being maintained at \$16,000 additional a year for the exclusive use of the few remaining citizens interested in light harness racing. Quite a substantial number of our citizens indulged in this sport years ago when the Speedway was first laid out, but this number has dwindled year by year, until now on the majority of the days of the year the west bank of the Harlem is deserted and even on the so-called matinee days when "brushes" take place there are only a few vehicles taking part with relatively few spectators. Meanwhile,

there are undeveloped separate park units bounding the Speedway on both sides. Therefore, we should release this valuable strip of park territory for the use of all the people and allow of the administration of all the adjacent park territory, including the Speedway, both economically and for general recreation purposes so needed by the citizens of New York who have such limited park area within the Borough of Manhattan. This situation led to the department's recommendations in 1914 and 1915, urging legislation on this matter. The present restrictions on the Speedway have impeded the development of the adjoining units and unduly limited recreation space. It is essential to make the necessary provision so that the Speedway may be treated in all respects as other park areas of this character and open it up for the general good of all. The facts concerning the present use of the Speedway clearly disprove the argument that the City should maintain for the road drivers this valuable area because of the advantages it represents to horse breeding in this vicinity. It is particularly important that every acre of park be used to the greatest advantage of the largest number of our citizens, especially those elements who are not able to get away to the country but must rely on the city's playgrounds to supply that rest and recreation that can only be had by getting away from the narrow streets and confined quarters of the city life. The City has recently acquired Isham Park to the north and is now in the process of acquiring the Inwood Hill tract north of Dyckman Street as a part of the future park plan of the City. Every effort should be made therefore to develop each single portion of park territory in relation to the rest so that one recreation feature should supplement another and result in the most intensive use of the whole.

During the session of 1916 renewed efforts were made to secure the approval of the Legislature for this much needed change in the existing law. This Department was represented by the Park Commissioner at the various hearings held. However, a new series of bills were introduced that were strongly supported by firms in upper Manhattan that had large trucking plans. This latter legislation attempted to secure the removal of the restrictions on the Speedway not only to the extent of releasing it for normal purposes as a park and parkway, but went further so as to provide for the use of the Speedway in the future as an ordinary street. This would allow for heavy trucks to make use of this area with a reduction of several blocks in the distance of some hauls. This Department naturally opposed vigorously such legislation, since it would have destroyed a park asset for the acquisition of which the city had paid millions of dollars in the past.

Chiefly owing to the objections to this new phase of the situation, all of the bills proposed, including those approved by the Park Department failed of passage by the Legislature, and an effort to secure the modifications desired by this department must be once more renewed in 1917.

ACOUISITIONS

Bronx River Parkway.

The year has seen a notable advance in the work of the Bronx Parkway Commission. The report of this body for the year 1916 is well worth the attention of those interested in the park development of this city. It will be seen from the report that a great many unsightly strucures and unsanitary and wretched conditions have been removed and the area redeemed through the Bronx River Valley.

During the year some objections were raised to the proceedings of the Commission, on the ground that in its condemnation proceedings it had not acquired sufficient lands in the southerly section of this parkway on each side of the Bronx River to provide a future park strip of sufficient width. However, the report of the Commission fully states the reasons for its general plan as it is being prosecuted, and the considerations which have guided them in acquiring additional lands to broaden out the upper section of the future parkway.

Lower Reservoir, Central Park.

At the time plans were being made for the Ashokan water system years ago, it was urged that one of the important incidental advantages of the new aqueduct supply would be the releasing of thirty-four acres, now occupied by the lower reservoir in Central Park, for park use. The present park administration, therefore, early in the year 1915, took up the matter with the Department of Water Supply, Gas and Electricity, requesting that, as the construction of the aqueduct was nearing completion, a date be set when this area could be turned over to the Park Department. At first it seemed doubtful whether this area would be released as anticipated, since Commissioner Williams, of the Department of Water Supply, Gas and Electricity, felt that his engineers were not in a position to say anything definite as to the possibility of abandoning this part of the water system. However, the matter was again taken upon on a number of occasions during the year under review, and recently we secured from the Commissioner a definite statement to the effect that the area in question can be released and that steps to that end can be taken so as to make the transfer in connection with the celebration of the opening of the Ashokan Water Supply System to be held October 12, 1917. Meanwhile, pending this decision, this Department has received a number of projects regarding the treatment of this area if acquired. In considering these projects the Department has been guided by the following general principles:

Deciding Factors in Reservoir Improvement.

First, that nothing should be done that would fail to take into consideration the general design and uses of Central Park. This park was laid out with such remarkable foresight that every one of its different features

bears an important part in the general plan. It would, therefore, be the height of unwisdom to make any changes without carefully taking into account the layout of Central Park as a whole.

Second, the Department considers that any treatment of the area should include provision for the extension of certain facilities for which the growth of the city has made an increased demand, namely:

- (1) That at least a major portion of the acreage should be set aside for playground purposes.
- (2) That in any portion remaining, provision should be made for a proper site for the Central Park concerts in view of the present inadequate facilities offered by the Mall.
- (3) That only after the above have been cared for should landscape treatment be considered and only then so as to harmonize properly this area with the rest of the park.

Several Plans Disapproved.

The application of these principles made necessary the rejection of a number of plans brought forward. Among the most recent of these was one which proposed to develop the entire area as a mammoth playground, including an elaborate installation of playground gymnasium and athletic apparatus.

While the Department believes that at least a major amount of the area released should be dedicated to active recreation so as to reinforce the facilities now provided on the various park meadows, it is felt strongly that this play area in Central Park, as well as those now existing, should not be encumbered by the restricted use which results from the installation of elaborate play apparatus. This latter would prevent its wide use for many forms of adult recreation such as now conducted on the large meadows of Central Park when they are not in use as playgrounds.

Another plan provided for the use of the area thus acquired to construct a broad driveway and a series of walks directly across Central Park, from northeast to southwest, so as to connect the two museums of Art and Natural History. This last plan would call for drastic changes in the existing park, both to the east and to the west of the reservoir site in question, and would be impossible of execution without breaking up the unity and usefulness of design of Central Park as laid down by Olmsted & Vaux.

Still another proposed to turn the reservoir site when drained of water and available for park purposes into a huge concrete amphitheatre or stadium, similar to the City College stadium.

These plans and all others hitherto proposed had each an element of merit, but they have invariably given undue weight to one factor at the expense of all others.

As the work of the Catskill Aqueduct has neared completion, the need of increased facilities for caring for the users of Central Park has become more acute, and it was evident that the Department would be soon confronted with the necessity of securing additional provision for these needs. The area now occupied as the lower reservoir offers a splendid opportunity to meet this situation, and it was for this reason that the Park Commissioner has been most anxious to secure its transfer to the Park Department.

Recent Acquisitions.

Acquisitions obtained and described in the 1915 report have been further solidified and developed. On Inwood Hill, for example, the city has actually made some land purchases and will proceed during the current year to gradually acquire more of the proposed park area.

Isham Park has been completed as to development in walk construction and shrubbery, and renovation of buildings and drainage system. The entrance on Broadway and the stairway path up to the plateau have been intensively used from the day of completion.

Negotiations are now pending which it is hoped will lead to the gift of an additional and adjoining piece of land by the generous donors of the existing Isham Park.

Dyckman House Park now stands as a completed park area, and the museum, comprising the restored Dutch mansion with its surrounding garden, has been visited by thousands during the year.

The splendid playground plant known as Jasper Oval has been regraded and fenced, and during 1917 will be surrounded by a suitable fringe of trees and shrubs.

The acquisition of the new playground at 67th Street and First Avenue, to be known as the Lenox Playground, is a notable addition, the details of which have been already set forth.

The Department has also secured land from other city departments, in accordance with the centralization plan outlined in the 1915 report. All these small areas, for example, that at Mangin and Tompkins Streets, at the foot of Rivington Street, that at Essex and Market Streets in the congested East Side; and that at the foot of East 50th Street, we are instituting as small municipal playgrounds. Besides this, through the co-operation of the Department of Water Supply, we secured additional acreage surrounding the Aqueduct gate houses for similar purposes.

New Playgrounds.

In addition, the Department has acquired a number of new units in the temporary playground plant. This is a continuation of the campaign outlined in previous reports, by which the city receives the temporary use by the generous co-operation by the owners of unused land in congested sections that have insufficient playground facilities. These areas are then operated during the summer season as municipal playgrounds. Detailed mention of these acquisitions will be found in the second section of this report.

There have also been a number of small acquisitions, such as Durando Lane Park, on the easterly side of Riverside Drive Extension, formerly known as the Lafayette Boulevard.

Proposed Rockefeller Park Gift.

By far the most important acquisition project of the year is the proposed gift to the city by Mr. John D. Rockefeller, Jr., of the tract of land known as Tryon Hill, in the northern section of Manhattan. This may be roughly described as the middle section of the rocky ridge in northern Manhattan, lying between the valley through which Broadway runs to the east and Riverside Drive and the Hudson to the west. It is the continuation in a southerly direction of the ridge whose northern limit is Inwood Hill.

City Must Acquire Additional Lands.

Mr. Rockefeller having acquired about fifty acres, which practically controls and includes this entire area, proposes to give it to the city, his only proviso being that the city shall in turn secure the full value of the future city asset comprised in his gift by acquiring simultaneously for park purposes the tract of land lying to the north of the existing Fort Washington Park and bounded on the east by Riverside Drive Extension, on the north by the Dyckman Street Valley and on the west by the Hudson River.

This acquisition, therefore, means much more than the securing for all time to the city of about fifty acres of the most valuable, desirable and picturesque park land remaining in Manhattan, as comprised in this generous gift. It is much more significant in that it will connect up already existing park units so as to make them of greater use and enhanced value to the city than ever before.

For the last three years the Park Department has neglected no opportunity to bring before our citizens and authorities the serious danger that besets our park system of the present and future in upper Manhattan.

Immediate Acquisition Essential.

As head of the Department I have pointed out again and again to civic associations and in reports and arguments before the city boards, that unless immediate steps were taken, Tryon Hill, Inwood Hill and the north and east slopes of Fort George Hill might any day be so affected by large private building or grading operations as to be forever lost to the city's park system. More than this, the permanent disfigurement of any of those areas and their failure to provide contiguous connecting park units would seriously reduce the value of our existing park system, for which the city has already paid large sums. Our citizens have willingly and gladly made this sacrifice in expenditures for park lands, but always with the idea that such acquisitions could be employed and developed to the fullest extent of their usefulness.

Building Operations Imminent.

Frequently, in the last year, some action has threatened that would have spoiled or greatly reduced the value of Tryon Hill, Fort Washington Park and Upper Riverside Drive, by the consummation of extensive building operations north of Fort Washington Park and west of the Drive. We would then have had a blow at the park asset even more serious than that dealt the city by the building and street operations on each side of Riverside Drive north of 157th Street, where the continuity of our justly appreciated Riverside Drive has been so rudely and stupidly broken by converting a beautifully natural park slope into what must be always a succession of unremunerative, expensive and ugly cuts and fills laid out for impractically steep city blocks and streets.

The Department has vigorously fought each one of these threatened encroachments to the north and east of Fort Washington Park, and with success.

It has constantly sought to have small parcels at once bought by the city, so as to establish at least beyond serious future harm a park zone, free from buildings on each side of the drives clear up to Dyckman Street and Broadway.

We have conducted many citizens and civic associations over the ground comprised in this region to bring this situation home to them.

I have said enough to make it clear how magnificent is this gift and how wise and far seeing is Mr. Rockefeller's provision that the city must acquire for park lands the areas west of his proposed city park and north of Fort Washington Park. For without this latter both the Tryon Hill acquisition, besides Riverside and Fort Washington Park, would fail of realizing their wonderful value to future generations.

Dual Control Inadvisable.

I would seriously question, however, the advisability and administrative wisdom of complying with Mr. Rockefeller's additional suggestion of placing the new park comprised in his gift under the control of the Inter-State Park Commission. This would mean the establishing of a separate park unit in Manhattan under entirely different management from the one thousand five hundred and seventy already existing park acres in this borough, part of which is immediately adjoining.

Fort George Hill Important.

Let us hope that as the benefits to be derived from this magnificent gift begin to be realized by all of our people, some other citizens, with similarly great resources, may come forward (inspired by this splendid example), and donate to the city the higher slopes and northerly point of Fort George Hill, now being rapidly released from the ugly structures of the past. The city already owns beautiful woodlands from the Speedway at the river bank half way up the slopes, and we are, therefore, bound to rescue in time the

upper reaches of Fort George. Then by securing the remainder of Inwood Hill to the north with a connection between it and Isham Park, we can then realize along the banks of the Canal a great canoeing recreation centre such as Detroit enjoys. Only by such measures as here outlined can the full benefit of the use of the city's park investments be obtained. Meanwhile Dyckman Street from the northern end of the Speedway to Broadway should be treated as a park boulevard with a parked centre.

This Department confidently awaits favorable action by the Board of Estimate and Apportionment on this matter when presented by Mr. Rockefeller.

This Department has filed with the Mayor a memorandum setting forth in full the reasons why it is considered that it would be highly prejudicial to the park system of the city should the new acquisition included in Mr. Rockefeller's gift be placed in the hands of a separate and state administrative control.

Randall's Island.

During the year the Park Department exhausted every endeavor to place before the city authorities the following projects which would have preserved the potential park possibilities now existing on Randall's Island, by securing the erection on another location of the proposed new institutional building on Randall's Island. This was in line with our general policy to further a complete although gradual abandonment of the Randall's Island institutions already existing, leading to the ultimate conversion of Randall's Island into a park at an actual saving of money to the City. This plan has for its basis the new facilities of the Department of Correction at New Hampton Farms and Riker's Island, making it possible for that department to abandon the workhouse on Blackwell's Island. The State, furthermore, has long contemplated the transferring of the House of Refuge, the occupant of Randall's Island, to a large farm in the country, in fact, were it not for the unfortunate controversy due to the selection of the Yorktown Heights site, the institution would probably have already been removed. Its removal is but a matter of a few years at most, during which time the boys at the present Blackwell's Island institution might well be employed in reclaiming and developing the acres to be added to Randall's Island by reason of the Federal Government's proposal for channel improvements at this point.

