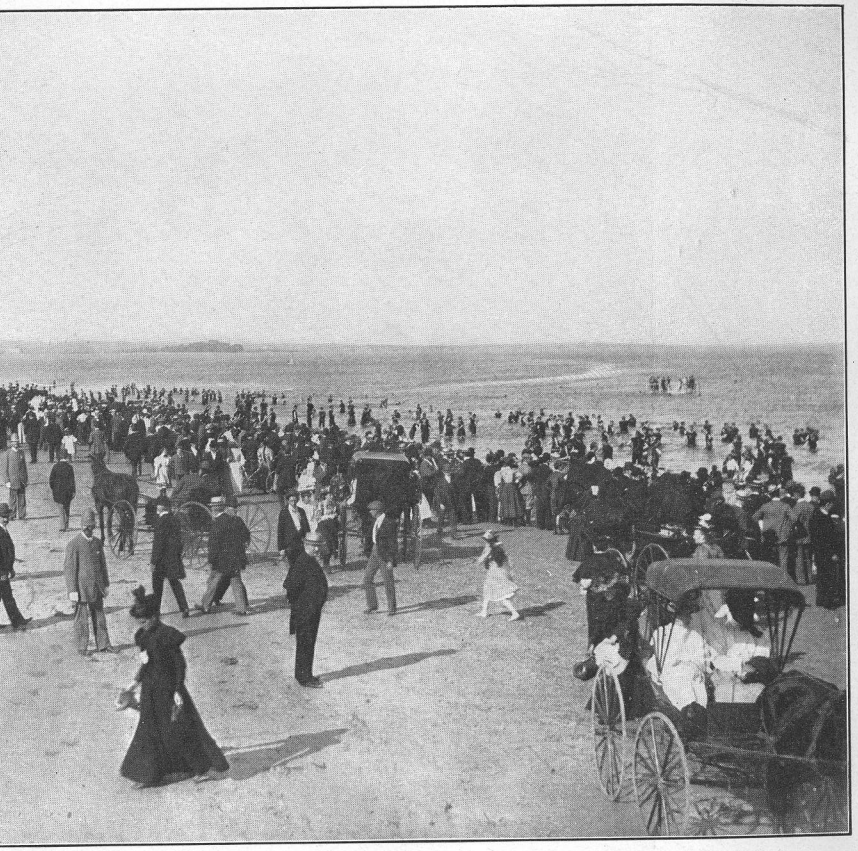


INK OF ITS VALUE.

APPENDIX A.—PUBLIC BATHING PLACES.

ONE of the most enjoyable and health-giving recreations for the people in a place with a hot summer climate is bathing, especially open-air swimming; but the natural facilities for it in Washington are not good. Sea bathing is unattainable within a reasonable distance, while the shallowness of the small streams and the muddiness and disagreeable banks of the Potomac and Anacostia do not make the fresh-water bathing attractive. In spite of these difficulties there is a good deal of unregulated bathing in retired places out of sight of the police, and the entirely inadequate temporary provision for bathing in the basin of Potomac Park is very largely used.

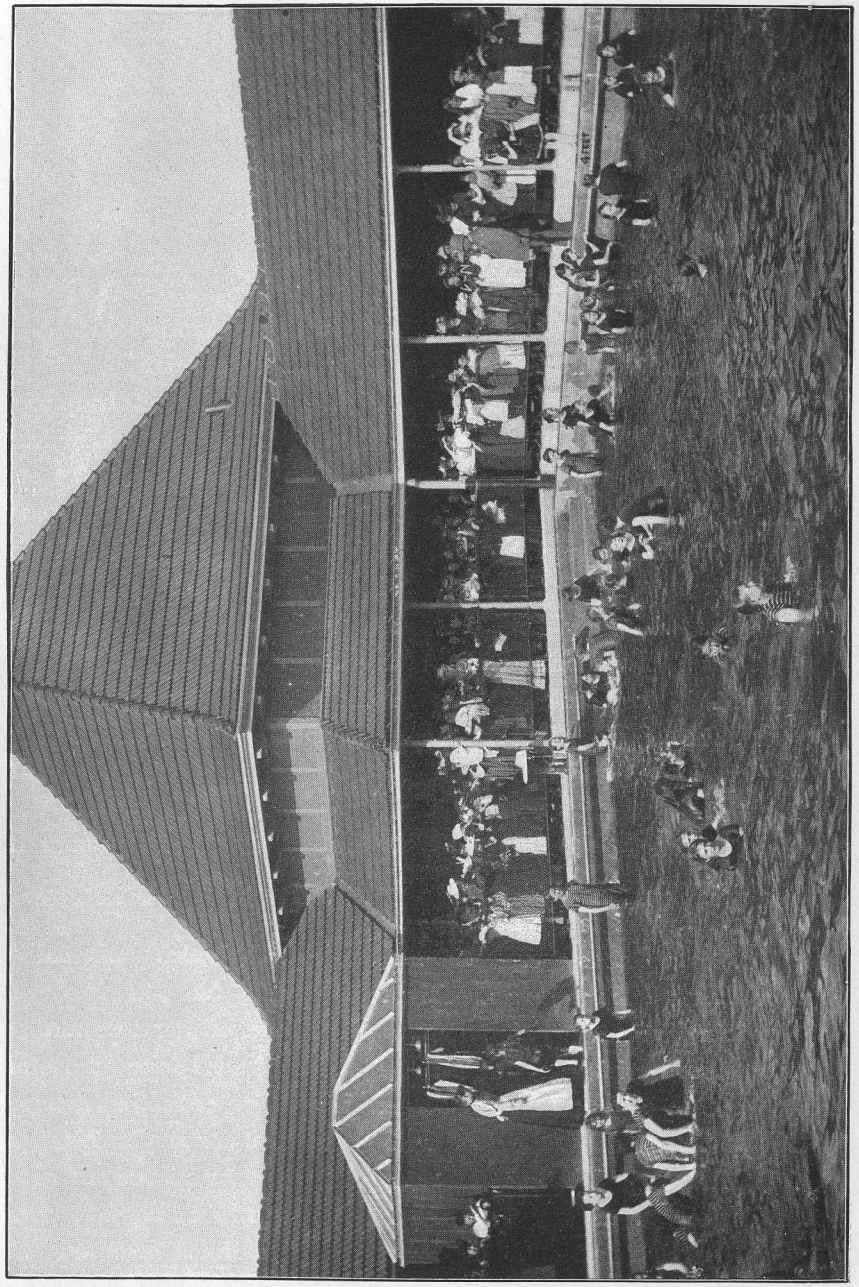
When a city has any place on sea or lake or river that is naturally well fitted for bathing, the popular appreciation of it quickly builds up some means of using it conveniently. Private enterprise erects bath houses and supplies bathing suits and towels in order to profit by the obvious public demand. But when, as at Washington, there are no natural facilities for bathing, the public demand is seldom sufficiently apparent to lead private enterprise into the large investment necessary to create good bathing arrangements. At Richmond, Va., recently, a private company built as a business venture a large open-air swimming basin, lined with concrete, supplied with filtered water purchased from the city, and surrounded by dressing rooms and shelters; but usually such undertakings are too uncertain in their financial outcome to attract private capital, and therefore when a city lacks natural advantages for bathing, it usually becomes necessary for the municipality to deal with the problem.

The public bathing establishments which abound in European cities and in many of our own may be divided roughly into three classes. The first, and perhaps the most important, includes those intended for the poorer people, who suffer most from the summer heat, who most

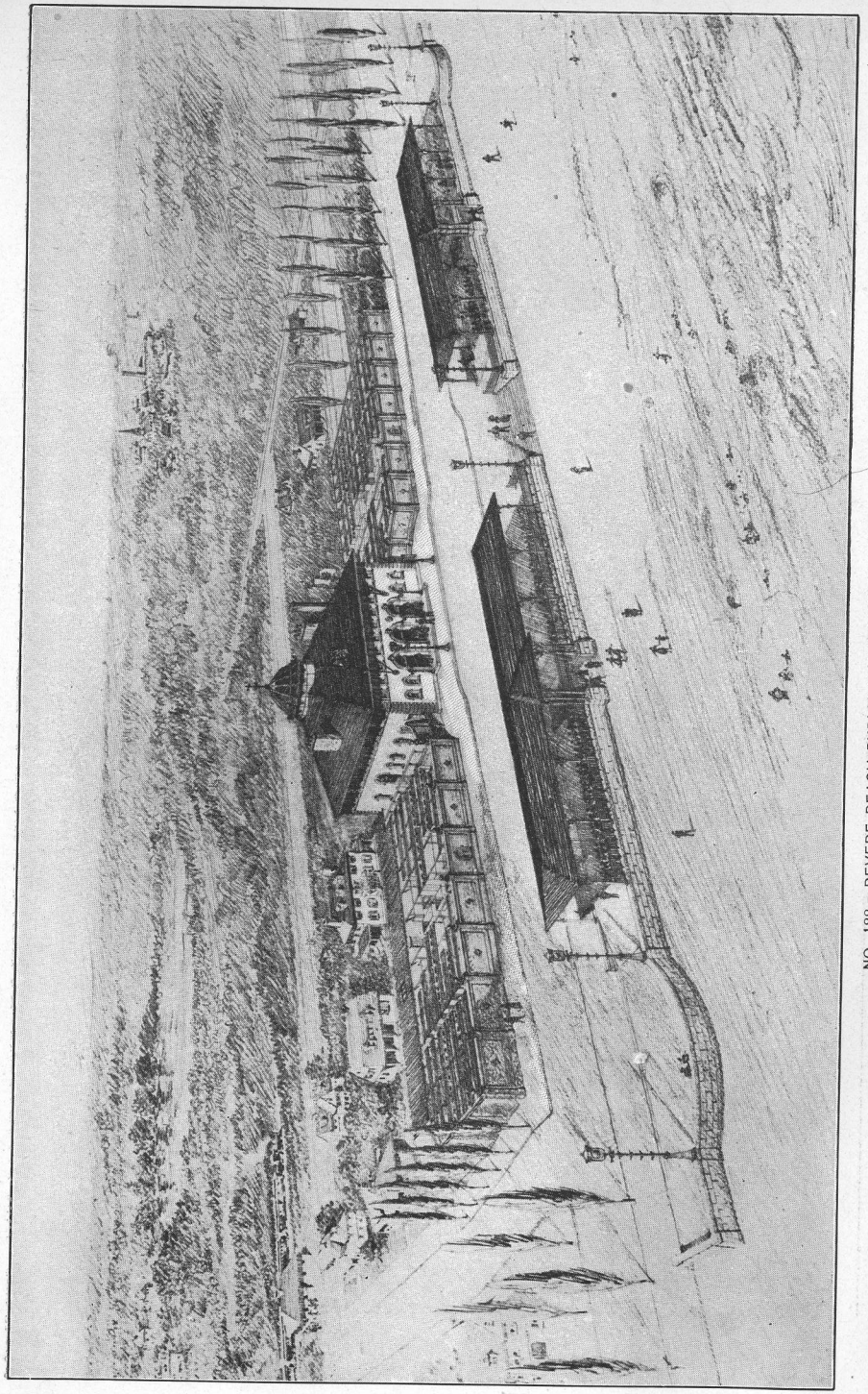
need the healthful refreshment of the bathing, who can not go out of the city to get it, and who can afford to pay little or nothing for it. The establishments of this class are free or open upon an almost nominal charge—1 cent, 2 cents, or at the most sometimes 5 cents. The commonest type is the floating bath, a great, wooden, scow-like affair, built around four sides of an oblong space, which has a perforated flooring a few feet below the surface of the water. The scow serves as a platform round the bath and supports the dressing rooms or lockers, which with a high board fence inclose the whole affair. The water space is sometimes roofed over and sometimes open. These floating baths are anchored next the shore in river or harbor at convenient points during the summer months.