An Island Park.

The Park Department, therefore, asked that the Board of Estimate withhold approval of plans for new buildings at Randall's Island until an investigation along the lines above sketched could be made. In securing, as is proposed, the enlarged Randall's Island for a city park, without any cost to the city, and a great reduction instead of an increase in institutional cost, New York can perform a great service for its citizens.

Randell's Island is adjacent to the two great centres of population-

both the Bronx and Manhattan. It is not only readily accessible from East 125th Street and the Bronx, but also from the rapidly growing population around Long Island City.

The Park Department considered this an opportune time to consider freeing Randall's Island of all institutions, because the Board of Estimate and Apportionment had recently appropriated \$600,000 for replacing the children's institutions on Randall's Island. A change in this plan is urged while there is still time to spend the \$600,000 on Blackwell's Island, where it would be more suitable and where it could be more economically administered, because in the neighborhood of other departments for which the Charity Commissioner is also responsible.

Adjustment of Activities Possible.

There is ample room for these buildings on Blackwell's Island, because definite plans have been made for moving the Department of Corrections entirely from that island and turning over all the area there for the use of the Department of Charities. The present workhouse site occupied by the Department of Corrections could easily be thus given within a year to the Charities Department, and used for housing feeble-minded children near the other existing hospital facilities.

After the building for feeble-minded children is erected on Blackwell's Island, the present buildings used by these children on Randall's Island could be utilized for housing boys from the Home of Refuge, for the time being, and they could be employed, as above suggested, for the next few years in making new land on Randall's Island.

The proposed park on Randall's Island would be of an acreage of approximately 200 acres.

Silver Lake Park, Richmond.

The plans are now reaching completion whereby in the Borough of Richmond lands surrounding the new Silver Lake reservoir will be turned back to the Park Department. These comprise large areas of what was formerly known as Laurel Hill, which will now be developed as park lands, together with a drive completely encircling the new reservoir.

New Parkways.

This Department has further taken over from other city departments and proposes to improve and thereafter maintain eleven separate parkway and boulevard areas in the Borough of Richmond, located as follows:

Park Plot 1.

Semi-circular terrace in front of the Richmond Borough Hall, over-looking the Staten Island Rapid Transit Railroad Terminal. This plot has previously been improved with the aid of this Department and is in good condition.

Park Plot 2.

Triangle to the south of the Borough Hall at Borough Place and Bay Street. This plot has, some time ago, been improved by private subscriptions and is in good condition.

Park Plot 3.

Haven Esplanade, between Castleton Avenue and Frelinghuysen Road. This is a plot of considerable size, widening from a width of 70 feet at Frelinghuysen Road to a width of 130 feet at Castleton Avenue, and is about 490 feet long. Haven Esplanade is a street with a driveway on each side of the plot in question. It is situated in the residential district of Staten Island in the immediate vicinity of Silver Lake Park. The plot is entirely unimproved and for most of its length above the grade of the adjoining roadways, and its proper landscape development would, because of its state and size, require a considerable sum. The sidewalks of the adjoining drives have been newly laid and are well kept. A strip 4 feet wide is left on the sidewalk for planting of trees.

Park Plot 4.

Barrett Boulevard (Forest Avenue). The plot referred to is a large plot, in the centre, between the two driveways of Forest Avenue and is 30 feet wide at its westerly end, about 90 feet wide at its easterly end and about 610 feet long. It is situated along the north side of Silver Lake Park in a very good residential district and has been recently graded in connection with the newly laid pavement of the adjacent roadways. It slopes from north to south to meet the grade of the two driveways of the Boulevard which are on a different level.

Park Plot 5.

Canal Street Parkway, Stapleton, where the Department has recently planted trees and shrubs. This plot should be curbed and fenced in.

Park Plot 6.

Is a triangle, surrounded by Griffin Street, Bay Street and Arrietta Street. This triangle is a graded and curbed plot for the development of which plans have been prepared by this office. Trees were planted along the curb during this spring.

Park Plot 7.

Hart Avenue, between Forest Avenue and Revere Street. This is a residential street, 80 feet wide with 15-foot parking plots in the centre. Granolithic flag sidewalks were recently laid along this thoroughfare which, however, lacks any permanent pavement. Almost for the entire length of the centre plot, there are large soft-maple trees. Similar trees of considerable size are planted in the planting strips on both sidewalks.

Park Plot 8.

St. Austin's Place. This is a residential street, 80 feet wide with parking plots 15 feet wide in the centre. These plots at present are grass plots without any trees. The street itself is a good macadam road, with granolithic flag sidewalks. No curbs or gutters have been constructed.

Park Plot 9.

Is a small, triangular plot at the junction of Henderson and Davis Avenues. This plot is curbed and the streets surrounding it are well paved. There is one elm tree about 15 inches in diameter in this plot.

Park Plot 10.

Maple Parkway. Three plots, 20 feet wide with maples of considerable size are in the centre of this thoroughfare. Only one side of the street has so far been paved and the sidewalks are also unimproved. The neighborhood of this parkway is a fairly good residential neighborhood.

Park Plot 11.

A small triangular plot at the junction of Bloomingdale Road, Pleasant Plains Avenue and Amboy Road. A new pavement is now being laid in Amboy Road. The other two streets are well paved. The triangle itself is between the two branches of Bloomingdale Avenue, where it joins the Amboy Road. Adjoining property owners planted here a bed of Cannas and a few shrubs.

The properties above mentioned will form a valuable addition to the park system of the Borough of Richmond. It is to be hoped that the acquisition of these sites is but the beginning for greater park boulevard acreage of Staten Island.

Park Plan Lacking.

Let me reiterate, as already stated in this report, that it is a vital necessity to make at once a study and completion of a park plan for the Borough of Richmond, which will include the connecting up of the park surrounding the aqueduct mentioned above with the chain of lakes which, with their rocky and wooded shores form a section of wild and picturesque territory cannot be rivaled in any portion of Greater New York.

This territory in the near future will undoubtedly be closely settled with a crowded city population. There is a further step which should be taken immediately. The city should acquire a section of the beach on the south shore of the Borough of Richmond. There is a most desirable tract now owned by the Vanderbilt Estate and this Department is now making renewed efforts to secure from the owners a gift of this valuable shore front to the city for municipal bathing purposes.

Kuyter Park.

This Department has taken steps this year to provide not only for signs indicating the names of existing parks but also including those areas newly

acquired. Other park areas, which hitherto have been unnamed, were given names after consultation with the civic and historical societies of the city and approval secured by the Board of Aldermen. A notable case of this kind is Kuyter Park, situated at Third Avenue and 129th Street. The name chosen is a very appropriate one, since the original Kuyter not only owned all the region in that locality immediately south of the Harlem River; in a similar manner to the farm owned by Bronx to the north, but Kuyter was further intimately associated with all the early history of the settlement of Manhattan Island.

Development of State Parks.

Although in an indirect way the city has received valuable park acquisitions through the development and new facilities afforded in certain park areas lying outside of the city limits, yet near enough to provide a recreation outlay for those who can take a day or more off for recreation and recuperation, or can spend a portion of the summer camping. This Department has made every effort to co-operate cordially and to assist in the splendid development being made by the Inter-State Park Commission of the State park lands, particularly that section known as the Bear Mountain Reservation. This park area, situated only an hour's railway journey from the city and a two hours' trip by boat up the Hudson, provides a splendid outlet not only for camping parties but for a great number of people who can thus get into primitive and wild country conditions for a day's vacation or week-ends and holidays. This is equally true of the Essex Reservation.

SAVING THE CITY'S TREES

A great advance was secured during the year in curing the tree situation that was found existing when this administration took office. As stated in previous reports of this administration the present Commissioner felt shortly after taking charge that there was serious need of securing a competent head for the city's tree activities.

A City Forester.

A survey of the conditions of the trees and shrubs, both in the parks and on the city streets, made clear the necessity of securing an expert who would co-ordinate the city's administration in tree work and at the same time secure scientific methods of care and planting. The Commissioner embarked, therefore, on a campaign to secure the creation of the position of Forester, who would also be an entomologist and arboriculturist. The difficulties were many in the securing of this position, but finally after repeated failures, the creation of such a position was authorized, and by co-ordination and better arrangement of the tree force, a substantial total saving in salaries was effected, notwithstanding the creation of this new position. A professional forester of long experience was then appointed

and the tree work of the Department was immediately reorganized and placed on an equal footing with any of the well-established shade and ornamental three bureaus of the country.

New Methods in Tree Work.

There was an urgent need to bring back existing tree life in the parks to normal conditions by expert treatment of diseased and neglected tree growths on the streets and in the parks, together with restoration of the park features and original landscape design which had been lost through dying of trees and shrubbery which had not been replaced. The Department began at once to stop the previous large annual tree loss in the parks by proper replacements and treatment to save existing trees.

Street Tree Campaign.

The Department started a campaign to secure a rapid increase in street tree planting by property owners. This has been extraordinarily successful. A series of pamphlets were issued giving in simplified form to property owners and taxpayers the advantages of trees in city streets, the lack of such trees in New York, the method of securing tree planting through the aid of this Department, etc. These written in striking and simple form, were widely distributed, with the result that a number of city blocks were planted this spring in Manhattan alone by the property owners with the co-operation, advice and assistance of the officials in this Department. This campaign, it is proposed to continue actively during next year.

Simplified Specifications.

The reduction in the cost of street tree planting by property owners has greatly aided us in the campaign for street tree planting. Through an accurate survey of the history of all trees planted in the city for the last twenty years, we have been able to prepare a complete prescription for every zone in the city as to what trees should be planted and the subsequent treatment for the same. At the same time specifications for street trees were modified to meet certain narrow sidewalk conditions and to reduce the cost to the minimum. New styles of tree guards and gratings were introduced in this connection.

The Department has been greatly hampered in certain tree areas by subway construction, which has endangered the lives of a great many trees bordering on the area of construction. At the same time questions arising on streets turned over to the jurisdiction of the Borough President that were formerly controlled by this Department as parkways, have created a great deal of difficulty.

West End Avenue.

West End Avenue, for example, contains a great many grassplots and shrubs between the curb and the houseline, as well as a continuous row of trees. A careful examination of the statutes by civic associations and the corporation counsel appears to make it clear that jurisdiction and control over a street includes the power to determine whether the grassplots in that street should be removed and replaced by paving. This in spite of section I, Chapter 46 of the Laws of 1894, which reads as follows:

"The Department of Public Parks in the City of New York shall have control of the planting, care and preservation of all trees which have been planted or hereafter may be planted on West End Avenue."

This section, however, does not purport to give to the Department control and jurisdiction over the streets, and it would seem that when jurisdiction and control were taken away from the Department of Parks, only the relatively small power remained of the care of trees. We believe, therefore, that the President of the Borough of Manhattan, and he only, has the power to decide whether the grassplots on West End Avenue north of 70th Street, should be allowed to remain as they are, or should be replaced by pavement.

The whole matter arises because of the fact that this Department has not succeeded in securing appropriations which it can apply to maintenance of grassplots on city streets. About one-third of the abutting property owners on West End Avenue maintain these grass plots, together with shrubbery. However, the remaining two-thirds are constantly left in a desolate condition.

Tree-Lined Streets as Park Connections.

The matter of maintaining certain tree-lined streets as park connections is a very important one. As long as the city, almost alone among the great cities of America, possesses neither a connecting park system nor a definite plan or program for the creation of such a system, if a system of connecting ways is to be secured at any reasonable outlay pending the development of a plan, use must be made in some form of the existing streets. This may be obtained by means of a comprehensive and organized system of tree planting on carefully selected avenues. By selecting streets which will permit of successful tree growth and by securing in our planting design a reasonable degree of interest and individuality, we can meanwhile approximate a boulevard system connecting up our parks. This could be done in the narrower streets by trees planted at the edge of the curb on the sidewalk area. Or, where the width of the street allows in addition to the single or double row of trees on either side a third row can be added to the center of the street surrounded by the wide grass or gravel parking such as we find in Seventh Avenue north of Central Park.

Publicity.

During the street tree campaign civic associations, as well as individuals, were addressed by the Commissioner and the Forester on many occasions,

with the aid of colored lantern slides. The results were most encouraging and over five hundred street trees were planted in a uniform and scientific manner. The movement which has taken root promised to bear still greater fruit during the coming year.

Specific Planting Appropriation Requested.

This department had also made careful preparations before the Budget hearings in an effort to convince the Board of Estimate and Apportionment that the city itself should add to park appropriations a certain amount for tree planting, instead of relying entirely upon property owners. The plan when presented to the Board of Estimate and Apportionment called for an appropriation of \$19,000, for planting trees on certain streets which would connect parks hitherto unrelated by planting rows of trees at equal distances on each side of the street. In this way, it was proposed to provide a series of semi-boulevards to connect our park system. The Board of Estimate and Apportionment in denying this request suggested that the Park Department had not exhausted its possibilities in this line and that we should make use of a method never tried, although permissible by law. These statutes provide that the Park Department, after obtaining the approval of the Board of Estimate and Apportionment, may hold hearings regarding the planting of trees on streets decided upon, and thereafter if the majority of the abutting owners are in favor, may plant the trees and tax through the local tax board, such owners for their proportion of cost. The Commissioner, although aware of the law on this subject, had not previously thought it advisable to proceed along these lines. However, at the direction of the Board of Estimate and Apportionment, this method is to be given a trial early in the year 1917. The plan will be tried out at a cost to the owner of \$13.00 per tree, making the resulting improvement to the neighboring property, as well as to the city as a whole, far in excess of the initial outlay, besides providing the city with the connecting park links mentioned above.

RESTORATION

Morningside Park.

In the second portion of this report will be found a detailed description of the planting of trees and shrubbery, together with the restoration work carried on in the various parks. It is sufficient to state here that during the year the restoration of Morningside Park was completed for the benefit not only of the immediate surrounding residents, but of the whole city. This park, one of the most beautiful natural parks in the entire metropolis, had suffered the weathering and vandalistic attacks of many years so that in some places there was nothing remaining but a desolate waste of earth and gullies punctuated here and there with dead or dying trees and shrubs.