Another form differs only in being built on piles or on permanent piers running out from the shore, and is sometimes open on the outer side when the opposite shore is distant and no near passing vessels would be annoyed by the sight of the bathing; for in establishments of this class, in which the sexes are always separated, the bathers are commonly nude, to their own greater comfort and enjoyment as well as for economy and simplicity of operation and maintenance. The bathers bring their own towels and bathing suits, if they wish them, and are only provided with small dressing closets or mere lockers in which to place their clothes. The running expenses are very low and the value to the people is such as to justify the establishment of such bathing places at several points along the water front where they can be conveniently reached from different quarters of the city. The construction of bathing places of this type should be very simple and inexpensive, but the arrangements should be carefully thought out so as to make them absolutely convenient, and the regulations should be kept as simple as possible and contrived with a studious regard for the habits, tastes, and prejudices of the bathers in order to encourage the use of the baths at the season when no one is inclined to exert himself to overcome difficulties.

The second class of establishments, which have usually grown up at beaches where the bathing is naturally good, afford more convenient dressing arrangements, supply towels and bathing suits, and provide for open-air bathing of what might be called a social sort under pleasant surroundings, in view of the public, for large numbers of both sexes. The bathers are charged an amount which generally varies between 10 and 25 cents, according to the accommodations furnished,



NO. 189.—SWIMMING POOL, GARFIELD PARK, CHICAGO.



NO. 188.—REVERE BEACH PUBLIC BATH HOUSE, NEAR BOSTON.

and although the location is often somewhat remote from the center of population the patronage is always large and profitable upon Sundays and holidays in hot weather. It is only under very favorable circumstances, however, that private enterprise can afford to provide thoroughly adequate, convenient, and sanitary arrangements, because the attendance is extremely irregular and will not pay interest on a costly plant at moderate rates of charge.

For these reasons, and because of the difficulty of regulating the sanitary and moral conditions of such private places, municipalities have in many instances provided their own public bath houses of this class. The best example is probably that at Revere Beach near Boston, under the control of the Metropolitan Park Commission of that city, shown in the accompanying

Public bath, Revere Beach, Massachusetts.

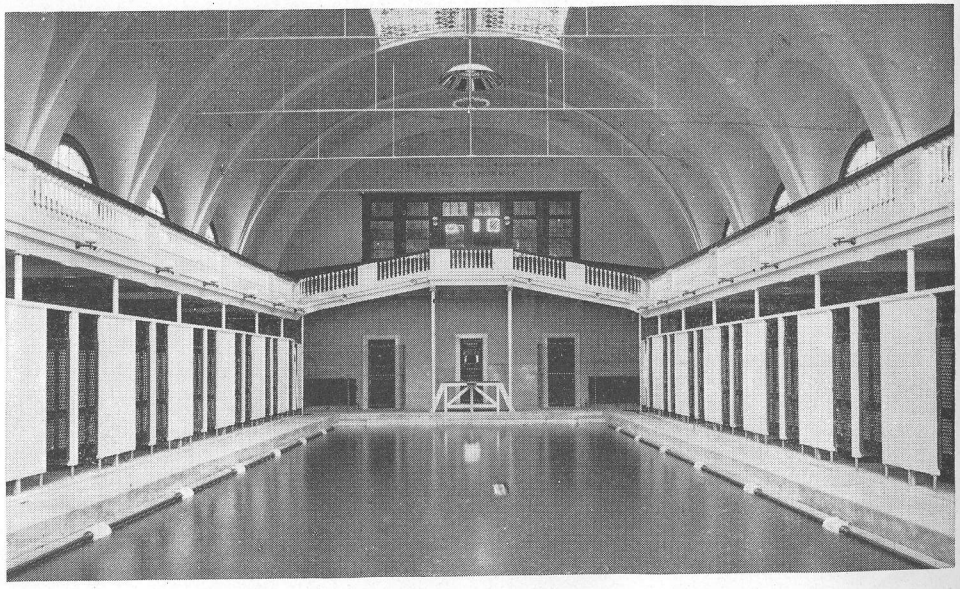


Public Bath, Town of Brookline, Mass.

illustrations. Since the date of the illustrations the accommodations have been considerably enlarged to meet public demand, and now include 1,700 separate dressing rooms within inclosed yards for men and for women, flanking a central brick administration building. This contains offices where keys, suits, and towels are given out and valuables stored, toilet arrangements, an emergency room, and the like. It is supplemented by a building containing a police station and a laundry, where the suits and towels are washed, sterilized, and repaired. To economize space additional provision is now being

made for a general locker room, for boys who do not care for separate dressing rooms, where the charge will be 10 cents, instead of 25 as for adults having private rooms.

During the summer of 1900 the bath house was used by 153,299 bathers, with a maximum number in one day of 7,529. The running expenses were $22,381.17, and the receipts were $34,374.30, leaving a surplus of $11,993.13 applicable to repairs and extensions. The total cost of land takings for control of the beach has been $1,117,778.29, and the total cost of buildings, roads, and other constructions and miscellaneous expenses during five years has been $564,055.62. It is universally conceded that these large sums have been well invested and



Public Bath, Town of Brookline, Mass.

are bringing adequate returns to the people in relief and refreshment during the heated term; but if this is true in Boston, where the summer heat is greatly mitigated by the cool ocean breezes and where there are numerous seashore resorts within easy reach, it is manifest that the benefit to Washington of similar facilities would be in proportion to its population immeasurably greater.

A third class of public bathing places, as yet not very greatly developed in this country, is that of inclosed swimming pools and other baths for winter use. These have been provided for some years on a limited scale in the larger cities by private enterprise and are to be found in a number of athletic clubs

Public bath, Brookline, Mass.

and gymnasia, but it is only recently that municipalities on this side of the water, recognizing the value of such baths to the health of the community, have begun to erect them as public institutions. New York led the way, and a few other places have already followed the example. The accompanying illustrations show the public bath erected in 1896 by the town of Brookline, Mass., at a cost of $50,000. Besides other baths and dressing rooms it contains a swimming basin, 80 feet by 26 feet, supplied with a steady flow of fresh water and kept at a uniform temperature. It is used on different days of the week by men and by women at a charge of 5 to 15 cents for residents and 25 cents for nonresidents, and one day is reserved for the use of a swimming club of limited membership. The running expenses during 1900 were $7,994.10; the receipts, $6,151.50, and the number of bathers, 51,453.

As mentioned in the body of the report, we believe that open-air bathing places of the second class, although on a much smaller scale than at Revere Beach, should be provided in the improvement of the Anacostia, and we believe that there will be ample justification before long for an important establishment of this sort near the present bathing place in Potomac Park, in connection with the development of the central group of parks. Ultimately there might be good opportunity to develop at the same point a winter bathing place of the third class.

APPENDIX B.—RELATION OF THE ANACOSTIA DAM TO TIDAL SCOUR.

ASIDE from the question as to whether the summer current of the Anacostia, unassisted by a tidal ebb and flow, is sufficient to maintain the basins above the proposed dam without danger of stagnation, there is another objection which might be raised against any interference with the normal tidal movement by a dam, namely, that it would reduce the scouring current, which would otherwise tend to prevent silting in the commercial channel lower down.

The general theory of tidal scour has been made a subject of special study by the United States engineer officers in charge of harbor and river improvements, and its application to the problem of the Anacostia can be most safely worked out by them; but without assuming any intimate technical knowledge of the matter we will state the special facts bearing on this case:

The water of the Potomac always carries a large amount of silt, which begins to settle on the bottom whenever the current ceases to move rapidly. The slower the current the more silt is deposited.

When at the head of any channel there is a large basin, over the whole area of which the water must rise and fall at every tide, a correspondingly large volume of water must pass in and out through the channel at every tide, and the amount of water passing in or out through a limited opening during the few hours that the tide runs in one direction obviously determines the speed of the current. If the basin be doubled, about twice as much water must pass through the opening in a given time and it must move about twice as fast to do it. If the proposed basins on the Anacostia above Massachusetts avenue could be made of sufficient area and the tide were allowed to flow freely in and out, it is clear that the current could be made swift enough in the lower channel, first up and then down, to keep the silt always stirred up so that none of it would settle on the bottom and no dredging would be required to maintain the channel. That is the theoretically perfect condition of tidal scour, as we understand it.

But, while the conditions would be perfect in the channel, in the

broad basin above there would be practically no current and the deposition of silt would take place there very rapidly.

If, on the other hand, by the construction of a dam at Massachusetts avenue, the channel were brought practically to a dead end at that point its upper portion would be in substantially the same condition as the whole basin under the first arrangement, that is, without current, and the deposition of silt would take place there very rapidly. The lower end of the channel would have some current, though much less than before. On the average, then, the channel would have a comparatively sluggish current, and silt would be deposited throughout its length only a little less rapidly than in the basin under the first arrangement. As the area of the channel, however, is very small as compared with that of the basin, the total amount of silt deposited within it must be but a small fraction of that deposited upon the extensive bottom of the basin under the first plan.

When, as often happens, a tidal basin can be cheaply provided and no important interests are affected if it becomes gradually shoaled, it is obviously wise to avoid the necessity for constant channel dredging by its use; but where, as on the Anacostia, the basin must be first dredged out and then, for sanitary reasons, maintained by dredging at a constant depth, it would appear to be more economical in the long run to keep the silt from flowing into the basin at all and to confine the future maintenance dredging to the much smaller area of the channel, where it will be assisted by at least some tidal current.

So far as the silt of the Anacostia River itself is concerned, although for its size a very turbid stream, the material which it carries in suspension is not large in total amount and is comparatively coarse, and it would therefore be deposited in the first still water at the head of the basin, whence it could be removed from time to time as necessary.

Thus, if the muddy tide of the Potomac should be excluded completely from the basin, not only would the total maintenance dredging for the system be less and the park lakes be free from the objectionable and inconvenient tidal fluctuation, but the water would be clear and clean instead of constantly muddy. The possibility of attaining this result appears to depend, as stated in the body of the report, upon whether the summer flow of the Anacostia is sufficient to supply the evaporation from the large lake surface and furnish a surplus for the renewal of the water. On this point the Commission has been unable to obtain sufficiently reliable data upon which to base a conclusion.

APPENDIX C.—A LETTER RELATIVE TO THE PROPOSED TREATMENT OF ANACOSTIA PARK.

35 Fairview Avenue, South Orange, N. J.,
November 29, 1901.

DEAR SIR: Referring to the questions relative to the proposed establishment of a water park at Washington, D, C., which were under discussion at the interview with the Park Commission at the Capitol in October, I beg leave to state that Colonel Allen requested me (inasmuch as the surveys and the preparation of the plans for the Anacostia River improvement had been placed by him in my immediate charge) to take up the consideration of the questions in reference to which you desired suggestions and to write you in regard to the same.

The desirability of the establishment of a water park in the upper part of the Anacostia basin seems to me to be beyond question. When the project for the proposed Anacostia improvement was under consideration in 1898 we were confronted with the problem of reclaiming or utilizing in some way the wide area of flats and marshes lying between the Pennsylvania Railroad Bridge and the District line. The extreme upper limit of commercial development of the river desirable seemed, at that time, to be Benning Bridge, on a main line of travel, but even then I was very doubtful about the practicability or advisability of using any part of the wide flats just below Benning Bridge and west of the river channel, when reclaimed, for residential purposes, for they consist of the lightest alluvium and are saturated with sewage. Between Benning Bridge and the District line conditions seemed to require some form of park development, and with this view I made studies for lakes with curved shore lines, which we termed tidal reservoirs, working on the basis of balancing the cut and fill, the reservoirs to be so arranged that they might be utilized in any possible future park development and at the same time serve to impound tidal water

to aid in the maintenance of the navigation channels of the river below. Owing largely to the lack of funds and available time, it was found impracticable to develop this part of the project at that time, and therefore it was left open and referred to only in a brief and general way on page 12 of the report. The plan of the Commission for the establishment of a water park on this part of the Anacostia will, therefore, not only not conflict in any way with the proposed river improvement, but, on the contrary, furnishes a most happy solution of the difficulty in the treatment of the wide area of flats here found.

The channel improvement proposed for the Anacostia had two objects in view—(1) a channel sufficient to meet the needs of naval vessels from the mouth to Navy-Yard Bridge, and (2) a sufficient channel for commercial vessels loaded with lumber, building materials, coal, etc., destined for the northeastern section of the city. Washington is not a manufacturing city, however, and so much heavy freight is now carried by rail that the needs of this part of the city, in the matter of water transportation, would probably be sufficiently met if the 16-foot channel proposed above the Navy-Yard Bridge had its upper terminus at the line of Massachusetts avenue extended, which, as I recall, is the proposed lower limit of the water park. This arrangement would have the advantage that the proposed bridge on the line of Massachusetts avenue extended, could be made much simpler in character and less expensive.

The question as to whether the tide should be allowed to ebb and flow in the lakes of the water park is one of considerable importance. All the authorities agree that the tidal prism of such a river should be preserved in order to maintain the integrity of the channels below. I made computations on this point and found that with the improvement proposed in the report of 1898 the tidal prism would be inadequate to maintain, in the channels proposed below Navy-Yard Bridge, a velocity sufficient to prevent silt deposit, and if the tidal flow be excluded from the water park these adverse conditions would, of course, be increased. At the same time I am aware that from a landscape point of view the rise and fall of the tide presents practical difficulties in the maintenance of a neat shore line. In the tidal reservoir of Potomac Park we built a masonry wall with a considerable batter, which served well, a slope wall having been found unsatisfactory. With Potomac River water, a sand or gravel beach would soon become covered with silt and be unsightly. To my mind, however, there is

nothing comparable to a clean-cut line of contact between the water surface of the lake and the grass slopes of the shore, which can, of course, only be secured by impounding the water at a fixed level. This, however, would probably be impracticable, by reason of the probable contamination of the fluvial waters of the Anacostia above the District limits by the discharge into the stream of its tributaries of raw or partially treated sewage, which conditions would undoubtedly render the impounded water unhealthful, if not offensive. It would, probably, be needful, therefore, to provide for the ebb and flow of the tide, at least between half tide and high tide, in order to secure a sufficient circulation of water. The channels below can, of course, be maintained by dredging, which would probably be needed to some extent even if no part of the tidal prism were impounded. It is suggested that a level of high tide (3 feet above low tide) would be most convenient for the maximum water line of the lakes.

As the tides in the Potomac often rise to a height of 4 to 5 feet under the influence of easterly winds, provision would need to be made for excluding these higher tides as well as freshets, for which purpose an earthen embankment or dam, with suitable sluiceways and gates, would suffice. Such an embankment might be built along the line of Massachusetts avenue, and serve also as a roadway in lieu of the proposed bridge, the sluiceways passing under the roadway. The top of the embankment would need to have a minimum grade of 14 feet above low tide to be secure against the backwater of freshets, but the park areas might, it is suggested, have a general level of 6 feet above low tide and be efficiently drained, inasmuch as the Potomac freshets do not reach their maximum height until some two or three days after the local rains have ceased.

During my connection with the Potomac River improvement, dating from the inception of the work in 1882 and continuing to 1899, I made a special study of the various physical conditions appertaining to the river and the reclamation of its flats, and it may be that there are other points on which I can give you information or make some suggestion. If this should be the case, I shall be glad to be of service to you.

Very truly, yours,

JOHN B. DUNCKLEE,
Civil Engineer.

MR. FREDERICK LAW OLMSTED, JR.

APPENDIX D.—A COMPARISON OF ALTERNATIVE PLANS FOR THE TREATMENT OF ROCK CREEK VALLEY.

FIRST. To build a large covered masonry culvert or sewer for the creek, and to fill around and over this structure so as to obliterate the valley and raise it to the level of the adjacent lands; constructing a parkway or boulevard upon a portion of the filled land and subdividing the remainder into streets and lots for sale.[1]

Second. To improve the present open channel of the creek, regrade its banks, and improve them for park purposes, and to construct roads and paths within the park thus formed, spanning the valley by frequent street bridges to provide close connection with Georgetown.[2]

The arguments for and against each of these plans may be divided into considerations of expense and considerations of direct benefit to the community.

As the question of cost is merely comparative we need not discuss those items which would be substantially the same in either case. The most important of these are the cost of land taken,[3] the cost of intercepting sewers,[4] and the cost of roads and other surface features of the parkway.

Relative expense.

The great expense of the first plan lies in the covered waterway, which is estimated in Captain Rossell's report at $2,358,925, and the

[1] Discussed, except as to construction of parkway, in Sen. Mis. Doc. No. 21, Fifty-second Congress, second session.

[2] Proposed by committee of Washington Board of Trade, December 15, 1899. See Park Improvement Papers No. 7, Appendix I.

[3] The valley area which would have to be taken for carrying out the improvement would be about the same in either case, but in the case of the covered channel a portion of it could afterwards be sold, as allowed for later.

[4] Whether the channel is open or covered, intercepters must be built to take the sewage. Senate Mis. Doc. No. 21, 52:2, p. 10. These are now built in part.

filling and grading at $1,752,424, amounting, with proportionate contingencies of $411,134, to a total of $4,522,483.[1]

The corresponding expenses under the open-valley plan have been approximately estimated at $100,000[2] for the improvement of the channel, $230,000[3] for excavation and grading, and $200,000 for retaining walls, etc., amounting, with $53,000 contingencies, to a total of $583,000.

To these preliminary expenses must be added, in the case of the second plan, the cost of building additional bridges across the valley and renewing some of the existing bridges, which, according to their number and character, might amount to from $1,000,000 to $1,500,000, to be expended from time to time as occasion may demand, while from the cost of the first plan is to be deducted the net salable value of the land not occupied by streets and parkways, amounting to about 1,160,000 feet.[4] While any estimate of this salable value can be little more than a guess, we may accept as a basis the estimates given in Captain Rossell's report, taking as the minimum 86 cents and as the maximum $2.58 per foot.[5]

This would give maximum gross returns of $2,992,800, and minimum gross returns of $997,600; or, after deducting the cost of neces-

[1] Senate Mis. Doc. No. 21, 52:2, p. 3.

[2] This figure of $100,000 provides for the removal of minor irregularities and the protection of the banks from wash.

[3] An approximate estimate by this Commission gives—

450,000 cubic yards of earth to be moved within the valley itself, at 40 cents	$180,000
100,000 cubic yards of earth to be excavated and removed to Potomac Flats or elsewhere, at 50 cents	50,000
	230,000

[4] This area is less than that given in Senate Mis. Doc. No. 21, because of the additional land required for a wide boulevard.

[5] The estimated value of these lands under condemnation in 1892 averaged 86 cents per foot, and the estimated value under sale was given as twice that amount. Senate Mis. Doc. No. 21, p. 7. The minimum value under sale assumed in this report is equal to the previously estimated value under condemnation, and the maximum value assumed is three times that amount. The maximum value is from nine to twelve times the present average assessed valuation of improved upland property in neighboring parts of Georgetown, and between three and four times the valuation of similar improved upland property in Washington.

sary streets, $130,000,[1] net gross returns not less than $870,000 nor more than $2,860,000.

From the above figures it would appear that under favorable circumstances the profit on land sales under the first plan might make its total cost some $400,000 less than that of the second plan, but that otherwise its cost might exceed that of the second plan by some $2,000,000.

This is not, however, quite a sound comparison, because, on account of the magnitude of the work and the length of time required for the settlement of the enormous fill under the first plan, it would be not less than fifteen and probably twenty years from the beginning of the work before the land or the boulevard would become available for use,[2] while the less costly second plan would be completed within five years. The interest charges, at 2 per cent, on the sums invested in land holdings and in construction under the second plan, would be nearly $400,000; but under the first plan during fifteen years they would amount to over $2,000,000, and, should they run for five years more, would amount to more than three and a quarter millions.

It is evident, after all due allowance is made for the imperfect data upon which the comparison is based, that the first plan would under any circumstances be far more costly than the second plan with its open valley.

Relative advantages.

The parkway provided under either plan would be in itself agreeable and dignified. Under the first, or culvert plan, there would be a broad, central roadway, flanked by four rows of trees in turf parkings, with promenades. Outside of these parkings would be wide streets for house frontage and for traffic, with the usual sidewalks and narrow parkings. The grades would be easy, the alignment agreeable, and the general effect, regardless of the quality of the abutting private property, would be similar to that of many of the notable boulevards of European capitals. But it is impossible so to disregard the appearance of the surrounding and inclosing buildings, for in boulevards of this formal urban type it is the buildings that fix the character, while the trees are merely a decorative adjunct.