The restoration has been remarkably successful and (in case this department is able to obtain money for temporary fencing of restored areas) it is believed that the park, with ordinary maintenance from year to year, will remain permanently restored.

Carl Schurz Park.

The same is true of Carl Schurz Park, where an exceedingly difficult restoration problem was presented. The restoration of the slopes of this rocky and picturesque park has been most successful, particularly the transplanting at that point of a large number of full-grown privet bushes in height from 12 to 16 feet. There remains a small area to the extreme northern and southern boundaries of the park that is to be completed during the season of 1917.

Central Park.

The largest restoration areas attempted in Central Park were those at the Sheep Meadow, in the southern section, and of Fort Clinton, to the northeast. At this writing there is every reason to think that the Sheep Meadow restoration will be a permanent one, notwithstanding the fact that immediately upon its opening it was found necessary to grant permits for the drilling of a large number of Home Defense organizations.

As the meagre sod appropriation was exhausted, the sod for the restoration of the Sheep Meadow was obtained by cutting sod from remote portions of the park, and seeding down the areas from where the sod was taken.

The Fort Clinton section, which has remained an eyesore for many years, is now restored, except for the banks on the southwest shore of the Harlem Mere. This latter area will be completed during the fall of 1917.

Mount Morris Park.

The steep slopes of Mount Morris Hill in Mount Morris Park have been completely restored, and in this, as in the cases above mentioned, the careful placing of retaining rocks and shrubbery plantations not only has resulted in greater beauty but it is believed will make permanent the work effected.

The shrubbery and tree plantations set out both for restoration and scenic features and to prevent weathering and washouts on park slopes are given elsewhere in this report in detail, including the planting plans for Isham Park and the continuation of the policy of last year of installing shrubbery plantations in the downtown parks.

Meanwhile the matter of ground cover has been well cared for by the greenhouses established at Isham Park for this purpose. By concentrating this kind of work at that point we were able to have during the year, both in the spring and fall plantings, a sufficient supply of ground cover so as to proceed with the program of making use of such covering for areas under trees and in other places where it is impossible to maintain grass.

A great number of bare areas were manured, spaded in and turned over in preparation of seeding next spring. Wherever there existed spaces in the tree plan along the sidewalks bordering the squares and small parks, these have been filled in by new tree plantations.

FARM GARDENS

Present Food Crisis.

The universal and remarkable rise in the price of food staples and the consequent increased cost of living have brought the question of the growing of vegetables in city areas more forcibly before our people than ever before. This has resulted in a better appreciation of the practical aspect of farm garden work. This department has, therefore, made every effort to encourage the creation of farm gardens throughout the city in vacant spaces, front yards and back yards, of which there are a great number even in a city as congested as New York.

Mrs. Parsons, the pioneer and mainstay of the movement for many years, has been able, through detail by the Park Commissioner, to address a great number of organizations on this subject and stimulate interest in the development of this movement without interfering with her regular duties, as head of the Bureau of Farm Gardens of this department.

Food Gardens.

There is, no doubt, great value to be obtained by the successful development of a movement to convert our unused places in the city into miniature farms and revive former activities in truck gardening within the city limits.

Whether or not the extension of such a movement will have an appreciable effect on the present high cost of living, the movement in itself is well worth the department's attention. Back-yard and vacant-lot gardens should become as popular as they were many years ago, when the old-time kitchen garden was not only of productive value but a source of healthful recreation.

In connection with this work, as well as the tree-planting campaign, arrangements have been made with the Department of Water Supply, Gas and Electricity whereby permits can be easily secured to use the hydrants for watering purposes throughout the city.

Union Square Demonstration Garden.

In looking over the ground the Commissioner has decided on Union Square as the best place to establish a "model back yard garden." This point was decided on because of its ready access from all parts of the city due to the convergence of all transportation systems—subway, elevated and surface lines, either directly or through transfer. The garden, here established as an example of what can be done by private owners of small plots,

will be carefully laid out in model gardens of different sizes and plantings, and representatives of the department and the Farm Garden Bureau will be present during the entire season of 1917, beginning April 1, prepared to answer all questions as to layout, fertilization, varieties of vegetables and their cultivation, and in every way encourage the cultivation of all available pieces of vacant land.

Organization.

It is proposed to have the Park Department act as a clearing house and citizens' committees will be formed early in the new year, with a representative in each locality, whose duty it will be to induce in every possible way owners of vacant lands to lend their areas to the city for this purpose. These lands, as soon as offered, will be investigated as to fertility of the soil by a corps of experts headed by Mr. E. J. Miller, the efficient assistant supervisor of the Bureau of Farm Gardens of this department. Other committees will receive applications from groups of citizens and individuals who offer to farm the land secured. Their ability to continue and persevere in the work until the crops are gathered will be then investigated, and through the Park Department those desiring to assist in this work can thus be assigned different tracts of land to cultivate. Certain undeveloped sections of the park area will also be used in this connection. For example, the slopes of Highbridge Park it is proposed to assign to groups of citizens of Italian origin, who are particularly successful in vegetable gardens of the hanging-garden type.

As this department is the only one in the city to have an organized Bureau of Farm Gardens, it is clearly our duty to proceed to develop this important matter along the lines indicated.

Garden Clubs.

The department is also fostering, wherever possible, the creation of city garden clubs, whose purpose it will be to create a better understanding of what landscape gardening stands for, and how it can be applied to the improvement of home grounds, private yards and streets. This is not a matter to be obtained for the sake of art itself, but rather for the benefit afforded the city through its application. Such garden clubs can assist tremendously in the efforts we are seeking to obtain in stimulating dwellers and owners to improve the appearance of the streets in their district.

Training School.

The action of the New York Botanical Garden in providing an endowment for the giving of regular courses of instruction in home gardening for those desiring to conduct their own gardens is a great step in advance. This will provide a permanent centre for propaganda and development of the home garden and school garden work. Training courses are to be given for teachers of school gardens which are to show the pedagogical value of the school garden and how it may fit into the school curriculum without dis-

turbing it. Courses will also include garden practice and laboratory and shop practice.

Lecture Course.

Furthermore, there is to be established early in 1917 a centre of information regarding farm gardens in the Park Department offices in the Municipal Building where short courses on gardening can be secured by all those interested, and a series of practical lectures will be given by the supervisor of the Farm Garden Bureau, and her assistants.

Board of Education Co-operates.

As outlined in our last year's program, closer relations were established between the Department of Education and this department on farm garden work. This resulted not only in a much extended use of the children's farm gardens of the Park Department for the nature study classes of the public schools, but it further extended the work for public school children carried on under the direction of Mrs. Parsons, the supervisor of the Farm Garden Bureau, and her assistants.

RECREATION

In the report of this department for the year 1915 a complete recreation program was laid down covering all the department's activities, needed development and recommendations for the future. It will be sufficient therefore, without restating here the general recreation policy of the present administration, to describe certain lines of development to which we have given special attention during 1916.

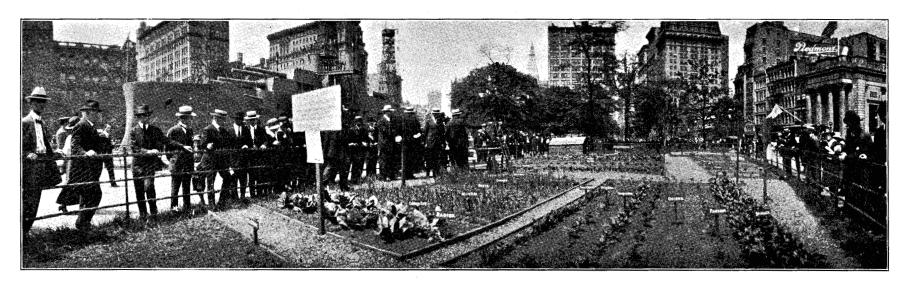
In the matter of increased play facilities in congested regions a decided improvement was secured. For instance, after three years of effort funds have at length been obtained for development of the large city block bounded by First and Second Avenues, 67th and 68th Streets. We are therefore now enabled to proceed at once with the construction of this much needed playground in a region hitherto totally lacking in facilities. The plans for this development are fully considered in another portion of this report.

Jasper Oval.

The reconstruction of Jasper Oval has been completed and it now provides a greatly enlarged play area with a level surface. In fact, it is now one of the most useful and extensive of the city's playgrounds.

Cherry and Market Street Playground.

The Cherry and Market Street playground is about to receive similar treatment to Jasper Oval, including a new treatment of the play surface. We have also secured funds with which to improve several playgrounds



DEMONSTRATION BACK YARD GARDEN

Union Square Park—A Practical Lesson

with a view to providing that touch of green trees and country surroundings so notably lacking in our small playgrounds.

At the points designated there will be planted a fringe of trees surrounding the playgrounds, as well as accompanying grass and shrubs, so as to provide a place where mothers with small children can go and watch their older children at play. At the same time this will give the children more beautiful surroundings and in every way enhance the playground asset. Chicago has set us an admirable example in this respect. There the arrangement of trees, shrubs and a strip of walk around the playgrounds has converted them into small parks for the parents, as well as playgrounds for the young.

A Year's Progress.

During 1916 several new playgrounds were secured by transferring land held by other departments to the Park Department's jurisdiction and installing the necessary apparatus and supervision.

A further development was made of the process of modification of existing playground lay-outs so as to make them useful to the public school recreation programmes. Meanwhile the campaign was actively continued for securing roof playgrounds and backyard playgrounds, although the development was not as rapid as in the previous year.

In Part II of the report will be found the details covering extension of the system of temporary playgrounds run by the city on vacant and unused property owned by citizens and corporations, and lent to the city for this purpose.

The projects for a recreation survey covering the entire city, in accordance with the plans laid out in the 1915 report, have been much delayed. The difficulty has been caused by inability to secure any city funds for this purpose, and the necessity therefore of organizing private neighborhood and recreation agencies in order to secure the necessary force of inspectors. Assurance must be, therefore, provided that such private agencies can and will co-operate with the department to the extent of continuing their assistance until the survey is complete, and also provide the proper type of inspectors.

The matter of securing a better distribution of recreation population in accordance with the given needs at any period during the year has been further developed, as well as better coordination between the city-run facilities and those obtained by voluntary agencies that propose to provide opportunity for play and recreation.

The completion of the restoration of the large building in Carl Schurz Park has added another unit to our plan of developing community centers by using the park playgrounds and recreation buildings.

The department, despite the utmost endeavors, was unsuccessful in securing the authority which it is believed it should have, to control specialized recreation. This power now rests partly with the Commissioner of

Licenses and partly with other departments, but it is manifestly evident that the Park Department, charged as it is with the management and securing of adequate recreation for the community, is the proper authority to control and supervise commercial amusements. It is clear that such authority would make possible a very much better coordination of public and private recreation and assist greatly in securing that better distribution mentioned above.

A playground recently created shows strikingly the possibilities of local playground development. This is the land now dedicated to playground purposes at 74-84 Washington Street and running through to West Street. In this immediate vicinity 27 different nationalities inhabit the surrounding congested district.

The carrying out of certain phases of recreation activities during the summer season of 1916 was curtailed, owing to the epidemic of infantile paralysis. The successful measures taken by the Park Department are fully set forth in Part II of this report where will be also found an account of the various playground festivals, games and special features carried on throughout the season.

Request for funds to meet the need for new playground apparatus to replace the worn-out and useless existing plants and for the development of the new playgrounds is herewith earnestly renewed.

Plans made for extending the facilities for winter sports in the city, and the success that was obtained, notably in skating and coasting, are fully set forth elsewhere in this report. It is proposed to hold next winter a carnival of winter sports, including skating races and other events for old and young.

It is hoped also to make use next winter of the southern end of the Speedway, where the sharply sloping drive can be made into a splendid toboggan and coasting slide, with its steep incline and long level stretch to the north.

The flooding of the playgrounds in the parks of the central section of the city for skating was unusually successful, and it is hoped that the necessary changes in grades and watering facilities may be effected so as to largely increase the number of such additional skating facilities.

The so-called "Americanization" movement thoroughly organized during the year in all portions of the congested regions of the city, has proved of immense benefit to the Park Department.

Community Centers.

As shown in previous reports, we have been making every effort to arrange for community centers in the small parks to see that the people of the neighborhood find in them a common meeting ground on which to rally the neighborhood spirit, resulting in movements for the improvement of the neighborhood and the better acquaintance of the surrounding population.

In this task we were frequently hindered by the fact that so many

elements of the population felt that they were outside of any civic interest, and *felt* alien when they attempted to take part in city life and city movements, joining with the so-called "American" portions of the population.

The folk-dancing in our playgrounds has done much to assist in eliminating this sentiment, the Park Department having in all cases called on the parents of the children to help instruct them in the folk dances of their native countries. In this way the parents were made to feel that the city authorities were recognizing them as having an important part to play in the city's education of their children.

The "Americanization" movement has given us a machinery that was lacking because of our limited number of play leaders.

We have now definitely arrived at a point in the direction of playground children where we know what the habits of bathing and taking exercise, which they acquire in their early years of spontaneous attendance in our playgrounds and gymnasia, bring them in after years. Generally it is found that the regular and interested patrons of the adult classes are grown-up juvenile members of former years.

Bathing and Swimming.

The question of providing bathing and swimming facilities for the city's population has become a serious one ever since the Health authorities decided that the large floating bath establishments along the river fronts must be closed. This was because they deemed it dangerous from a health point of view to allow bathing in the polluted waters of our river fronts.

An inspection of the ambitious programs which other cities are carrying out in the construction of large bathing pools within their city limits, makes it clear that New York is falling behind in an appreciation of the needs of such development.

The National Municipal Review, Vol. 6, No. 1, has an admirable article covering every phase of this subject, by George A. Bellamy.

Recreational Facilities and Beaches.

The recreation facilities that are provided in our adjacent ocean beaches such as Coney Island and Staten Island, are greatly misused by private concessionaries. Especially is this true when in periods of unbearable heat, through which New York passes in mid-summer, the concessionaries raise their ordinary rates in such a way as to force charges many times what would be reasonable, upon the sweltering thousands seeking relief.

This Department believes that there should be not only acquisition of new beaches by the city, such as those recommended in other portions of this report, but the city should take over the bathing beaches, including control over the issuance of concessions and permits. Such a plan is not as difficult of accomplishment as it would seem, as successful legislation to this end has been secured in other states.

The municipal bathing establishments at ocean beaches and lakeside beaches in cities like Detroit, Chicago and Boston have been not only successful but profitable. Equally so has been the municipalization of boating facilities on park lakes and streams.

As was hitherto shown in the last annual report, this department found it was lacking in legal power with which to proceed to have the municipality operate its boating privileges in the parks, and it will be necessary to succeed in securing legislation, to amend the City Charter in this respect.

Public Education in Recreation Opportunities.

Despite the fact that so many of the recreational advantages offered by the city's park and playground systems are used far beyond their normal capacity and limits, there are other forms of recreation already provided, with which the people are not sufficiently acquainted.

This Department proposes to take measures through the press, the public schools and pamphlets issued, to make thoroughly known to our entire population the varied recreation activities that are at the disposal of our citizens.

An interesting discussion on the question of "How Much Playground Space Does the City Need," by Rowland Haynes, will be found in Vol. X B-1 No. 3 of a magazine entitled "The American City."

Back-Yard Playgrounds.

This Department has been actively interested in the campaign to rid New York of the old unsightly fire-inviting and rubbish-accumulating wooden back-yard fences. These should be eliminated in the interest of New York's tenement-house population. An appeal to tenement-house builders to use metal and open fencings is being made by the Tenement-House Committee of the Charities Society, in an excellent circular which they have issued. It shows that the use of such fencing will not merely benefit the community and tenement dwellers by adding to the light and allowing air to circulate in the park, eliminating fire hydrants and hiding places for thieves and making back-yards more attractive than the street for children to play in, but that it is a profitable investment of the first order. In previous reports we have outlined the progress of the movement to extend the number and scope of back-yard playgrounds.

Recreation in Other Cities.

During a period of vacation last summer the head of this Department visited the playground plants of such cities as Rochester, Buffalo, Detroit, Cleveland, Chicago, Minneapolis, Denver, Kansas City and St. Louis.

Special attention was given to a study of those recreation features which hitherto it has not been thought advisable to adopt in New York, owing either to the different conditions we have to face in this city, or to

the fact that we believed that experiments along the lines proposed would reveal the impracticability and unwisdom of such forms of recreation, if conducted by the municipality. For example, in Cleveland, special attention was given to the municipal dance halls. An observation of conditions there seemed to reveal that despite the admirable surroundings and administration that had attended the municipal dance hall plant, the results are such as to make it clear that similar development in New York would be highly undesirable under present conditions.

The number of dance halls originally started in Cleveland has now been reduced to two, and as a result of viewing their operation, grave doubt is felt as to whether the unsatisfactory elements that are bound to accompany such a project are sufficiently compensated for by the good results obtained. They have a special park police and a system of matrons to control moral conditions in the dance halls. From the self-respecting crowds in evidence in the dance halls, one might imply that the results achieved were good.

Work of Committee on Recreation.

The President of the Park Board of this City is a member of the sub-committee on Recreation of the Board of Estimate and Apportionment. This Committee, among its other activities, had representatives before the Board on numerous occasions when questions arose as to the advisability of the city in its financial stress, appropriating money to secure much needed play areas. There was also a very thorough discussion obtained during the year as to how much, in proportion to the cost of the acquisition of new playgrounds, should be borne by the entire city, and how much should be borne by an area of local assessment; also as to what this area should be in given cases. The Board of Estimate and Apportionment has not as yet laid down any fixed rule in this regard.

A very great advance was made in securing a better co-operation and co-ordination between the recreation facilities operated by the Board of Education and those operated by the Park Department, so as to further eliminate such duplication of facilities and waste effort, as still remain.

A further study of the relation of school vacation playgrounds, play streets and park playgrounds has resulted in the relocation of those too near together, and the installation of units so freed in areas not sufficiently covered.

In 1916 there was a further development of the National Municipal Recreation Federation and a strong effort was made to secure in this city, contests by means of elimination tournaments to secure city representatives in the major sports conducted on municipal playgrounds.

We believe that such contests conduce to healthy rivalry by stimulating a greater number of playground users to perfect themselves in some one line of sport.

Night Playgrounds.

A successful trial was made of the long-cherished plan of lighting the playgrounds at night so as to make them available for the neighboring adult population. These have been most successful, but their further development in other sections of the city is impeded by the lack of appropriations for this purpose in the Department of Water Supply, Gas & Electricity.

If this Department succeeds in carrying out its proposed recreation survey the results obtained would go far to securing a more even distribution of playgrounds and play area. The way in which playgrounds are used when provided, is of as much importance as the mere acquisition of the ground.

In general, New York must follow the lines of some of the great European cities where the less fortunate elements of the community particularly get the freest and fullest use of the public parks. This is done in those countries without impairing the beauty or ruining the valuable features of the public places, and our citizens must be educated to assist in this problem. But such freedom must be coincident with a better civic spirit that will not selfishly destroy the Park asset and thereby deprive other citizens of their due share in the city recreation facilities.

Annual Winter Reunion.

The annual reunion of the children of the park playgrounds was held on December 28th at the Amsterdam Opera House, 44th Street. Each playground sent representatives to perform some folk-dance, gymnastic drill or other feature in which they particularly excelled. This large section of the city had a chance to display to the children of the other sections its proficiency in playground activities.

The children also under the supervision of the Bureau of Recreation of this Department, gave a play entitled "Father Time and His Children," which was hugely enjoyed by several thousand boys and girls gathered in the hall. After this the children and parents mingled together for dancing. This most recent reunion was more than ever a success and the feature will undoubtedly become an annual event.

ORGANIZATION AND ADMINISTRATION

The Department as reorganized fully meets expectations as to improved administration and fixing of responsibility, and as to the large economies effected.

For the motor truck service operated by this Department, there has been established a carefully worked out system of control. This was finally decided upon after a trial of various suggested plans. Careful tabulation has been kept of mileage secured by the several cars, cost of up-keep, etc.

Motorization.

The motorizing of the Department, begun in 1915, has been further developed with continuing success. Estimated savings have been more than equalled and the efficiency of the department in its transportation materials greatly increased.

Central Garage Service.

However, as to facilities of transportation for the Department's inspection service, the problem is still unsolved and each one of the general officers of the department is greatly hampered in inspection work. A certain amount of automobile service is secured through the Central Garage of the Department of Plant and Structures, but this is only adequate at the times of least activity in departmental administration. When additional service is needed (such as required during the major portion of the year) the department's applications fail to secure the transportation owing to the number of calls made upon the Central Garage. On this account frequently when emergencies arise we are obliged to call on private citizens to lend us cars for park use.

It would seem absolutely necessary to have a sub-station of the Central Garage system in upper Manhattan, such as exists in the Borough of Queens, The Bronx and Prospect Park, Brooklyn. This would not only secure adequate provision for the park needs that cannot be anticipated long in advance, but would also avoid the long haul and unnecessary expenditure for wear and tear, gasoline and oil when park service is needed in the upper part of Manhattan.

Frequently our heads of bureaus and inspectors start and finish their trips, without beginning or ending at the central office in the Municipal Building. In addition a number of cases arise where it is more expeditious to take the subway from the central office to a point far up-town and begin the automobile service at such a point.

The other difficulty encountered in inspection work is the fact that the automobile drivers furnished by the Central Garage vary in accordance with the car that may happen to be assigned to the Park Department on a given day. It therefore frequently happens that the chauffeur is entirely unfamiliar with the park system, and a great deal of time is wasted giving him instructions as to how to proceed and where to meet the inspecting party should they leave the car at one point in the park, and desire to be met at another point after proceeding on foot to make the inspection.

Pension System.

Once more urgent recommendation is made that legislation be secured to install a pension system in this department, similar to that in force in the Street Cleaning and other city departments. Such a law would allow for an age restriction and physical examination so that this department would not be obliged, as it now is, to appoint from Civil Service lists, men

who begin their Park Department work already incapacitated by age and infirmities from carrying on to the best advantage the heavy laborer's work that should be properly required. In addition, such a law would permit of our retiring park laborers who have been in the city service for years, but are utterly incapable of a "full day's work."

The theory of the City Budget allows on a carefully prepared work programme, a certain number of men on the basis of each man being sufficiently young and active to perform the full day's work of which such a man is capable. Under present conditions, this difficulty exists not only as to appointments of new men from the Civil Service lists, but we are obliged to employ a very large number of men in our working force more or less incapacitated by old age and physical disability.

Although we have been able to obtain substantial improvements, the existing conditions only need to be stated in order to make apparent the handicap under which proper maintenance of the park system is carried on.

The following table well brings out this point:

Taking age figures of the force at the time of writing, we find a total of 365, as follows:

Ages	21	31	36	41	46	51	56	61	66 to	71	76 to	81 to
Between	to 30	to 35	to 40	to 45	50	to 55	60	to 65	70	75	80	85
Laborers	22	27	44	43	54	57	51	28	14	16	6	3-365
•	Park	Veterans		38 men 69 men	aged more than 80 years; aged from 71 to 80 years; aged from 61 to 70 years; aged from 55 to 60 years.			rs; rs;				

Corlears Hook Park.

It is a pleasure to record that a settlement has at last been reached of the questions so long pending regarding the bulkhead of Corlears Hook Park. The other city authorities have after several years of discussion been brought around to the view of this department, and authorization has been granted whereby work will immediately proceed on the reconstruction of the old wooden bulkhead facing the East River at Corlears Hook Park.

As stated previously this old bulkhead had rotted away and large amounts of soil and land had washed into the river.

The new bulkhead will be constructed of concrete on a new process especially devised for this purpose and which is fully explained in Part II of the 1915 and 1916 reports.

We have also made advances in the matter of obtaining the closing of South Street and now look forward to the accomplishment of both of these ends after which Corlears Hook Park should receive its final lay-out, including the increased area which will make it a water front park of the highest value to the congested neighborhood it serves.

The existing unsatisfactory conditions of Corlears Hook Park have meanwhile been obliged to await proper improvement and development, but it is hoped now that before the end of the ensuing year the park may be all ready in a fair way to properly fulfill its function.

Proposed Centralization.

The plan put forward by the Comptroller for further centralization of the city's park activities by abolishing borough park commissioners and placing all park lands in Greater New York under the administrative direction of one Commissioner has received a great deal of discussion within the year. This matter was taken up in the 1915 report of this department. Since that time several conferences of recreation authorities and associations have pointed out to the Board of Estimate and Apportionment the advantages of a centralized control of recreat on which would plan all activities and administer those found in one section of the city with due relation to the whole and to the fluctuations of the population seeking recreation which so widely differ in any given day or season of the year. However, a majority of the Board of Estimate and Apportionment is evidently at present opposed to the further development of any such plan on the theory that the interests of the outlying boroughs and their especial needs would be less carefully considered and administered to if the present borough system were abolished.

This Department in its organization work has had always in mind, the emphasis to be placed on certain principles:

- (1) The importance of fixing clearly the duties and responsibility of each agent.
- (2) To make it unmistakable to whom he is responsible for the satisfactory performance of his duties.
- (3) To give him enough discretionary authority to develop his own sense of personal responsibility for getting the desired results.

These principles of the past have certainly not been applied with the thoroughness and consistency characteristic of a first-class organization. The piece-meal acquisition and distribution of park units and sections, and the emergency conditions under which new bureaus frequently have been organized, and new work undertaken in former years, have led to the adoption of emergency measures for getting the work done by any means available regardless of the requirements of permanent efficient organization. Furthermore, the jealousy of bureau chiefs (as is always found in federal, state or city departments) forms a constant obstacle to the elimination of unnecessary machinery, and the proper coordination of work and responsibility.

Having such principles in mind, it should be clear that the principal justification for the existence of a Park Board, instead of a single Park Executive, is the theory that the former will provide for broader and sounder wisdom, because of the united deliberation of several minds brought to bear from different points of view on the problems involved.

As an executive, one head provided with adequate assistance is undoubtedly more efficient than a Commission, but the purposes to be accomplished in park work are so difficult of definition, so varied in character

and sometimes so conflicting, as to be in the majority of cases very debatable matters of judgment, and here it is urged that one man's views are more likely to be mistaken than is the joint opinion of a Board. There is undoubtedly the advantage in the Board that each Commissioner would be more familiar with conditions affecting parks in that part of the city where he lives, and such familiarity is a useful part of his equipment. But the natural tendency to regard each commissioner as a representative of his own part of the city and in the sense a special pleader for its interests, as against those of the rest of the city, often leads to a one-sided park development, and one that does not sufficiently consider the parts of the park system as related to the whole recreation problem of the city's population.

Furthermore, it is more or less bound to result that the individual members of the Board, being specialists in their districts, are apt to remain superficially informed about the other portions of the city, and when a matter comes up that does not affect his section, he is often disposed to waive his own personal judgment and accept, without question, the authoritative opinion of the Commissioner representing the district particularly affected. This attitude therefore takes largely away from the deliberative advantage urged in favor of a Park Board, as well as imperiling the unified development of the park system as a whole.

Walks.

Special efforts were made throughout the year to place graphically before the Board of Estimate and Apportionment the serious condition of some of the most used walks in the park system.

As stated in the 1915 report, this portion of the park plant has been allowed to run down without adequate repair for many years previously to the advent of this administration.

In the discussion before the Board of Estimate and Apportionment, it was pointed out that to allow these walks to go for years without substantial repairs constituted poor business policy on the part of the city. Failure to take this into account has undoubtedly been the cause of the rapid deterioration in the matter of park walks. Meanwhile successful damage suits frequently brought by citizens more than equal the cost entailed in making such repairs. However, despite our efforts, the total result was an appropriation in the 1916 budget of \$8,100, which is a sum barely enough to patch a few of the most serious walk sections.