The portion of Georgetown and Washington through which the line

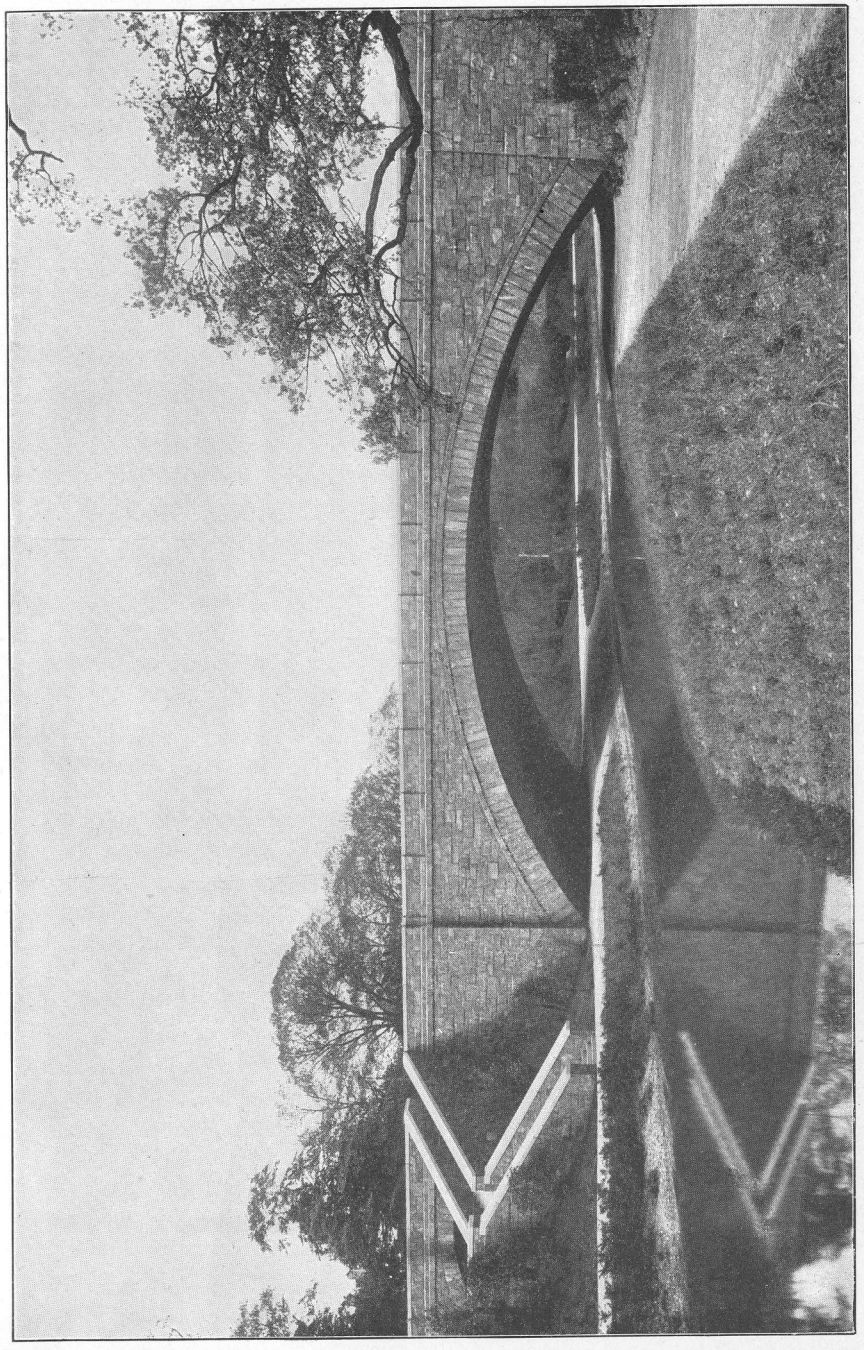
[1] 8 550 linear feet of 90-foot street, estimated at $13.75 per foot by District Commissioners' office, $117,562.50, plus 10 per cent for contingencies, equal $129,318.75.

[2] Senate Mis. Doc. No. 21, 52d Cong., 2d sess., p. 6.

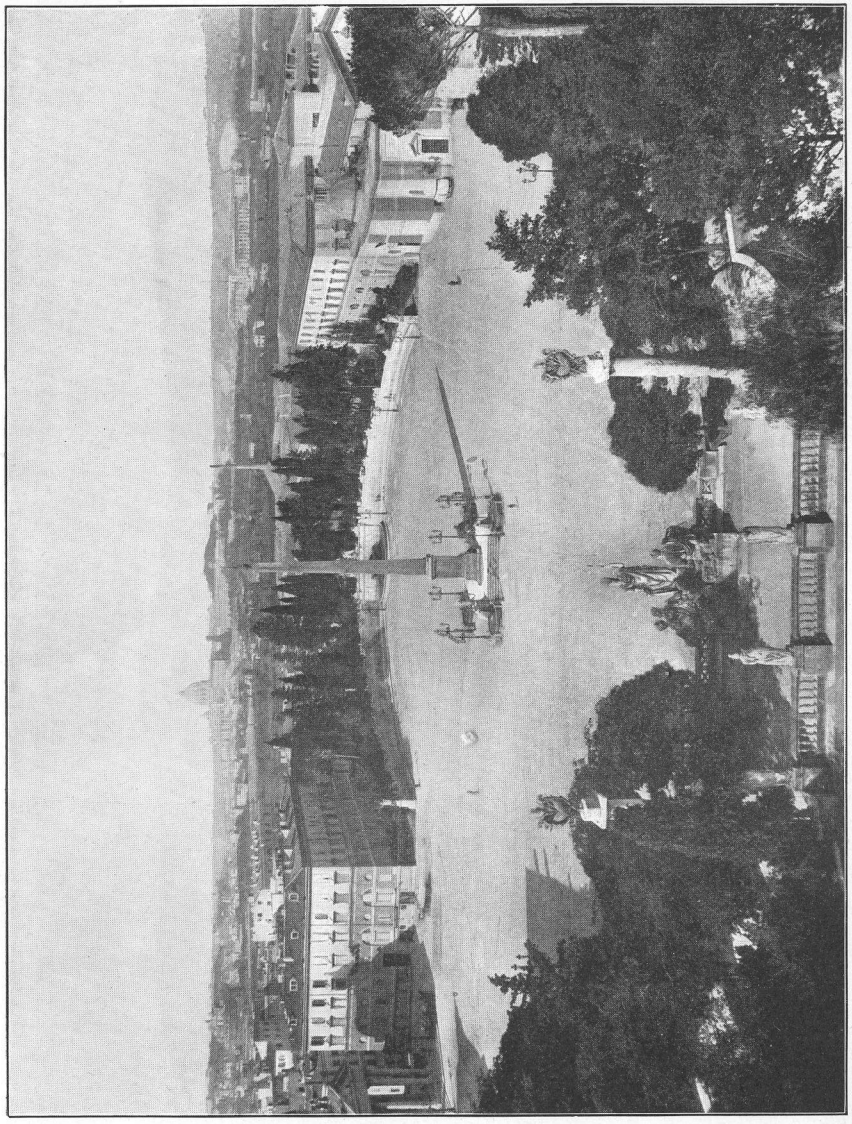
passes is now given over partly to manufacturing and partly to a poor class of residences. It is very far from agreeable in appearance, and it is hardly to be expected that it will become a first-class part of the city, because natural growth exerts no pressure in that direction. The tide of development can often be deflected by park and street improvements, but it can very seldom be reversed. A parkway, therefore, built according to the first plan would probably be lined by factories, tenement houses, and the like, on a level with the drive and separated from it only by the width of a street and four rows of tree trunks. A formal urban boulevard is very dignified, impressive, and interesting when it presents an agreeable aspect of city life, but when it presents a disagreeable aspect of city life and remains, as it must, just as intimately a part of that life it ceases to be satisfactory.

Under the second or open-valley plan the broad main drive accompanied by paths would run along a little above the creek, somewhat as does the new drive through Rock Creek Park. The present valley, which has been narrowed by the constant dumping of earth over its edge, would be widened by excavation at the restricted points to a semblance of its original form and clothed with turf and trees, while the necessary provision for business traffic and for building frontage would be made by border roads on a level with the existing streets. Along these border roads the same factories, tenements, and the like would doubtless be built as in the other case, but with the traffic roadways from 30 to 40 feet above the park drive such occupation would not intrude itself forcibly upon the attention, even if it were not entirely cut off from view.

Besides secluding the parkway from direct and intimate association with an unattractive part of the city, the higher elevation of the regular streets would permit them to cross the parkway above grade by bridges spanning the valley, so that the busy and growing traffic of pedestrians, wagons, carriages, and especially electric cars would not be brought into conflict with the pleasure travel. From every point of view this is to be desired. For the driver of a spirited horse, for the wheelman, even for one strolling afoot along the parkway, the necessity for crossing a busy thoroughfare at every block, together with several electric-car lines, would seriously mar the ease and comfort of a pleasure excursion, while the obstruction to business traffic by grade crossings of a thronged parkway is not to be ignored. In the city of Boston recently the objections to a long diagonal crossing



NO. 182.—BRIDGE ACROSS THE RIVERWAY, BOSTON PARK SYSTEM.



NO. 75.—PIAZZA DEL POPOLO, ROME. A COMMANDING SITUATION WISELY TREATED FOR THE ENJOYMENT OF THE PEOPLE.

of a traffic street with the principal parkway were felt to be so great that the city went to a large expense to provide a second street for traffic and electric cars, less direct, but passing under the park drive.

An advantage of the street-level boulevard that would offset, at least in part, the obstruction which it might offer to cross traffic is, that it would permit more connecting streets across the valley than would be reasonable or feasible with the open valley plan, where each cross street would have to be carried on a bridge. But with half the streets carried across on bridges, as is perfectly feasible, the interference of the valley with cross-town travel would be very slight. It is not a question of a uniform tide of travel from one side of the valley to the other; it is a question of travel between various regions somewhat remote on either side—travel which naturally tends into a few main arteries. If the valley were converted into a uniform plain the bulk of the travel would still continue to flow on a few principal lines, and if these be well provided for by bridges the absence of a few intermediate crossings will be of little consequence.

Objection has been made to a valley parkway secluded in any degree from the streets by difference in level—particularly if the seclusion be increased by trees and bushes—on the ground that it would be very difficult to police in such a region as that bordering upon Lower Rock Creek. This raises a problem not to be lightly pushed aside; but if carried to its logical conclusion, it means that we are to have in the poorer quarters of the city no parks in the least degree retired from the streets or materially differing in treatment from their bald and sordid surroundings; for any park is more liable to abuse than is a street. The answer to the objection is that we can not have good things in this world without paying for them and that part of the price of parks is the policing of them. The attempt to secure the policing of parks as a mere incident of street policing is not a wise policy and must in any large city give way to a regular and systematic policing of the parks. Moreover, in this particular case the difficulty may easily be exaggerated, for the fact that the sides of the valley cut off the sight of adjacent streets and houses from the main drive and paths does not necessarily mean that the valley itself is to be filled with dense thickets and somber groves. It may, indeed, be open and sunny, with but enough trees to give desirable shade.

It would appear, then, that the open-valley project would afford the more satisfactory parkway and that its cost would certainly be much

less than that of the culvert plan; but there are still other points to be taken into consideration, of which the most important is, perhaps, that the culvert plan would add a considerable area to the building land of the city, from which in time a large income would be derived in taxes. The same argument may be raised against the withdrawal of any park land from commercial occupancy, and it is merely a question whether in this case the value of the park-like borders to the drive and its partial seclusion from disagreeable surroundings would be worth the loss in taxes. In our opinion it would be, especially when it is considered that the potential purchasers of this land are not likely to be lost to the District as taxpayers, but will simply purchase other private land, increasing its value by improvements and paying the same taxes upon it. This raises the question, too, whether it is a wise policy and in accordance with our principles of government for the public authorities to go into real-estate business in competition with the citizens. There appears to be at present no lack of land for sale in Washington, but rather a lack of sufficient market, and for the Government to put additional land upon that market would seem a questionable blessing. If the Government is not to go heavily into real-estate speculation in competition with the landowners of the District, the cost of the culvert project becomes so enormous as to be utterly out of the question.

It is our conclusion, then, that the Rock Creek parkway should be treated as an open valley, crossed as often as may be necessary by handsome and substantial bridges, flanked by traffic roads connecting on a level with the adjacent city streets, and including at a lower level near the stream a drive or drives and such paths as may be needed.

APPENDIX E.—BOTANICAL COLLECTION.

THE advantages to botanical science, to horticulture, to forestry, and to landscape architecture, of a great systematic collection of living plants under the direction of the Department of Agriculture, are too great to need argument. The Department has already found itself compelled to make partial collections for study and experiment in special fields; but from lack of funds and because of the limited purposes in view in each case, these collections have been quite unrelated one to another, and have been unavailable for general purposes. The investigations of the Department and others who have occasion to study large groups of plants for any purpose, have no such collection of living and growing specimens at their disposal as have been got together by the Government authorities of England, France, Holland, Germany, and Russia. They have been compelled to rely mainly upon the dried specimens of herbaria, supplemented by a very few collections of living plants maintained by educational institutions.

Although of immense value to the purely scientific, systematic botanist, the dried herbarium specimens are of very limited use in studying the general character, appearance, and habits of the plants in nature; and it is in order to meet the practical requirements of the people at large, who want to use the plants intelligently in farming, gardening, forestry, and ornamental planting, that the living plants should be brought together so that they can be examined with economy of time and travel. The existing collections, of which the Arnold Arboretum at Boston, the Shaw Botanical Garden at St. Louis, and the New York Botanical Garden are the most important, are limited in their ability to supply this need, not only by reason of the space required for a complete collection and the cost of the work, but because of local climatic

conditions, for in the climate of Boston, New York, and St. Louis thousands of plants of the utmost value and interest to large sections of the country can not be grown at all.

A great and adequate national botanical collection will necessarily be a slow growth, and its organization and arrangement must be the outcome of long study and gradual development; but as suggestions to guide the steps that may first be taken toward its establishment, the following conclusions of the Commission may be helpful. They are the result of some familiarity with the present arboreta and botanic gardens and of discussion with several botanists of eminence.

It is obvious that all the plants native to the territory of the United States, to say nothing of desirable exotics, can not possibly be gathered together in a single place and grown there. Their climatic requirements range from the arctic to the tropical; and even within the main continental territory of the United States there are differences quite as radical, if not so striking, as between Alaska and our tropical islands. We should therefore look forward to the ultimate establishment of several working collections, probably in connection with certain of the invaluable experiment stations of the Department of Agriculture, in a few localities having typical climatic conditions fairly representing the whole range of United States territory.

It would doubtless be possible to arrange for utilizing such valuable existing collections as those of the Arnold Arboretum, the Shaw Botanical Garden, and the New York Botanical Garden as the stations for their respective sections, supplementing their present activities and resources by governmental cooperation, bringing them into closer touch with one another, so organizing their aims and efforts as to avoid needless repetition and waste of energy, and providing for the prompt and full publication of the results of study at the various centers. This branch of the undertaking would require but little expenditure in proportion to the results, for it would in the main but provide for the wise and orderly direction of the existing local activity of wealthy communities; but it is quite as important to the welfare of the country that there should be similar working collections for study and experiment in less developed sections, where local activity can not be expected for very many years to establish them, where far less is known as to the possibilities of plant life, and where such knowledge would be of immense advantage to the development of the country.

Washington is the appropriate place for the station representing the climatic region of the Middle Atlantic States, and southward to the beginning of the subtropical section, and it should be provided with a large working collection of the flora, both native and introduced, of the region which it represents. Like the other working collections that at Washington should be placed and arranged with a view, first, to the successful growth of the plants under fairly normal conditions, second, to convenience in caring for them, and studying them as individuals and botanical series, and only third, to the appearance of the collection as a whole. It is a business proposition, and not a matter primarily of public recreation.

As stated, however, in the body of the report, it is desirable, as a matter of popular instruction and enjoyment, and also for the sake of presenting in a clear and forcible manner the greater and more fundamental aspects of systematic botany, that there should be in addition to this large working museum, a synoptic collection representing all the more important botanical divisions by those species of each group having the greatest interest, whether economic, artistic, or purely scientific. Such a collection as this, which might well be placed in Potomac Park, should be selected and arranged not only with a view to the successful growth of each species of tree, bush, and herb, and to their convenient inspection, but with the most scrupulous regard to the pleasing character of the resulting landscape, a motive that could not be followed with great success in the unlimited miscellaneous collection for experimental purposes.

In such a synoptic series, for example, the seventy or eighty species of oaks of the United states would be represented only by the kinds of greatest importance, which are certain to grow at Washington into great and beautiful specimens of an aspect that will fit in harmoniously with the proposed landscape of the park; the sixty or seventy species of hawthorn would be represented by a few of the commonest and most beautiful varieties, upon whose appearance when grown it is possible to count with reasonable certainty, and which therefore can be so placed as to produce a pleasing result; and similarly with the smaller brushes and herbaceous plants. With the two latter especially the results of cultivation can be indicated in a beautiful and striking manner by choosing a few of the genera that have responded most successfully to garden cultivation and exhibiting them very perfectly,

presenting, for example, every one of the almost countless varieties of lilacs, of clematis, of peonies, or of poppies, and of a few of the more interesting economic plants, such as grapes. A few such collections, grouped each by itself in a retired garden or bay of the wood along the easterly side of the park, if well planned with that end in view, need in no way interfere with the quiet simplicity of its general landscape, and would afford an immense amount of enjoyment as well as instruction.

APPENDIX F.—LIST OF THE DRAWINGS, DESIGNS, AND MODELS ILLUSTRATING THE REPORT OF THE COMMISSION ON THE IMPROVEMENT OF THE PARK SYSTEM OF THE DISTRICT OF COLUMBIA.

[Exhibited at the Corcoran Art Gallery, Washington, D. C., January 15 to February 25, 1902, and now on exhibition in the Library of Congress.]

GALLERY.

CENTRAL GROUP.

1. Map of District of Columbia, showing existing public spaces.
2. Map of District of Columbia, showing existing and proposed public spaces.
3. Map of District of Columbia, showing proposed additions to park system.
4. Diagram of the parks of New York.
5. Diagram of the parks of Boston.
6. Diagram of existing and proposed parks of Washington.
7. Diagram of the existing parks of Washington.
8. Diagram of the parks of Paris.
9. Diagram of the parks of London.
10. Typical section of Potomac Quay.[1]
11. Typical section of Rock Creek Parkway. Treatment recommended.
12. Typical section of Rock Creek Parkway. Alternative project with covered channel.
13. Typical section of one of the Valley Parkways, such as Piney Branch, Soapstone Creek, and Georgetown Parkways, showing the preservation of existing natural scenery.

[1] The sections Nos. 11 to 17 were rendered by Sears Gallagher and Percival Gallager.

14. Typical section of Potomac Drive, short distance above Aqueduct Bridge.
15. Two panoramic views showing present conditions.
16. Typical section of Potomac Drive below Chain Bridge.
17. Section of Savannah Parkway.
18. Plan of Savannah Parkway.

MALL DIVISION.

19. General plan, describing area included between Capitol and Lincoln Monument, White House and Potomac Park.
20. Birds-eye view of general plan from point taken 4,000 feet above Arlington. (Rendered by F. L. Hoppin.)
21. Birds-eye view of general plan from point taken 4,000 feet over Insane Asylum, Anacostia Heights.

CAPITOL DIVISION.

22. Plan of Capitol grounds (L'Enfant) 1791.
22*a*. Plan of Capitol grounds (Thornton) 1803.
23. The Capitol. West elevation, showing proposed Terrace, restoration of the Bulfinch gates and boundary fence, fountains and approaches. Rendered by A. R. Ross.
24. Section through same, east and west. Rendered by A. R. Ross.

MONUMENT DIVISION.

25. Plan showing proposed treatment of Monument Garden. Rendered by Geo. de Gersdorff.
26. Section through Monument garden on White House axis, showing proposed treatment of approaches and terraces forming a setting for the Washington Monument. (Looking east.) Rendered by A. R. Ross.
27. Section through Monument garden on Capitol axis, looking north toward White House. Rendered by A. R. Ross.
28. Section through Mall at Fifteenth street, looking west, showing Monument approaches and terraces. Rendered by A. R. Ross.
29. Section through canal, looking east, showing terraces and approaches to Monument garden. Rendered by A. R. Ross.

LINCOLN MONUMENT DIVISION.

30. Plan showing proposed treatment of Lincoln memorial site.
31. Elevation of same on proposed site.
32. Section of same.
33. General section, Lincoln monument site, showing proposed memorial bridge connection at this point.

HEMICYCLE.

34. Model of Mall, including areas between Capitol and Twenty-seventh street, White House and Potomac Park, showing present conditions. Scale, 1 foot equals 1,000 feet. George Carroll Curtis, geographical sculptor.
35. Model of Mall, showing treatment proposed by the Commission. Scale, 1 foot equals 1,000 feet. George Carroll Curtis, geographical sculptor.

CAPITOL DIVISION.