Details of this repair work and other measures taken will be found in Part II under the Report of the Chief Engineer. Similarly will be found other types of repair work carried on by the department, such as rehabilitation of the Mount Morris Park water supply and drainage system, restoration of comfort stations, etc.

Topographical Surveys.

The present administration, on taking office, found, with the greatest surprise, that practically none of the park territory of the city had been

topographically surveyed. The need for such surveys is being constantly shown, for there is not a day when there does not come up some question regarding a park which requires for its proper settlement a knowledge of the actual topography. This is still more true when it is proposed to redesign any park area or to do any work of a large character. The lack of such knowledge in the department has also hampered it in presenting its plans in such form as to assist in securing their approval from the appropriating authorities where the changed conditions of the city make urgent need for new layouts and improvements.

Although funds have not yet been secured for such purpose, the report of the Chief Engineer will show how we have incidentally been able to secure surveys this year of the entire area of Riverside Park south of 129th Street.

It is desired to call especial attention to the chart on page 75 of the Report of this Department for 1915, showing functional proportions of the annual budgetary appropriations of the city for the year 1916. It is there clearly demonstrated that an unduly small proportion of the total budget is expended on park maintenance, and this is particularly noteworthy when comparison is made with the relative appropriations in other cities.

Part-Time Employment Unsatisfactory.

During the year, at the request of committees representing the various types of labor in the department, a part-time system was tried as a substitute for the usual method previously employed of taking on an extra force during the spring and other seasons of increased activity, and then laying off the men when the emergency season had passed. However, in practice the part-time system did not prove its worth, and in the incoming year it has been decided to return to the former method.

The part-time plan in practice provided pay which was insufficient to meet the increased cost of living and proved a hardship to all the men employed. Furthermore, it worked injustice at a time when there was such demand for labor in the general business field.

Already the Department has lost some good men who have resigned to procure steady work on full time outside of the city service. During the next year it is expected men laid off will find ready employment and meanwhile the men kept on will be better satisfied with full time. Under the limited and insufficient appropriations available it is clear that the full-time method is the best. But there are many park operations that should be performed in the off seasons by a properly run and maintained park system. Therefore, had we the maintenance funds which this department feels it should secure, there would be no necessity of laying off men, but they could be regularly employed throughout the year. As it is, however, there are a great many kinds of park work that must be eliminated entirely.

Menagerie, Central Park.

The Central Park Menagerie will be dealt with elsewhere in this report, suffice it to say that the successful raising of wild animals in captivity has been maintained at the previous high standard, so that this branch of the city's zoological facilities practically pays for its up-keep from the sale to other cities of such valuable animals as the young hippopotamus, recently disposed of.

It is a matter of regret that the limitations of this report prevent a discussion on the operations, plans and developments of such institutions lying within the park areas such as the Zoological Park, Botanical Gardens, the Metropolitan Museum of Art, American Museum of Natural History, and others. As the President of the Park Board is ex-officio a Trustee of these institutions, and they form a very vital part of the city's recreation, as well as educational facilities, it is proposed to include these topics in future reports.

Dyckman House.

The attendance at the Dyckman House Park and Museum has exceeded by many thousands all estimates made previous to its opening. However, although for eight years the annual attendance at the Aquarium exceeded 2,000,000 persons, in 1915 and 1916 the attendance fell to practically 1,540,000. It is thought that this is due to war conditions which, while restricting emigration to Europe to a minimum, has also eliminated the legion of tourists going abroad.

Shakespeare Garden.

Grateful acknowledgment should be made of the gift of \$1,500 to the city by Mr. H. C. Folger, for the maintenance of the Shakespeare Garden in Central Park.

Inadequate Maintenance.

The whole question of securing proper maintenance funds for the Park Department plant was fully discussed in the 1915 report. Therein was pointed out the short-sighted policy which allowed a plant of this character to run down to a point where radical and expensive restorations were required. Furthermore, instead of allowing a new park area undeveloped to remain without attention for many years, such areas should from the time of their completion be maintained in accordance with certain standards. If roads, paths, lawns, plantations and shrubs are permitted to suffer from lack of sufficient care it is an expensive matter to restore them, and sometimes an entire reconstruction is made necessary.

In the year under review it was only possible, through reorganization and the introduction of new and improved methods of administration, to provide proper care of the park facilities at the reduced total budget provided.

The reorganization effected by this Department brought about a reduction of 20 per cent. of the previous annual cost of running, and this in the face of higher cost of labor and increased cost of material, and other factors of this character.

The restoration carried on since the beginning of the present administration has gone as far as it is possible, but it would seem a matter of good business to provide funds to complete the restoration, for it is then possible to substantially reduce maintenance cost for a large number of years.

Vandalism.

Once more it is desired to urge the need of a separate park police force for the park system. Failing other methods there should, at least, be a separate park squad in the police force, similar to the traffic squad. In this way a continuous park service and park posts can be obtained with a force especially trained to this kind of work as distinct from the ordinary street police duty. While it is true that the campaign conducted by this Department to reduce vandalism in the parks and stimulate a desire by the majority of our citizens to conserve their park features has had good results, there, nevertheless, continues to exist a very high percentage of depredations caused by the vandalistic elements. This not only extends to littering of the parks and the destruction of trees and shrubs, but to the stealing of copper and bronze from statues, monuments, etc., also sections of fencing are taken up and carried away, until it becomes often a question as to whether it is worth while restoring certain valuable features, lest the depredations immediately result in the elimination of the features restored.

The work of the Boy Scouts and the Anti-Litter League have both contributed most helpfully to our campaign against vandalism.

The personal interest in the welfare of his section by a park guard would do more than anything else to further assist in curing this situation. At the present time the patrolman on a park beat is too frequently an officer who is merely detailed for a short time in the parks and has no special knowledge of the needs of the section he is patrolling and the dangers to be provided for in advance, and he also lacks any special interest or pride in his duties.

In other cities, like Newark, which have, as New York, a large foreign-born population, no such question arises and the parks do not seem to suffer at the hands of vandals. We still have in our midst elements of our population who appear to be entirely ignorant of the fact that liberty means the opportunity to give the other fellow the same chance you enjoy yourself; that liberty does not mean a license to destroy the property which you hold in common with other citizens. There is still lacking sufficient co-operation by the Magistrates in securing action against those who wantonly destroy park features and litter the park areas.

The Junior Park League is a new city agency which, in connection with

our school campaign, may provide a new and healthy spirit among our young citizens.

Monuments.

The policies laid down in the 1915 report for consideration by the Park Department, of memorials and monuments submitted for installation in the park system have been successfully pursued throughout the year.

In this connection it was decided in many cases to require a full-sized model in wood or stucco to be put up on the proposed site before a decision was reached. It was found that only in this way could the proportions of the statue and setting relative to the site be properly visualized. It is believed by this method the city will avoid in the future the erection of a great many of the existing monuments which have been found after completion, were entirely out of scale.

The questions arising in connection with the consideration of the proposed Tilden Statue, the Gaynor Statue, the Crane Fountain in City Hall Park and others of that type have occupied a great deal of the time of the department's experts. These matters are not as yet in a satisfactory state for final consideration.

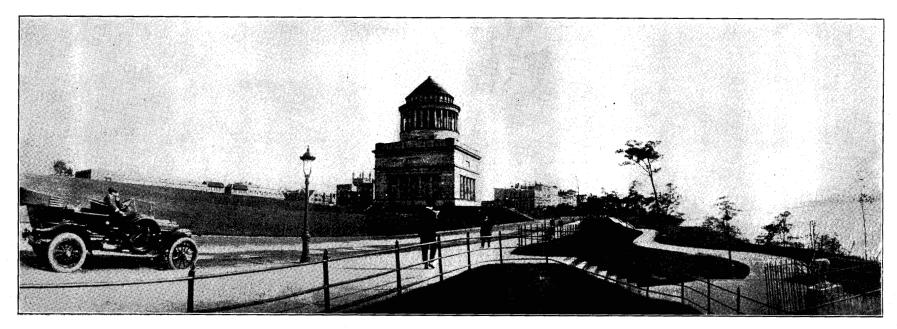
A record of the monuments accepted and installed will be found in the Architect's report.

Particular mention should be given to the satisfactory treatment which has resulted in the memorial to the Architect, John M. Carrere, on Riverside Drive at 98th Street.

A very ready response was had to that section of the 1915 report of this department, wherein it was urged that definite steps be taken to rid the city of the common-place and inartistic memorials that are now too frequently occupying sites in the center of the town, far too valuable to be taken up by such poor specimens. However, the movement has not as yet reached the proportions where it can be hoped that successful action by the city authorities can be secured.

One of the first such monuments that should be removed when action can be secured, is the Louis Heinz Memorial on the Grand Concourse in the Borough of The Bronx. Not to speak of the Statue of "Sunset" Cox in Astor Place. In the former case claim to the occupancy at the permanent square in the city seems to have been the fact that from 1891 to 1893 Mr. Heinz was Commissioner of Public Improvements for the 23rd and 24th Wards of the City.

In one case of this character a very successful result has recently been obtained. Many years ago the Government of our Sister Republic of Venezuela presented to New York a statue of the famous Revolutionary hero of South America, who most nearly corresponds in their history to our George Washington. His name was Simon Bolivar, and the statue was placed on a strikingly beautiful eminence in Central Park, known as "Bolivar Hill." However, the Venezuelan Government itself, after



GRANT'S TOMB AND RIVERSIDE PARK

the statue had been placed on its site recognized it as unworthy of the subject and location. It was therefore removed and the pedestal has remained unoccupied for a number of years. This Department took up the question, therefore, with the Venezuelan Government and the proposal was enthus astically received by the latter. They have since had a competition between eminent sculptors and the selection decided upon has been confirmed as worthy in every way by the city authorities. It is hoped that the new statue will be dedicated in the autumn of 1917.

Music.

Community Singing, so auspiciously introduced in the summer season of 1915 in the park system, was very much extended and developed. This not only extended to the community chorus, which sang weekly on The Mall in Central Park, but included a number of community singing organizations fostered by this Department which gathered together the people in the neighborhood of a number of the small park centers. Representatives of these various community singing movements have met at the Park Department so as to compare notes as to successful methods employed.

It is proposed during the 1917 season to further extend community singing with special reference to the Ruthenian and Luthuanian sections on the east side; the Italians in the neighborhood of Washington Square, and similar groups.

The weekly meetings of the community chorus at the bandstand in The Mall, Central Park, found regularly several thousand persons singing together. The work of the chorus concluded with the Song and Light Festival at the Large Lake in Central Park on September 13, 1916. It was estimated that over 50,000 people either heard or joined in the singing, and the entire affair received the universal approval of the people of the city as one of the most happy innovations that have taken place in many years. The nucleus of 800 for the singing with an orchestra was stationed on a promontory on the north side of the lake, while the great public occupied the hillside along the southern shore. The beauty of the scene was enhanced by the placing, from the banks of the lakes, of a series of lights and lanterns excellently designed.

The festival was attended on the following night by a still larger crowd. The work of the community chorus, in co-operation with the Park Department, resulted in making a much greater success of the Christmas Tree entertainments held in the parks during the month of December.

The successful results obtained in the reorganization of the Park Department's system of summer concerts was continued during 1916. The Park Commissioner, however, believes that despite the excellent use made of the appropriations available for this purpose they were far smaller than should be granted for these concerts in the summer season of the parks. These concerts not only provide enjoyment and relief to the thousands who cannot get away from the city in the hot summer months, but they tend

to solidify community spirit and form a basis on which the neighborhood can later get together for many diversified forms of civic endeavor and neighborhood improvement.

We were fortunate in the season just passed, in securing a number of additional concerts to eke out the all too insufficient number in Central Park. These additional concerts were made possible by the gifts of generous citizens for the purpose.

The inadequacy of the present music provisions at the band stand in The Mall is more than ever apparent, and it is interesting to note in this connection the proposed gift of Mr. Elkan Naumburg, of a new band stand to be situated at this point if a place is not found for it in the area to be released to the Park Department, which is now occupied by the Lower Reservoir in Central Park.

The Department is preparing for the season of 1917, to provide better facilities for the band concerts in the section included in Washington Heights. The irregular character of the topography of the parks in this vicinity does not provide for suitable places where a large crowd can gather and listen to the concerts, and it is therefore proposed to secure the Stadium of the City College, where 14,000 or 15,000 auditors gather from that neighborhood to listen to the music.

THREE YEARS' ACCOMPLISHMENTS

Meanwhile, pending the development and completion of the much needed "park plan," this department has proceeded with the restoration and further development of the already existing park and recreation areas and the acquisition and development of new parks and playgrounds on lands already owned by the city that this department has been able to secure by transfer from other city agencies.

The methods by which this has been accomplished have been thoroughly discussed and outlined in the reports covering the first two years of this administration, namely, those of 1914 and 1915. The work has now reached its conclusion in that results have either been obtained or the undertakings are thoroughly organized and approaching completion. Since the matters are thoroughly covered in last year's report it is sufficient to state here briefly a few of the principal objects attained and then to describe the broader field of work the department has entered upon and the reasons that have decided those in charge to use the department not only in its normal limits of city activities, but in other lines of civic endeavor, which hitherto the Park Departments have not felt came, in any sense, within their province.

Some of the results of the last few years are the following:

1. Reorganization of the Department including redistribution of functions resulting in a greatly improved and extended service, with at the

same time a coincident saving of 20 per cent. of the previous annual park budgets.

2. The Restoration of Park Plant.—Great progress has been made during the year so that it may fairly be said that, without special appropriations, the worn and destroyed park areas below 145th Street, in Manhattan, have been, one after the other, restored to beauty and usefulness.

It is hoped that careful administration of the further reduced budgetary appropriations of 1917 may allow of a continuation of this work, so that at the end of the present administration the completion of the entire area calling for restoration may have been accomplished.

In Carl Schurz Park, Central Park, Morningside Park, and a number of downtown parks, success has been notable. Restoration has withstood the elements and intensive wear so as to make it clear that the work will be far more permanent than before.

In Staten Island, Canal Street Parkway was actually improved and boulevarded. The work in this case included a rearrangment of transit and lighting facilities and the elimination of several unsightly structures.