36. View of Capitol as seen from Mall (Third street). Rendered by Robt. Blum.
37. View showing proposed treatment of square at head of Mall. Rendered by C. Graham.
38. Gate house and posts, old Capitol Grounds. (Bulfinch.)
39. View showing proposed treatment of basin, terrace, and Capitol approaches, head of Mall. Rendered by Henry McCarter.

MONUMENT DIVISION.

40. View of Monument and garden terraces from White House. Rendered by Jules Guerin.
41. View of Monument and garden terraces, seen from canal, Lincoln division. Rendered by Jules Guerin.
42. Views of projected buildings, restaurants, pavilions, etc.
43. One of the six pavilions in Monument garden. Rendered by Henry McCarter.
44. View in Monument garden, main axis, showing proposed treatment of approaches and terraces, forming a setting for the Washington Monument. (Looking east.) Rendered by Jules Guerin.

45. View from terrace, base of Monument, looking toward Arlington. Rendered by Jules Guerin.
46. View from terrace, base of Monument, looking toward White House. Rendered by Jules Guerin.
47. View of terrace and approach to Monument, seen from the garden. Rendered by H. McCarter.
48. View of Monument garden, looking toward White House. Rendered by O. H. Bacher.

LINCOLN DIVISION.

49. View showing proposed development of site for Lincoln memorial, seen from canal. Rendered by Robt. Blum.
50. Proposed development of Lincoln memorial site, seen from Riverside Drive. (Rendered by Carlton T. Chapman.)
51. View of the same, seen from Old Observatory site. Rendered by Jules Guerin.
52. View of same, seen from Washington Monument. (Rendered by O. H. Bacher.)

WASHINGTON COMMON DIVISION.

53. View of memorial structure and public playgrounds looking south. (Rendered by Jules Guerin.)
54. View of Washington common and public playgrounds, showing proposed baths, theater, gymnasium, and athletic buildings. (Rendered by Jules Guerin.)
55. View of public square and above group of buildings, showing proposed memorial structure. Rendered by Jules Guerin.

MALL DIVISION.

56. View in Mall at Sixth street. Rendered by J. Guerin.
57. Mall seen from Fourteenth street, looking toward Capitol. (Rendered by Jules Guerin.)
58. General view of Monument Garden and Mall, looking toward Capitol. (Rendered by C. Graham.)
59. View of Monument seen from Mall at Fourteenth street. (Rendered by Jules Guerin.)

59*a*. View from the West—Monument.
59*b*. View from balloon.
60. Projected plan of the City of Washington, 1790, designed by Peter Charles L'Enfant, under the direction of General Washington.
61. Plan of the City of Washington, 1791, designed by Peter Charles L'Enfant, under the direction of General Washington.
61*a*. Model of Monument Garden. Scale, 1 inch equals 32 feet.

PHOTOGRAPHIC ENLARGEMENTS.

62. Fountain of Marcia, Rome.
63. Fountain in Front of Farnese Palace, Rome.
64. Fountain, Place Chateau d'eau, Paris.
65. Parade Ground, Boston Common.
66. Column in Garden of the Luxembourg, Paris.
67. Broad Avenue, Old Hadley, Mass.
68. Avenue, Cirencester, England.
69. Avenue, Windsor.
70. Broad Avenue, Old Hadley, Mass.
71. "Charles Sumner" Elm, Front of Capitol, Washington.
72. View from Terraces, St. Germain, Paris.
73. Terrace, Garden of the Tuilleries, Rue de Rivoli, Paris.
74. Fountain, Hampton Court, London.
75. Piazza del Popolo, Pincian Hill, Rome.
76. Ringstrasse, Vienna.
77. Fountain and Vista, Chantilly, France.
78. Fountains, Versailles.
79. Fountains, Versailles.
80. Fountain, Place Saint Sulpice, Paris.
81. Fountain of San Paolo, Rome.
82. Fountain de l'Observatoire, Paris.
83. Fountain Versailles.
84. Fountain, Barberini Palace, Rome.
85. Fountain of the Medici, Garden of the Luxembourg, Paris.
86. Fountain, Quirinal, Rome.
87. Terrace, Versailles.

88. Garden Pavilion, Laxenburg, Austria.
89. Fountain and Terrace, Fontainebleau.
90. The Long Walk, Windsor, England.
91. Avenue, Cirencester, England.
92. Avenue, Cirencester, England.
93. General View, Place de la Concorde, Paris.
94. Avenue of the Champs Elysées, Paris.
95. Fountains, Place de la Concorde, Paris.
96. Station at Frankfort, Germany.
97. Avenue of the Champs Elysées, Paris.
98. Fountain in Garden at d'Aranja, Spain.
99. View, Garden of Villa Medici, Rome, showing Terrace.
100. Basin and Parterres, Fontainebleau.
101. Fountains, Versailles.
102. *Fountain, Villa Albani, Rome.
103. Fountain and Canal, Versailles.
104. The Orangerie, Versailles.
105. Palace and Gardens of the Luxembourg, Paris.
106. Temple, Borghese Gardens, Rome.
107. Chateau d'eau, Caserta, Italy.
108. Bernini Fountain, Piazza of St. Peter's, Rome.
109. Brandenburg Gate, Berlin.
110. Canal, Hampton Court Palace, London.
111. Memorial Walk, Thiergarten, Berlin.
112. L'arc de l'Etoile, Paris.
113. Fountain, Versailles.
114. Terrace, Trianon Palace, Versailles.
115. Terrace and Walk, Garden of the Tuilleries.
116. Quays at Lucerne, Switzerland.
117. Quays at Grenoble, France.
118. Bridge and Quay, Paris.
119. Bridges and Quays, Budapest.
120. Quay at Vannes, France.
121. Bridges and Quay, Angers, France.
122. Elm, Lafayette Square, Washington.
123. Elms, Capitol Grounds, Washington.
124. Elms, East Front of Capitol, Washington.

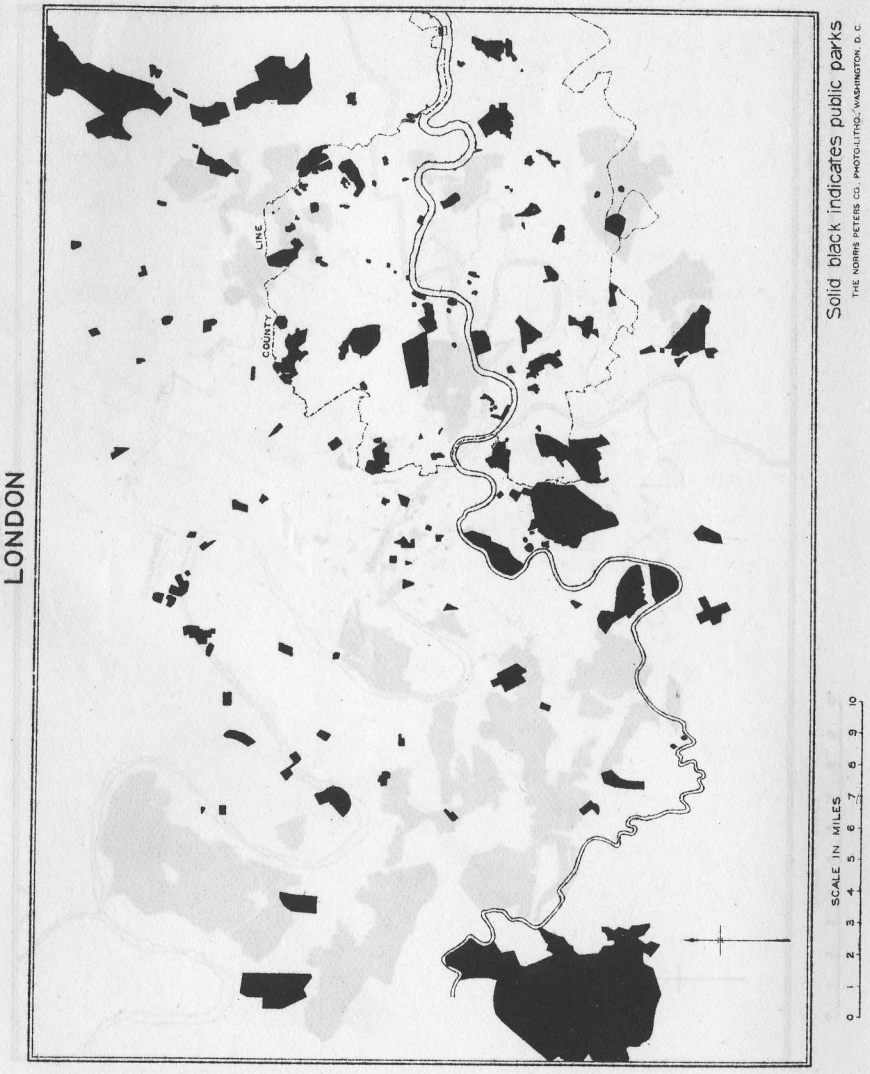
*From photograph taken by Mr. Frederick Law Olmsted, jr.

125. Elms, East Front of Capitol, Washington.
126. Elm, Capitol Grounds, Washington.
127. Elms, Side Avenue of Mall, Central Park, New York.
128. Elms, Side Avenue of Mall, Central Park, New York.
129. Elms, Mall, Central Park, New York.
130. Elms, Boston Common.
131. Mall, Boston Common.
132. Elms, Boston Common.
133. Elms, Boston Common.
134. Elms, Grounds of Harvard University, Cambridge, Mass.
135. Elms, Grounds of Harvard University.
136. Elms, Avenue, Old Hadley, Mass.
137. Elms, Avenue, Old Hadley, Mass.
138. Elms, Avenue, Old Hadley, Mass.
139. "Charles Sumner" Elm, Capitol Grounds, Washington.
140. "Charles Sumner" Elm, Capitol Grounds, Washington.
141. The "Tapis Vert," Versailles.
142. General View, Cirencester, England.
143. Fountain and Vistas, Garden of the Tuileries, Paris.
144. Exedra, Garden of the Tuileries, Paris.
145. Terrace, Fontainebleau.
146. Garden of the Luxembourg, Paris.
147. *Garden Terraces, Chateau Vaux le Vicomte.
148. *Gardens, Vaux le Vicomte.
149. *Fountain, Garden Vaux le Vicomte.
150. *Vatican Garden, Rome.
151. *Borghese Gardens, Rome.
152. *Hippodrome, Borghese Gardens, Rome.
153. Pavilion, Borghese Gardens, Rome.
154. *Garden, Villa d'Este, Tivoli.
155. *Cascade, Garden, Villa d'Este.
156. *Cascade, Garden, Villa d'Este.
157. *Stair and Fountain, Garden, Villa d'Este.
158. *Villa Albani, Rome.
159. *Villa Albani, Rome.
160. *Villa Albani, Rome.
161. *Villa Albani, Rome.