A further development has been made in the treatment of small parks, as outlined in the 1915 report.

3. Park Encroachments.—The fight against park encroachments has been successfully continued. An unusual number of projects, which threatened buildings and various pre-emptions on park territory for uses other than rest and recreation, were successfully fought and defeated.

The department also secured the removal of unsightly and dangerous buildings, notably the old West End Hotel, in Fort Washington Park, and the McGowan Pass Tavern and Carousel in Central Park.

The Arsenal in Central Park will be removed in 1917 (see later portions of this report; also of the 1915 report).

The Morningside Park pump house matter has reached a successful conclusion, in that an underground pump house shall allow for the removal of the unsightly service structure.

- 4. Tree Work.—The reorganization of the tree-caring forces of the department, together with the securing of the position of a City Forester, has brought about a still further improvement in our technical tree work, which has already brought remarkable results destined to be still more evident within the next year. Meanwhile the campaign entered into by the department for securing a general tree planting by property owners has proved remarkably successful. Further details of this will be found elsewhere in this report.
- 5. Concessions.—Concessions have been placed on a basis of service to the public and the revenue therefrom has also been increased over \$30,000 per year. The concessions have been placed in two classes. In one class are all those concessions where the income has been valued at \$1,000

or more, and the city can therefore expect to receive \$200 or more annually. In all such cases the privileges are put up for public bidding and awarded to the highest responsible bidder. When the value is ascertained to be less than \$1,000 and the income to the city less than \$200, charitable considerations prevail, and these privileges are treated on the theory that in this manner the city cares for a number of cripples and unfortunates, who are thus rendered self-supporting, and who otherwise might become public charges. All applications for such privileges are first investigated by and awarded only upon the recommendation of the Charity Organization Society, the United Hebrew Societies and the Catholic Charities, etc.

- 6. Municipalization of Band Music.—The standard of music has been improved at a saving to the city. Standard instrumentation was prescribed for all bands employed by the department. The Boroughs of Manhattan and Richmond were divided into four districts, and a band of 21 men and leader was assigned for the music season to each district. By employing musicians by the week the following advantages were obtained:
 - 1. The leader and musicians became accustomed to each other, with the result that a better quality of music has been obtained.
 - 2. A substantial saving has been effected, amounting to twenty per cent. of the appropriation. This saving made possible the giving of forty additional concerts each season.
- 7. Policy Regarding the Acceptance on Behalf of the City and Maintenance of Monuments.—It has been the fixed policy of this administration not to accept monuments on behalf of the city unless the would-be donors provide additional funds necessary for transforming the surrounding park territory to provide an adequate setting. In other words, the city should be put to no expense in accepting or maintaining monuments or memorials.
- 8. Centralization of Recreational Activities.—Under this department gymnasiums formerly administered by the Recreation Commission, recreation pier activities formerly conducted by the Dock Department, playgrounds in the past under the jurisdiction of the Water Department and the Department of Plant and Structures have been turned over to be centrally administered by this department. A great amount of duplication and waste effort have thus been eliminated.
- 9. New Lenox Playground.—Three years ago there were thirty-nine playgrounds in Manhattan and Richmond. To-day there are over seventy under the supervision of this department, and now a notable acquisition has been added. The department has finally secured from the Board of Estimate and Apportionment \$36,000, required for the construction of a new playground on the site occupied by the block between 1st and 2d Avenues, 67th and 68th Streets. Plans for the new playground include a large field for the playing of baseball and soccer football, and two play-

grounds for small children, to be equipped with swings, gymnastic apparatus, slides and basket-ball courts. The playground will also be equipped with a modern building. The playground will be notable in providing for pleasant surroundings, obtained through borders of trees and shrubs, including a shady area for mothers and babies, so that the parents can be with their children and take an interest in their playground development.

- 10. West Side Improvement.—The numerous and perplexing questions arising during the discussion of the proposed contract between the Board of Estimate and Apportionment and the New York Central Railroad continued to take up a very large part of the time of all the park officials in Manhattan during the year. Since no definite conclusion has been reached and modifications are still being discussed and inserted in the contract at the date of writing this report, it has been thought best to add nothing to what was said on the subject in the 1915 report.
- 11. Community Singing.—The efforts made by the department in 1914 and 1915 were more than repaid by the results obtained in Community Singing in the past year. The successful Sunday meetings of the Community Chorus on the Mall were celebrated in September by a Song and Light Festival, described in another part of this report. In 1917 the department expects the inauguration of a number of smaller choruses, who will sing in our smaller parks, thus bringing this great movement closer to the people.
- 12. Food Gardens.—In view of the inability of our Country under present conditions to supply itself and the world with food products in sufficient quantities to meet demand, there will be, according to the estimates of the Federal authorities in charge, serious shortages. Production must be increased and waste combated and lessened. In order to increase food production inside the city limits and by example to demonstrate to the people of this city the possibilities to be derived from backyard gardens, a serious campaign will be made this winter, and in the spring of 1917, to urge all persons to plant and cultivate a backyard garden. Such a campaign it is expected will meet and deal with such problems as the assignment of waste land for productive purposes, the providing of adequate technical supervision, fertilizer, tools and seed, the disposal of crops, etc. While a great quantity of production is not expected, it is hoped that a valuable lesson in the difficulties of production and the necessity of conservation will be afforded.
- 13. Acquisition and Development.—During 1916 several important park areas were acquired by the City. Inwood Hill Park was enlarged by securing 5.8 acres adjoining the original site bought in 1915. Other parks and park areas acquired in the last three years are:

Dyckman House Park, New area to Isham Park, 10th Avenue and 18th Street Playground. In addition to the acquisition of the sites above mentioned, the Jasper Oval Playground, St. Nicholas Avenue and 138th Street, formerly a portion of St. Nicholas Park, was improved as a playground. Facilities for baseball—four diamonds are provided, and a large field house with shower baths and locker rooms.

14. Improvement in Work and Supervision Methods.—During the period of the present park administration the work methods of the maintenance force have been materially improved. The personnel of the Department has been reorganized and adequate supervision of a discriminating and intelligent character has been substituted for the former inefficient organization. Two cases in point will serve to illustrate these improvements. A new model of broom has been designed which reduces by one-third the time necessary for walk sweeping.

A head caretaker of men's comfort stations and a supervisor of women's comfort stations have been appointed to bring up to normal this neglected but important phase of park management. In the first two months important results were secured. A code of Regulations for the public's Use of Comfort Stations has been evolved. Copies of this code will be posted in all Comfort Stations for the public's observance. In cases where violations are committed the magistrate will not fail to give adequate punishment to these offenders, as it can be shown that the ignorance of regulations did not exist, or at least was not excusable. In this short period of two mouths a manual of "rules for employees" has also been prepared for attendants employed in these Comfort Stations.

Corresponding improvements and progress have been made in the other functional divisions of the park service.

PART II.

REPORT OF CHIEF ENGINEER ON PARK MAINTENANCE

Scope of Work.

This bureau carried on through the year the work of maintaining the parks and park features, parkways, drives, playgrounds, baths and comfort stations. The work consists of the usual routine of cleaning and repairing of walks, drives, buildings, fences and other structures in the parks; the care of lawns and plantations, including the planting of new trees and shrubs and the propagation of plants and flowers for the summer bedding in the parks and for display in the Central Park Conservatory; the cleaning and repair of playgrounds and playground apparatus, the furnishing of attendants for baths and comfort stations, and of park keepers and watchmen for the protection of department property. In addition to this work a large amount of construction work, not ordinarily classed as maintenance, was done by the operation and maintenance force.

The territory maintained by the Department during the year consists of 75 parks, comprising an area of approximately 1,548 acres. Seventy-one of these parks are in the Borough of Manhattan and four in the Borough of Richmond. The total area in the latter borough amounts to about 63.6 acres.

During the year the Pulitzer Fountain at 59th Street and Fifth Avenue, and Dyckman Park and Mansion at 204th Street and Broadway, were turned over to the Department.

Within the parks the Department maintains 47 comfort stations, 24 of which provide accommodations for both men and women; 15 for women only, and 8 for men only. It also maintains 4 bathhouses for both sexes; also 70 playgrounds besides a number of lawn spaces that are set aside within the parks for recreation purposes.

The total force under the Bureau of Operation and Maintenance for the year ranged from 444 during the winter season to 671 during the summer. This force consisted of the following:

Labor Force:

- 3 District Foremen. 1 General Foreman.
- 405 Laborers, Stablemen, Caretakers, Bath Attendants, Watchmen, etc.
- 39 Drivers.
- 3 Hired Carts.
- 4 Automobile Enginemen.
- 65 Female Attendants.

Gardening and Arboricultural Force:

- 1 Foreman of Greenhouses.
- 2 Arboriculturists.4 Gardeners in Charge.
- 36 Gardeners.
- 29 Climbers and Pruners.
- 83 Mechanics.

Care of Lawns.

The proper maintenance of lawns in view of the poor soil generally existing in Manhattan park areas and the continuously crowded use of all park territory is one of the most difficult problems of the administration of the parks of New York. The carelessness and lack of respect for public property on the part of a portion of the public using the parks, and a lack of sufficient police force to explain to the public the need of protecting their own property, have caused our lawns to deteriorate to such an extent that a thorough re-seeding has become necessary.

During the year lawns were re-seeded in Stuyvesant, Hamilton Fish, Corlears Hook, William H. Seward, Riverside and Central Parks. The total area of these re-seeded lawns amounted to 20 acres.

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

To allow many of the newly seeded areas an opportunity to become thoroughly established, there were erected in many cases a temporary 6-foot wire mesh fence around such areas.

All the small lawn areas in the parks where the grass was weak and deteriorating were spaded and seeded during the spring. Lawns in comparatively good or fair state had to receive considerable attention. They were maintained and improved by putting on a top dressing of well-rotted stable manure in the early winter, or were treated with commercial fertilizer in the spring. The stable manure was gathered from the Department stables at 97th Street, a large riding academy, and from several armories in the vicinity of Central Park. Twenty-seven hundred loads of fresh manure were received and 1,800 loads, or 2,450 tons of rotted manure, distributed on the lawns and plantations through the parks. This manure is stored in two concrete manure pits, each of 4,250 and 4,400 cubic yards capacity.

During the dry weather of August and early September it was necessary to water lawns in numerous parks. This was carried on between 10 p.m. and 6 a.m.

One hundred and seventy-five thousand square feet of sod were laid along the borders of the Drives in Central Park and Riverside and in other small areas in the parks.

Restoration.

Large areas in Central, Morningside and Carl Schurz Parks were restored. These areas were barren, through erosion and destruction by park users, and had remained so for many years previous to this administration.

In Central Park the restored area was at the Harlem Meer from 106th Street north to 110th Street, and from 5th Avenue along 110th Street to Lenox Avenue. The lawn areas were seeded and enclosed in 6-foot wire mesh fence. A path was laid out between the north side of the Harlem Meer and the 110th Street wall north of the existing walk, which was not of sufficient width to accommodate the dense traffic in this location. On the north shore of the Harlem Meer a dry rubble slope wall was built to protect the shore at this point. A quantity of additional shrubs and trees were planted in this area.

In Morningside Park the restored area runs from the Amsterdam Avenue side along 123d Street, and on the east and lower areas of the park to 110th Street, with the exception of the area in the immediate vicinity of the Board of Water Supply Pumphouse (as much remains to be done here by the Water Board, the Commissioner excluded this from the restoration plan). This restoration consisted of the placing of mold and sod, and rocks to hold steep slopes, and the planting of shrubs and trees. Sixfoot wire mesh fences were erected to protect this restoration, wherever funds allowed.

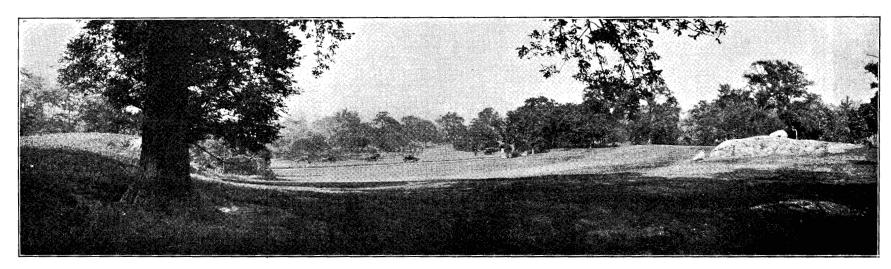
At Carl Schurz Park the slopes along East End Avenue, 86th Street, the north end of the park, and a portion of the east slope south of 86th Street were restored. This restoration consisted of the placing of mold and sod, and rocks to hold the steep slopes, and the planting of trees and shrubs, and the erection of 6-foot wire-mesh and iron pipe-rail fences for protection.

The bare spots in the Sheep Meadow in Central Park were sodded. This required over 105,000 square feet of sod, of this 67,000 square feet was cut from screened areas in Central Park, which were treated this fall and will be seeded this coming spring.

Drives and Bridle Paths.

The drives and bridle paths in Central and Riverside Parks were kept in such good condition throughout the year that all the riding clubs of the city passed resolutions stating that conditions were far better than in any previous year.

The gravel drives regraded, rolled and resurfaced with asphalt binder were the East Drive from 66th to 110th Street; the West Drive from 59th Street to 66th Street, and the various branch drives connecting these two Central Park drives, and Riverside Drive Extension from 135th Street to 158th Street; Morningside Drive from 110th Street to Amsterdam Avenue—590 cubic yards of North River gravel, 2,300 cubic yards of sand, and 73,000 gallons of asphalt binder. The old binder removed from these drives was used for walk repairs in these and adjacent parks. The bridle paths were



ROLLING GREENSWARD—CENTRAL PARK

given daily attention throughout the year and were in excellent condition for riding at all times, winter and summer. During the mid-summer season the paths were spiked up with the road rollers and resurfaced with a layer of fresh gravel. At many points, where the constant addition of new gravel from year to year had raised the grade of the paths too high, the surplus gravel was removed and the surface brought to the proper grade. Eleven hundred cubic yards of gravel were used in this work. These drives have been kept in as good condition as was possible with this type of drive and the heavy traffic which it sustains, and the small amount of money available for labor and material for repairs.