*From photographs taken by Mr. Frederick Law Olmsted, jr.

162. *Villa Medici, Rome.
163. *Villa Medici, Rome.
164. *Statue, Garden, Schoenbrunn, Vienna.
165. *Prater Restaurant, Vienna.
166. *Prater Restaurant, Vienna.
167. *Prater Restaurant, Vienna.
168. The Long Walk, Windsor, England.
169. Avenue of Stone Pines, Rome.
170. Monument Park, Washington, Present Condition, from the South.
171. Fountain of Trevi, Rome.
172. Panorama from the Cupola of St. Peter, Rome.
173. Piazzi of St. Peter, Rome.
174. Aqueduct, Rome.
175. The Spanish Steps, Plaza, Rome.
176. Avenue du Bois de Bologne, Paris.
177. Avenue du Bois de Bologne, showing Arc de Triomphe, Paris.
178. Fountain St. Michel, Paris.
179. Garden Pavilion. Borghese Gardens, Rome.

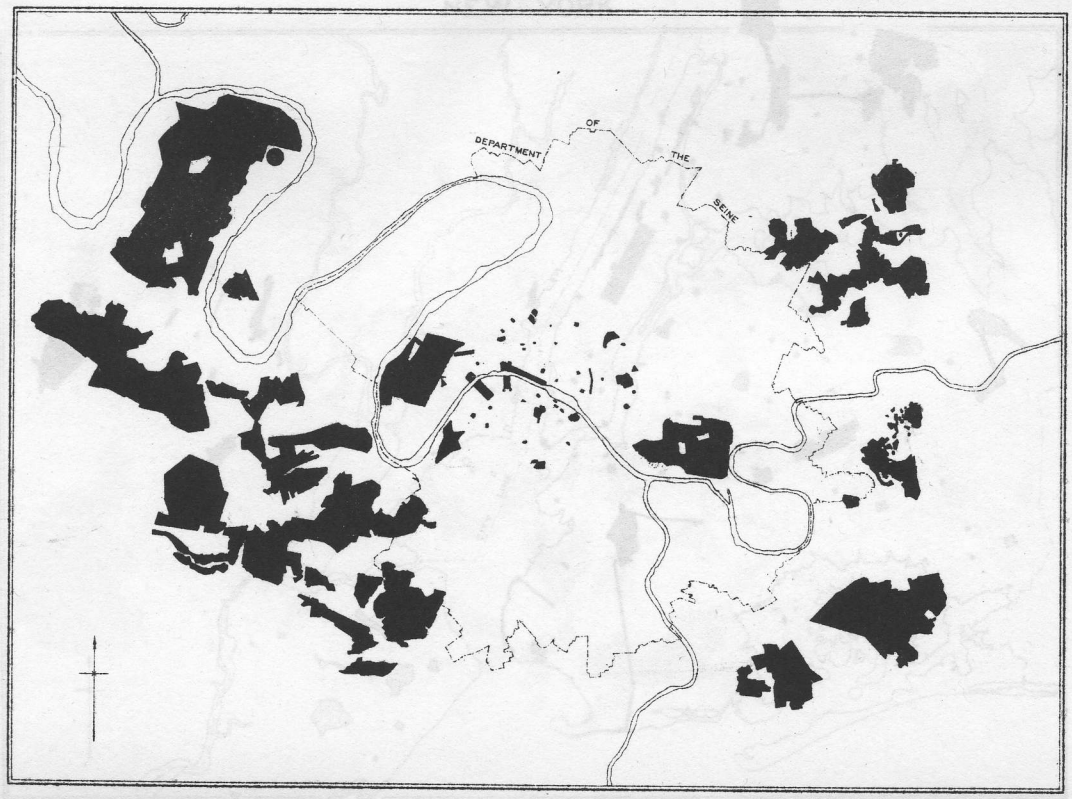
*From photographs taken by Mr. Frederick Law Olmsted, jr.





LONDON

PARIS



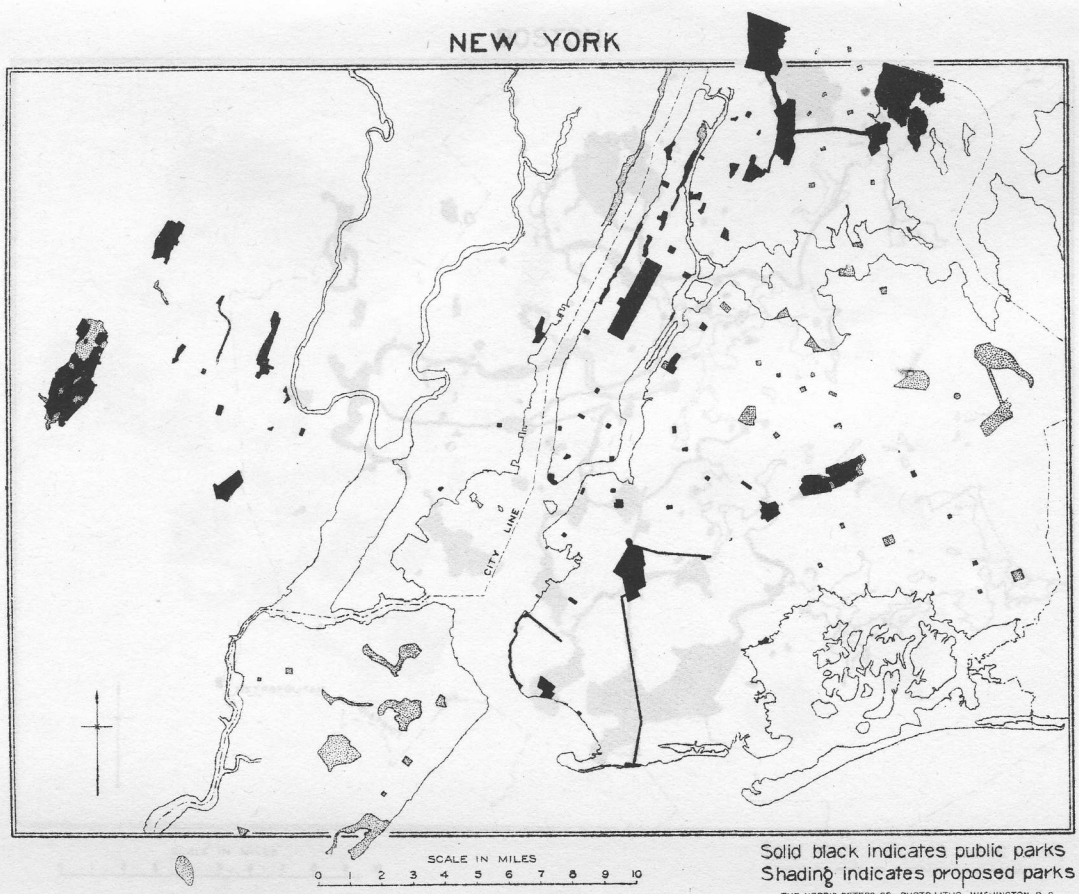
SCALE IN MILES
0 1 2 3 4 5 6 7 8 9 10

Solid black indicates public parks

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.



PARIS



Solid black indicates public parks
Shading indicates proposed parks

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.



BOSTON

METROPOLITAN DISTRICT LINE

SCALE IN MILES

0 1 2 3 4 5 6 7 8 9 10

Solid black indicates public parks

THE NORRIS PETERS CO., PHOTO-LITHO. WASHINGTON, D. C.

SCALE IN MILES
0 1 2 3 4 5 6 7 8 9 10
Solid black indicates public parks
THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.
DISTRICT LINE

WASHINGTON

BOSTON



APPENDIX G.—LIST OF LANDS IN THE DISTRICT OF COLUMBIA DEVOTED TO PUBLIC USE.

[Shown on map No. D–287, following page 171.]

CLASS A.—SQUARES, CIRCLES, TRIANGLES, AND OTHER MINOR RESERVATIONS, INCLUDING GROUNDS ABOUT PUBLIC BUILDINGS WHEN ALWAYS OPEN TO THE PUBLIC.

TABLE I.—*Reservations over one acre in extent.*

[An asterisk (*) indicates control by the District Commissioners. A dagger (†) indicates control by the Joint Committee on the Library. All others are under control of the Superintendent of Public Buildings and Grounds.]

Name.	Official number.	Area.	Approximate area occupied by buildings.	Location.
		Acres.	*Acres.*	
Dupont Circle	60	2.0	.....	Between Eighteenth and Twentieth streets west, and at intersection of Massachusetts, Connecticut, and New Hampshire avenues.
Farragut Square	12	1.6	.....	Between I and K streets north, and terminus and intersection of Connecticut avenue and Seventeenth street west.
Folger Square	16	1.9	.....	Between Second and Third streets east, at intersection of North Carolina avenue and D street south.
Franklin Square	9	4.6	.....	Between Thirteenth and Fourteenth streets west, I and K streets north.
Garfield Park	17	23.9	.....	Between South Capitol street and Third street east, at intersection of New Jersey and Virginia avenues.
*Haymarket Square	.....	2	.....	On B street north, at junction of Ohio and Louisiana avenues.
Howard Park	20	11.3	.....	Between Four-and-a-half and Sixth streets west, and College and Pomeroy streets north.
Iowa Circle	153	2	.....	Between Twelfth and Fourteenth streets west, at intersection of Vermont and Rhode Island avenues.
Judiciary Square	7	19.8	2.3	Between Fourth and Fifth streets west, and Indiana and Louisiana avenues and G street north.
Lafayette Square	10	6.9	.....	Between Pennsylvania avenue and H street north, and Fifteen-and-a-half and Sixteen-and-a-half streets west.
†Library of Congress grounds.	.....	9.8	3.1	Between East Capitol and B streets south, First and Second streets east.
Lincoln Square	14	6.5	.....	Between Eleventh and Thirteenth streets east, at intersection of Kentucky, Tennessee, North Carolina, and Massachusetts avenues.
Marion Square	18	1.6	.....	Between Fourth and Sixth streets east, at intersection of South Carolina avenue and E street south.
McPherson Square	11	1.6	.....	Between I and K streets north, at southeastern terminus and intersection of Vermont avenue and Fifteenth street west.

TABLE I.—*Reservations over one acre in extent*—Continued.