The Harlem River Driveway was maintained in condition for fast driving of light harness horses throughout the year. The sandy loam surface was gone over daily with a light harrow. Matinee trots were held by the New York Road Drivers' Association during the season which opened on May 7th and closed on November 26th.

Flower Show.

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

Flower beds were maintained during the season in City Hall, Madison Square, Stuyvesant Square, Riverside and Mount Morris Parks, and in the Park Avenue Plots from 34th to 40th Street. The largest of these displays was in City Hall Park.

Tennis courts were maintained throughout the season on the Sheep Meadow and at 95th Street east of the West Drive.

Skating and Band Concerts.

The skate houses erected at the large lake at 72d Street and at Harlem Meer, 110th Street in Central Park for use during the season of 1915-16 were removed in the spring, stored for the summer, and re-erected at the beginning of winter.

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

Motorization.

The motorization of the department was started during the year, and will be completed in January, 1917. This equipment consisted of 4 one-ton trucks and 1 3½-ton truck. These trucks were used for delivering play-

ground apparatus, supplies and mechanics' materials, and hauling rubbish and manure. This partial motorization permitted a reduction in number of 16 drivers, 5 stablemen and 32 horses, and forage necessary for this number of horses.

Mechanical Force.

The mechanical force of the department was employed largely in the small jobbing repairs necessary to keep the buildings, structures and equipment of the department in good condition. Special orders were issued covering the work of this force.

Playground structures and apparatus were kept in condition for use throughout the season and new supplies of jump-ropes, swings, etc., were made at the department work shops for use on the playgrounds.

Building Repairs.

The Gracie Mansion in Carl Schurz Park was repaired, and the exterior painted. This building had not been painted since 1896, and it was necessary to burn off the old paint over a large area, which added considerably to the cost of this work.

The Isham Park Greenhouse was repaired, reglazed and painted, and the heating system overhauled.

The Greenhouse, 106th Street, Central Park, was given attention in the way of painting, glazing and repairing of the heating apparatus.

The Arsenal, Marble Arch, Dairy and Sheepfold comfort stations were repaired and painted, both interior and exterior, new leaders were placed and roof ventilators installed.

Playground buildings, school farm buildings, comfort stations, tool houses and other park structures and their equipment were repaired and painted.

Fences.

The repair of the iron fences on the Broadway Parks, from 60th Street to 122d Street; the Park Avenue Parks, from 34th Street to 40th Street, and from 59th Street to 96th Street, and the Seventh Avenue Parks from 110th to 153d Streets required daily attention from the Department iron-workers, as these fences were constantly being damaged by automobiles and horse-drawn vehicles.

Iron picket fences and pipe-rail fences were erected and painted in various parks, and existing fences repaired and painted.

Repairs were made to water supplies lines, and new lines laid in Mount Morris, Bryant and Central Parks.

New concrete drinking fountains were made and installed in numerous parks to replace the old-style cast iron drinking fountain.

The above will give an idea of the multifarious character of the work of this bureau, without entering into further details.

REPORT OF CHIEF ENGINEER ON CONSTRUCTION WORK

Improvement of Isham Park.

Owing to the abnormal conditions existing in the labor market and the difficulty of securing materials, work under the contract for the development of Isham Park was greatly delayed.

In deciding upon the permanent system of sidewalks for the park, a great many authorities were consulted. It was finally agreed that the old-fashioned garden on the top of the plateau should be continued and restored to its original condition, excluding as much as possible any asphalt walks or artificial conditions. A united request was made that there be a stairway and path up the beautiful Broadway slope, rendering easy access from the neighboring subway station for those wishing to reach the plateau from the northeast. It was a source of regret to the department that the funds allowed did not permit for such change of specifications as would allow of an easier tread to the stairway. However, the work as completed in other respects is entirely satisfactory, and its results will be all the more evident when the numerous trees and shrubs planted during the autumn of 1916 have become thoroughly established.

A subsequent contract for Isham Park was executed in July of this year for constructing an additional walk with steps from Broadway at the northeast corner of the park to the main walk in the park at the top of the hill. The work on this contract is practically completed.

Straus Park Improvement.

Under a contract executed in February, the work of constructing walks, setting curb and edging and installing drinking water in this park was completed in the early summer. This little triangle, located at Broadway and 105th Street, had for the last three years remained a barren waste. By this improvement the park has been placed in a presentable condition, so that, in addition to its utility as a rest spot for the public, it now provides a proper setting for the Straus Memorial, therein located.

Repaving Service Road, Riverside Drive.

Under a contract executed late in 1915, the roadway of Riverside Drive property, or Service Road, between 91st and 114th Streets, as well as the approaches to Cathedral Parkway and the intersection of 79th Street and Riverside Drive were paved with an asphaltic concrete.

Included in this work, which was begun in the early part of 1916 and completed in the middle of July, was the resetting of curbstones, the setting of new cement curb and the necessary rebuilding of catch basins, etc.

With the completion of this contract a permanent pavement has been provided for Riverside Drive from 72d to 129th Street, inclusive.

Cement Walk Repairs.

Under a contract executed in August the work of repairing the most dilapidated walks in various parks was carried on and prosecuted to completion.

The limited funds available permitted the laying of 18,841 square feet of pavement in Riverside Extension, Mount Morris Park, Madison Square Park, Columbus Park and Corlears Hook Park. Only those sections of walk pavement which had entirely disintegrated, so that they were a menace to the safety of pedestrians, could be repaired, owing to the inadequate appropriation for this purpose.

Asphalt Walk Repairs.

During the fall a contract was entered into providing for the most urgently needed repairs to asphalt mastic walks.

Under the contract certain walk areas, totalling 30,320 square feet, in Central Park, Riverside Park, Morningside Park, Thomas Jefferson Park, Carl Schurz Park, Chelsea Park and Hamilton Fish Park, were patched. Only those sections of walk pavement which had entirely disintegrated, so that they were a menace to the safety of pedestrians, could be repaired, owing to the inadequate appropriation for this purpose.

Resetting Flagging at Public Library, Bryant Park.

The flagstones of the walks covering an area of 548 square feet in the rear of the Public Library having settled so badly as to endanger pedestrians, an open market order was issued, whereby these sunken stones were taken up, the holes underneath filled in with sand, the flagstones reset and the joints filled with cement mortar.

Battery Park Walk Drainage.

In response to repeated complaints that the sidewalk of Whitehall Street along Battery Park remained wet nearly all winter long owing to defective drainage conditions, the department issued an order to cut away a strip of walk pavement, 550 square feet in area, about 2 feet wide, for the entire length of walk and to lay a new pavement, depressing the same at the edging line. This formed a natural gutter. A small catch basin was built near Pier "A," which will take care of the water shed from the lawns in case of snow and rain.

Mount Morris Park Water Supply.

The water supply for the men's cottage in Mount Morris Park having become absolutely inadequate through the corrosion of the iron pipe, a new supply was installed from the croton main in 124th Street to the building.

All the necessary excavations, backfilling, repairs to walks, plumbing work, etc., were performed by the departmental force.

Additional Drainage, Mount Morris Park.

Through the growth of tree roots and other vegetation some of the old drains in Mount Morris Park had become unserviceable, causing the flooding of large areas of the walks during every rain storm. The necessary excavations were made and 240 linear feet of 6-inch vitrified drain pipe was laid along the different lines, so as to avoid trees, shrubbery, etc. Since the installation of this new drainage all defective conditions have been remedied.

Water Supply, Bryant Park.

The two comfort stations in Bryant Park, built in connection with the Public Library building, had to be closed from time to time, as the water supply pipes, installed at the time that the stations were built, were badly strained and broken through settlement of the ground (fresh fill) in which these pipes had been originally laid, and, secondly, the supply originally came from the service to the Public Library building. To make these stations serviceable, a new supply was laid from the 42d Street main.

Jasper Oval Playground.

Owing to the failure of the Board of Estimate and Apportionment to approve the design of the Park Department for a modern playground at this location, the work of improving this playground was undertaken during the latter part of the year and has so far been confined to the depositing of 2,000 cubic yards of filling and the tearing down of the old fences.

Surveys.—Surveys were made as follows:

Topographical survey of grounds around the Carousel in Central Park, Water front of Corlears Hook Park.

Topographical survey of the entrance to Central Park at East 79th Street.

Topographical survey of Jasper Oval.

Walks around Morningside Park.

Present conditions of walks in Battery Park.

Playground at 68th Street and First Avenue.

Topographical survey of Jumel Park (Roger Morris).

Vicinity of 110th Street and Seventh Avenue, in Central Park.

Ryan, Carl Schurz, Morningside, Madison, Seward, Battery and Central Parks, to supply data needed for record maps.

Specifications.—Specifications were prepared as follows:

Concrete bulkhead, Corlears Hook Park (also for a new pile foundation for same).

For extending the wrought iron picket fences on the boundary of Chelsea Park, from the present ends of fences to the corners at 28th Street, 27th Street and 12th Avenue.

For constructing a cement walk with stone steps in Isham Park, at the northeast corner of same, at Broadway to the main park walk.

For improving Jasper Oval (two different specifications were prepared). For cement walk repairs.

For asphalt walk repairs. (Several different specifications were prepared.)

For the extension of the concrete bulkhead walls and appurtenances at different places along the Harlem River Driveway.

For a high gas pipe and wire mesh fence along the boundaries of Chelsea Park.

For constructing a gas pipe and wire mesh fence around the boundaries of Jasper Oval.

Plans.—Plans were prepared as follows:

Topographical map of grounds in Central Park around the Carousel.

Plan showing location of trees, north end of Madison Square.

Topographical map of Jasper Oval.

Contract drawings for improving Jasper Oval (two different plans).

Record map of Herald Square.

Topographical map of Roger Morris Park.

Plan of grounds in Central Park adjacent to 110th Street and 7th Avenue.

Contract drawings for a concrete bulkhead along the water front of Corlears Hooks Park.

Contract drawings for concrete bulkhead along the easterly boundary of the Public Driveway.

Map of Central Park showing dead and dangerous trees.

Plan of proposed gutter and catch basin in the Whitehall Street sidewalk of Battery Park.

Plans for furnishing and erecting a gas pipe and wire mesh fence around the boundaries of Jasper Oval.

Plan of Isham Park, showing different cessions with dates.

Plans for constructing a pipe sewer in the vicinity of the Museum of Art in Central Park.

Plan showing the boundaries of the Playground at 1st Avenue, between 67th and 68th Streets.

Miscellaneous.—A statement was prepared showing the approximate consumption of water in the various parks of Manhattan and Richmond.

A table was prepared showing in detail the area of walks, drives, lawns, etc., in each foreman's section in Manhattan and Richmond.

An estimate of cost was prepared in the matter of grading the playground at 1st Avenue, between 67th and 68th Streets.

A measurement was made of the height of the flagstaff near Grant's Tomb.

Estimates were made of the cost of repaving in various manners the roadway of the Public Driveway.

Estimates were prepared of the cost of a concrete bulkhead along the easterly boundary of the Public Driveway.

Inspections were continued during the year of the work under way through permits in the parks by the Public Service Commission, the Board of Water Supply, the electric and gas companies and private parties, and of filling being deposited in Fort Washington, High Bridge, Riverside and other parks by various parties, under permits.

A map of Central Park was prepared on a scale of 200 feet to 1 inch, to show walks, roads, buildings, etc., but without foliage.

Measurements were taken of supplies (gravel, sand, mold, stone, etc.), being delivered to the department through contract or order, in scows or trucks.

Bids were tabulated as received for all boroughs of the department.

During the last two months or so the office has had under way a topographical survey and map of Riverside Park, from 72d to 129th Streets, for use in connection with the projected changes in alignment, etc., of the New York Central Railroad.

The surveys have been very nearly completed and the maps are more than half done.

EDWARD A. MILLER, Chief Engineer.

REPORT OF ARCHITECT

CONSTRUCTION AND MAINTENANCE OF BUILDINGS AND STRUCTURES.

Contract Work.

Metropolitan Museum of Art.—The erection of the substructure and superstructure of Additions "J" and "K," and the interior finish complete of Addition "J" exclusive of plumbing, heating and ventilating, was finished in May and the completed Addition "J" turned over to the museum authorities. The contract price was \$647,067.63. This included the extra work necessary to overcome various defects encountered in the excavation due to the variation in the plans of the course and depth of the five 48-inch water mains which are located at this point.

A contract for the steam heating and ventilating work for Addition "K"; the steam and return connections from engine room, etc., to and extending through Addition "K," and changes in duct work of Addition "D" as required by building Addition "J," was completed in May, and cost \$36.516.

A contract for plumbing work in Addition "J" and for certain rough work in Addition "K" was completed in January, 1916, and cost \$6,300.

Morningside Park.—A contract for the furnishing and erecting of a wrought iron fence and setting of artificial granite gate posts around Morningside Park, amounting to \$14,200 was executed on January 25th. The time allowed for completion was 150 days, and the work was promptly started and completed within the time allowed. The artificial granite gate posts were purchased by the department on open market order for \$990, and the setting of same was included in the fence contract.

Speedway.—A second contract for the continuation of the artificial granite balustrade on top of the present granite coping on the newly reconstructed speedway balustrade wall was executed on February 28th, and amounted to \$13,150. Plans and specifications were prepared by the Architect. The artificial granite used was manufactured and supplied by the same manufacturer of the stone in the first contract. Therefore, material, color and texture is identically the same as the material furnished for the balustrading under the first contract.

A supplementary contract was entered into on November 18th to the amount of \$1,150 for furnishing and setting approximately 102 lineal feet of balustrading to complete the work up to the pier of Highbridge. When this is finished a continuous stretch of approximately 2,000 lineal feet of balustrading, including two stairways will be completed.

Central Park, Dairy Building.—This building, erected in 1865, was fast falling into absolute ruin for lack of care and maintenance. For years each restaurant concessionaire abused the building and did as little

repairing and maintenance work as possible. For the past four or five years the building has been closed to the public entirely. The slate roof was in such a state of disrepair that the entire interior was ruined. The contract for the overhauling consisted of laying the entire new roof of asbestos shingles, new flooring throughout, plastering, electric light, kitchen equipment, painting inside and outside, and repairs to interior woodwork. A contract amounting to \$3,788 was executed January 10th and completed on Memorial Day. Plans and specifications were prepared by the Architect.

Isham Park.—A contract amounting to \$2,420 for the general construction work exclusive of plumbing and electric light fixture work in connection with the installation of a comfort station for men and women in the basement of the Isham Mansion, Isham Park, was completed in July. Plans and specifications prepared by the Architect. The work included the rearrangement of the rooms in the basement of the Isham Mansion to provide toilet rooms for men and women. Toilet rooms were finished with tile wainscoting, new cement floors, new doors and windows, marble toilet partitions together with the electric wiring of the entire house.

An additional contract for plumbing work in connection with the installation of comfort station in basement of Isham Mansion, Isham Park, amounting to \$1,200, was completed in July.

Central Park, Belvidere.—Plans and specifications prepared by the Architect for a contract for the general construction and alterations to the Belvidere. The plans provide for the reconstruction of the Belvidere Building to provide quarters for the Weather Bureau now located in the Arsenal Building, and the work included consists of the reconstruction of the present tower to provide a flat roof for the meteorological instruments, the closing in of all door and window openings with metal sash and doors, new floors, plastering throughout, roofing, electric lighting and new cement pavement on terrace. Contract amounting to \$9,475 awarded December 28th. S. Deitz, Contractor.

Contract for plumbing and gas-fitting work, alterations to the Belvidere. Plans and specifications prepared by the Architect. Contract amounting to \$2,199 awarded December 28th to Thomas E. O'Brien, contractor. This work includes the installation of toilet fixtures, wash basins, hot and cold water supply, gas steam radiators for heating, excavation and installing of water supply line and sewer from the main and sewer in the 79th Street Transverse Road to the building.

New York Public Library.—Plans and specifications were prepared by the Architect. Galleries, book shelves and cases in Rooms 307, 308, 313 and 226 for the preservation of valuable manuscripts and prints were installed under a contract amounting to \$6,264.16; executed January 31st. Work was completed in September.

American Museum of Natural History.—Plans and specifications were prepared by the Architect. Contract for the finishing and erecting of

storage cases in the American Museum of Natural History, was executed on July 27th, amounting to \$14,222.90. Work now under way.

A contract for furnishing and erecting special steel alcoholic cabinets in the American Museum of Natural History was executed on July 15th, amounting to \$2,450. Work is now under way.

Madison Square Park.—Plans and specifications were prepared by the Architect for an underground comfort station for men and women in Madison Square Park, cost \$25,000. These plans and specifications are now before the Board of Estimate and Apportionment for approval.

Central Park, Arsenal Restaurant.—Plans and specifications prepared by the Architect and bids received for the overhauling of the Arsenal restaurant in Central Park at a cost of \$2,500. The Bureau of Contract Supervision reported adversely and the Board of Estimate denied a request for approval of plans and specifications at a meeting held on December 22nd.

Open Market Work.—Plans and specifications were prepared for and open market orders given for the following general repair work to buildings:

Tompkins Square Park comfort station for men and women:

General construction Plumbing work	715.00
Heating	425.00
-	
Total	\$1.015 CO

This work included the remodeling of the entire interior, sanitary floors, painting, installation of modern plumbing fixtures and steam heating.

DeWitt Clinton Park Pavilion Building:

General construction	310.50
Total	\$2.157.50

The interiors of the bath and toilet rooms were remodeled. The old tile wainscoting which was bulged, broken and in dangerous condition was removed and replaced with cement wainscoting. Walls and ceilings were waterproofed, plastered and painted; roof repaired and electric lighting overhauled; additional radiators were installed in bath and toilet rooms, and repairs were made to the hot water tanks and the boilers.

Central Park, Greenhouses.—At a cost of \$575 a new area was constructed to provide light and ventilation for the boiler room. This work included a new drain for the area and for the floor of the boiler room. The old defective heating coils in the central exhibition house were removed and replaced with new coils at the cost of \$987.

Hamilton Fish Park Pavilion.—The two new areas and stairways will provide entrance to the men and women's comfort stations directly from the park and will eliminate the continuous traffic through the main

building and interference with the gymnasium work of the Bureau of Recreation on the main floor. Provisions also are made for the hoisting of ashes from the boiler room, and will overcome the necessity of carrying these ashes up the main stairway and through the central corridor on the main floor, and will also facilitate the delivery of coal. New Wash basins were installed in the toilet room; floors were properly drained and the drains connected to the sewer. New leaders were furnished and put up and connected to drains; the drains long clogged up were cleaned out and repairs were made to the balance of the sheet metal work of the roof.

Areas and stairways	\$680.00
Plumbing	505.00
Roofing and sheet metal work	184.00
Total	

Thomas Jefferson Park Pavilion.—This work included the taking out and replacing with new the old corroded and dangerous hot water pipes and coils in the hot water tanks, and repairs to leaks in the boilers. The Lawler mixer was installed on the hot and cold water mains to regulate the temperature of the hot water at the shower heads to prevent scalding. The vault lights provide light for the boiler room.

Repairs to the heating plant and hot water supply lines	\$370.00
Lawler hot water mixer	250.00
Vault lights	195.00

Central Park, 86th Street Garage and 97th Street Stable.—This was the continuation of work on the reorganization of shops and stables which was started in 1915 and included the extension of floor space and the installation of a heating plant in the garage. The boiler used here was an unused one removed from the greenhouses in Central Park. Additional skylights and a ventilator were installed over the blacksmith's shop, in the locker and clipping rooms of the stable, and a terra cotta enclosure with doors and windows put up at the locker and clipping rooms thereby completing entirely a permanent enclosing of the entire shed structure.

Garage—	
Cement floor	\$175.00
Steam heating	593.00
97th Street Stable—	
Ventilating and skylight	\$139.50
Terra cotta enclosure	

Central Park, Sheepfold Building.—The exterior woodwork including cornices, rafters, dormers, etc., was repaired. This work was followed with the repairing of all the sheet metal work, gutters, leaders, etc., together with repairs to slate roofing. The roof was made entirely water-tight and prevented further damage to the building.

Carpenter work	\$435.00
Roofing	505.00

Central Park—Arsenal, Menagerie and Restaurant Heating.—Decision having been reached to demolish the Arsenal Building when quarters in the Belvidere and in the Sheepfold Buildings are provided for the Weather Bureau and Police Department, respectively, it was necessary to provide

heat for the Menagerie Buildings and restaurant which heretofore were heated by the boilers in the basement of the Arsenal. The New York Steam Company service was installed, and at a cost of \$998.00 the present heating mains, radiators and coils in the Menagerie Building and the restaurant were overhauled and connections made with the New York Steam Company's mains. These new methods of heating effected a saving of \$11,000 per annum.

Carl Schurz Park—Gracie Mansion.—The verandas which were in a dangerous condition were reconstructed; new shutters provided and hung, and general repairs made to the exterior of the building. The entire roof was repaired and new gutters and leaders put up. The exterior painting was done by Park Department painters.

Carpenter work	\$680.00
Roofing	400.00

Plaza, 5th Avenue and 59th Street.—All the lamp posts on the Plaza were wired and put into service. Trees and sodding planted and three bluestone crosswalks laid to provide connections at street crossings and to protect grass borders.

Wiring	\$350.00
Trees and sodding	276.00
Bluestone crosswalks	276.00

Seward Park Pavilion.—The old and unsanitary plumbing fixtures in the toilet rooms were removed and modern fixtures installed and rearranged to provide facilities and accommodations for the intense use of this station. The entire interior was overhauled and painted and made as sanitary as the conditions would permit. New flue connections were made to the boilers and the heating mains repaired and covered.

Plumbing	\$990.00
Heating	198.00
Painting	240.00

East 17th Street Park, Shelter House.—A new tin roof was put on the structural steel shelter in this park at a cost of \$525.

Corlears Hook Park.—A shed frame with canvas roof was constructed adjoining the present farm garden house consisting of a heavy wood frame with canvas roof made in three sections, arranged to be rolled up. Cost \$340.

Preliminary Plans.—Preliminary plans were prepared for the following buildings:

Carousel Building	\$20,000.00
Shelter and comfort station at 86th Street and 8th Avenue	17,500.00
Underground Tool House, Bryant Park	3,000.00
Proposed Extension to Carmine Street Baths, including swimming pool,	
comfort station for men and women, playground room and pavilion	70,000.00
Playground building for playground at 1st Avenue, between 66th and 67th	
Streets	10,000.00

Respectfully submitted,

J. KRAUS,

Architect.

PARK AND STREET TREES

The most important accomplishment in the maintenance of park and street trees during the past year was a definitizing and carefully thought out improvement of work methods.

Work Methods.

Under the supervision of the Forester the park employees engaged on tree work now have a definite program to follow throughout the year, and they are further trained through field and written instructions as well as illustrated indoor lectures to do their work with knowledge of fundamental principles. Every line of work is now done within its own appropriate season. The hopelessly diseased, as well as dead trees of which there was an accumulation of nearly three thousand, were marked with white bands in the fall and removed during the winter. Winter was determined as the appropriate season to do heavy work of this sort, besides the fact that the infestations were thus destroyed before the beetles had a chance to emerge from their winter quarters. All the general pruning work was confined to the late summer and early autumn instead of the winter, on the theory that the men can climb the trees at that season with greater safety and can discern the dead branches from the live ones with greater certainty than they could in the winter.

Fertilization.

The autumn season is also taken advantage of for the proper distribution and preparation of manure as a fertilizer. New compost piles have been prepared and stored at various points of the city, each pile consisting of alternate layers of manure, leaves and soil. The manure was obtained gratis from neighboring stables and the leaves were gathered from the lawns, where formerly they were burnt and wasted. The well rotted manure in the two large pits in Central Park was utilized not only for covering the shrubbery beds and lawns, but also for feeding the older and weaker trees of special significance. This, too, was a new departure from the former forms of fertilization. The manure in such treatment is applied in mixture with rich soil dug in around the feeding rootlets of the trees in a trench away from the main trunk. When these trenches were dug up around the trees in City Hall Park, the soil consisted of practically nothing more than cinders and gravel, thus showing the necessity for such treatment on most of the more valuable trees in the city.

Planting.

The planting both in the autumn and spring is now conducted on new and improved lines. Trees are adapted to the special local soil, moisture and light conditions, and the planting methods were improved upon.

In the selection of planting material special attention was paid to the quality of the stock as well as its proximity to New York City.

Insects.

In the matter of insect control great progress was made. A close study of the insect infestations of the city trees revealed about half a dozen new enemies of great significance. Practically all the elms were infested with the scurvy scale, for which a campaign of systematic spraying was installed. The material heretofore used against this and other similar sucking insects had not been satisfactorily prepared, and that, too, received due attention. The hickory bark beetle, another serious pest, which during the past ten years has practically destroyed the hickories of this vicinity, was this year for the first time fought methodically. In fighting our old enemy, the Tussock moth, special stress was laid on destroying the egg masses of the insect in the fall and winter before the caterpillars hatched. Where trees were growing on lawns, the egg masses were allowed to fall on specifically designed dark canvas covers—a method which insured the absolute destruction of every egg, which, if allowed to fall on the grass, would have otherwise hatched there as well as on the trees.

In addition to these changes in work methods there were many minor improvements, which in the aggregate had a strong bearing towards making more effective the work of the tree division.

Improvements.

Steps were taken to label all the representative trees in the various parks; a new spraying apparatus was applied for; a self-recording system of office records was installed and a system was inaugurated to handle the woodlands on modern forestry principles, which included plantations, the retaining of leaves and the underplanting of thousands of small trees obtained from the state nurseries and other sources.

Street Trees.

The interest in street trees has grown to such an extent during the past year that nearly four thousand requests were received from citizens calling for advice and personal inspection. The forester could not possibly cover all these numerous cases and the assistance of a trained gardener had to be called in, who acted in the capacity of inspector.

Co-operation of Civic Organizations.

In this connection there should be mentioned the valuable aid rendered by the Civic Art Committee of the Women's Municipal League of the City of New York in the campaign for more street trees.

The Department also wishes to recognize the valuable aid rendered in one phase of our tree work by the Tree Planting Association.

While we are heartily in favor of securing a border of trees on the sidewalks adjoining the public schools of the city, the appropriations given to this Department would render it impossible for us to obtain this result, unless in future years we are successful in obtaining a specific amount for this purpose in the city budget.

In the face of this difficulty the Tree Planting Association has offered to provide funds to treat some important school fruitages and the plantings have been made. Doubtless during the next year the Association will be willing to continue their good work in this respect in connection with the Park Department.

Reforestation.

The parks of the city are distinctly hampered as far as Manhattan and Richmond Boroughs are concerned, in the matter of reforestation. It is true that there are extensive nurseries in the Boroughs of Queens and The Bronx, but these nurseries were only recently established, and it is found that the needs of those boroughs are such as to make it impossible for them to furnish other sections of the city with the required trees for planting. The only surplus stock which they have in hand consists of varieties which experience has shown cannot be successfully grown in congested areas and under the soil and subsoil conditions of Manhattan.

At the present time, therefore, the trees of reforestation and replacement are purchased out of budget appropriations from nurserymen whose offerings are carefully passed upon, after bidding has been secured, by the Forester and Purchasing Agent of this department at the nurseries in question.

Further details of the system employed will be found elsewhere in this report.

Meanwhile, through co-operation of the State Conservation Commission, it is expected that we can secure certain varieties of trees from up the state, so as to plant places where extensive reforestation is necessary, such as Central Park, High Bridge Park, and the slopes of parks adjacent to the Manhattan Valley.

An effort was also made to secure trees from the nurseries established by the Bronx Parkway Commission. But a careful inspection of those nurseries made it clear that they had no trees that would be available for our purposes. It is hoped that this source of supply may become available within the next year, and in addition that the New York Botanical Gardens may give us some assistance in this matter.