Name.	Official number.	Area.	Approximate area occupied by buildings.	Location.
		Acres.	*Acres.*	
Mt. Vernon Square	8	2.6	.4	Between Seventh and Ninth streets northwest, at intersection of Massachusetts and New York avenues.
Rawlins Square	13	1.6	.....	Between Eighteenth and Nineteenth streets west, at intersection of New York avenue and E street north.
Stanton Square	15	3	.....	Between Fourth and Sixth streets east, at intersection of Massachusetts and Maryland avenues.
Washington Circle	26	1.8	.....	At intersection of Pennsylvania and New Hampshire avenues, and K and Twenty-third streets northwest.
Reservations without name.	19	3	.....	Between Fifth and Seventh streets east, and K and L streets south.
	21	2.8	.....	Between Twentieth and Twenty-first streets west, and B street north and Potomac River.
	55	1.3	.....	Segment of circle at junction of Pennsylvania avenue with Eastern Branch bridge, and on south side of avenue.
	56	2.2	.....	Segment of circle at junction of Pennsylvania avenue with Eastern Branch bridge, on north side of avenue.
	113	2.2	.....	Rectangle between Seventh and Ninth streets west, at intersection of Maryland and Virginia avenues.
	126	2.9	.....	Rectangle between Ninth and Eleventh streets east, at intersection of Virginia and Georgia avenues south.
	54	1.1	.....	Between Thirteenth and Fifteenth streets east, at intersection of Pennsylvania and Georgia avenues south.
*An irregular plot	.....	1.7	.....	Between Louisiana and Pennsylvania avenues and the Washington Market and Seventh and Ninth streets northwest.

Total number of minor reservations over 1 acre in extent		26
Total area of minor reservations over 1 acre in extent	acres..	121.70
Total area free from buildings	do....	115.90
Average size	do....	4.68

TABLE II.—*Reservations under one acre in extent.*

[An asterisk (*) indicates control by the District Commissioners. All others are under the control of the Superintendent of Public Buildings and Grounds.]

Name.	Official number.	Area.	Location.
		Sq. feet.	
Triangle	22	3,502	Between Twenty-eighth and Twenty-ninth streets west, at intersection of Pennsylvania avenue and M street north.
Do	23	2,275	Between Twenty-fifth and Twenty-sixth streets west, at intersection of Pennsylvania avenue and L street north.
Do	24	6,240	Between Twenty-fourth and Twenty-fifth streets west, at intersection of Pennsylvania avenue and L street north.
Trapezoid	25	1,365	Between Twenty-third and Twenty-fourth streets west, at intersection of Pennsylvania avenue and K street north.
Do	27	2,232	Between Twenty-second and Twenty-third streets west, at intersection of Pennsylvania avenue and K street north.
Do	28	17,688	Between Twentieth and Twenty-first streets west, at intersection of Pennsylvania avenue and I street north.
Do	29	14,338	Between Twentieth and Twenty-first streets west, at intersection of Pennsylvania avenue and I street north.
Triangle	30	18,511	Between Eighteenth and Nineteenth streets west, at intersection of Pennsylvania avenue and H street north.

TABLE II.—*Reservations under one acre in extent*—Continued.

Name.	Official number.	Area.	Location.
		Sq. feet.	
Triangle	31	14,749	Between Eighteenth and Nineteenth streets west, at intersection of Pennsylvania avenue and H street north.
Trapezoid	32	16,270	Between Thirteen-and-a-half and Fourteenth streets west, at intersection of Pennsylvania avenue and E street north.
Do	33	21,012	Between Thirteenth and Fourteenth streets west, and Pennsylvania avenue and E street north.
Do	34	7,678	Between Ninth and Tenth streets west, at intersection of Pennsylvania avenue and Ninth street.
Triangle	35	5,529	Between Eighth and Ninth streets west, at intersection of Pennsylvania and Louisiana avenues.
Trapezoid	36	15,138	Between Seventh and Eighth streets west, at intersection of Pennsylvania and Louisiana avenues and C street north.
Triangle	37	5,180	Between Second and Third streets east, at intersection of Pennsylvania avenue and B street south.
Do	38	13,360	Between Fourth and Fifth streets east, at intersection of Pennsylvania and North Carolina avenues.
Trapezoid	39	12,100	Do.
Triangle	40	3,685	Do.
Trapezoid	41	3,933	Between Fifth and Sixth streets east, at intersection of Pennsylvania and North Carolina avenues.
Triangle	42	11,070	Do.
Do	43	13,855	Do.
Do	44	14,960	Between Seventh and Eighth streets east, at intersection of Pennsylvania and South Carolina avenues.
Do	45	13,030	Between Seventh and Eighth streets east, at intersection of Pennsylvania and South Carolina avenues and D street south.
Do	46	1,450	Between Seventh and Eighth streets east, at intersection of Pennsylvania avenue and D street south.
Do	47	1,100	Between Eighth and Ninth streets east, at intersection of Pennsylvania and South Carolina avenues and D street south.
Do	48	11,440	Between Eighth and Ninth streets east, at intersection of Pennsylvania avenue and D street south.
Do	49	16,019	Between Eighth and Ninth streets east, at intersection of Pennsylvania and South Carolina avenues.
Do	50	4,618	Between Tenth and Eleventh streets east, at intersection of Pennsylvania avenue and E street south.
Do	51	7,456	Between Eleventh and Twelfth streets east, at intersection of Pennsylvania avenue and E street south.
Trapezoid	52	10,962	Between Twelfth and Thirteenth streets east, at intersection of Pennsylvania avenue and G street south.
Triangle	53	6,800	Between Thirteenth and Fourteenth streets east, at intersection of Pennsylvania avenue and G street south.
Do	57	2,435	Between Twenty-first and Twenty-second streets west, at intersection of Massachusetts avenue and Q street north.
Circle	57*a*	22,698	On Massachusetts avenue, at Twenty-third streets west.
Triangle	58	3,177	Between Twenty-first and Twenty-second streets west, at intersection of Massachusetts avenue and Q street north.
Trapezoid	59	8,363	Between Nineteenth and Twentieth streets west, at intersection of Massachusetts avenue and P street north.
Do	61	2,200	Between Eighteenth and Nineteenth streets west, at intersection of Massachusetts avenue and P street north.
Do	62	13,964	Between Sixteenth and Seventeenth streets west, at intersection of Massachusetts and Rhode Island avenues.
Scott Circle	63	7,854	Intersection of Massachusetts and Rhode Island avenues and Sixteenth street west.
Trapezoid	64	13,725	Between Fifteenth and Sixteenth streets west, at intersection of Massachusetts and Rhode Island avenues north.
Do	65	3,190	Between Fourteenth and Fifteenth streets west, at intersection of Massachusetts avenue and M street north.
Thomas circle	66	28,352	Intersection of Massachusetts and Vermont avenues and Fourteenth street west.
Trapezoid	67	3,560	Between Thirteenth and Fourteenth streets west, at intersection of Massachusetts avenue and M street north.
Do	68	16,819	Between Eleventh and Twelfth streets west, at intersection of Massachusetts avenue and L street north.
Do	69	17,686	Between Tenth and Eleventh streets west, at intersection of Massachusetts avenue and L street north.
Do	70	6,794	Between Ninth and Tenth streets west, at intersection of Massachusetts and New York avenues and K street north.
Do	71	5,812	At intersection of Massachusetts avenue, Seventh street west, and K street north.
Do	72	18,000	Between Fifth and Sixth streets west, at intersection of Massachusetts avenue and I street north.
Triangle	73	625	Between Fourth and Fifth streets west, at intersection of Massachusetts avenue and I street north.
Trapezoid	74	10,887	At intersection of Massachusetts avenue and I street north and Fifth street west.

TABLE II.—*Reservations under one acre in extent*—Continued.

Name.	Official number.	Area.	Location.
		Sq. feet.	
Triangle	75	5,400	Intersection of Massachusetts avenue and H street north and between Third and Fourth streets west.
Do	76	7,320	Between Third and Fourth streets west, at intersection of Massachusetts avenue and H street north.
Circle	77	15,393	Between North Capitol and First streets west, at intersection of Massachusetts and New Jersey avenues.
Triangle	78	4,725	Between North Capitol and First streets west, at intersection of Massachusetts avenue and F street north.
Do	79	1,205	Between North Capitol and First streets east, at intersection of Massachusetts avenue and F street north.
Do	80	1,205	At intersection of Massachusetts and Delaware avenues and First street east.
Do	81	4,062	Between First and Second streets east, at intersection of Massachusetts avenue and E street north.
Do	82	4,418	Between Second and Third streets east, at intersection of Massachusetts avenue and D street north.
Trapezoid	83	4,915	At intersection of Massachusetts avenue, D street north, and Third street east.
Do	84	9,594	Between Sixth and Seventh streets east, at intersection of Massachusetts avenue and B street north.
Do	85	8,506	Between Eighth and Ninth streets east, at intersection of Massachusetts avenue and B street north.
Do	86	8,007	Between Eighth and Ninth streets east, at intersection of Massachusetts avenue and A street north.
Triangle	87	960	Between Ninth and Tenth streets east, at intersection of Massachusetts avenue and A street north.
Do	88	10,042	Between Thirteenth and Fourteenth streets east, at intersection of Massachusetts avenue and A street south.
Trapezoid	89	8,505	Between Thirteenth and Fourteenth streets east, at intersection of Massachusetts avenue and B street south.
Triangle	90	10,011	Between Fourteenth and Fifteenth streets east, at junction of Massachusetts and South Carolina avenues southeast.
Do	91	7,654	Between Fourteenth and Fifteenth streets east, at intersection of Massachusetts avenue and B street south.
Do	92	18,354	Between Seventeenth and Eighteenth streets east, at intersection of Massachusetts avenue and C street south.
Do	93	11,178	Between Eighteenth and Nineteenth streets east, at intersection of Massachusetts avenue and C street south.
Do	94	1,574	Between Twenty-seventh and Twenty-eighth streets west, at intersection of Virginia avenue and I street north.
Do	95	787	Between H and I streets north, at intersection of Virginia avenue and Twenty-seventh street west.
Do	96	1,750	Between Twenty-sixth and Twenty-seventh streets west, at intersection of Virginia avenue and H street north.
Do	97	1,875	Between Twenty-fifth and Twenty-sixth streets west, at intersection of Virginia avenue and H street north.
Do	98	8,640	Between Twenty-fourth and Twenty-fifth streets west, at intersection of Virginia avenue and G street north.
Do	99	4,897	Do.
Do	100	6,164	Between Twenty-third and Twenty-fourth streets west, at intersection of Virginia avenue and F street north.
Trapezoid	101	2,394	Between Twenty-second and Twenty-third streets west, at intersection of Virginia avenue and F street north.
Triangle	102	4,234	Between Twenty-first and Twenty-second streets west, at intersection of Virginia avenue and E street north.
Do	103	1,342	Do.
Do	104	1,450	Between Twenty-first and Twenty-second streets west, at intersection of Virginia avenue and D street north.
Do	105	11,096	Between Twentieth and Twenty-first streets west, at intersection of Virginia and New York avenues.
Do	106	11,467	Do.
Do	107	1,950	Between Nineteenth and Twentieth streets west, at intersectiou of Virginia avenue and D street north.
Do	108	1,323	Between Nineteenth and Twentieth streets west, at intersection of Virginia avenue and C street north.
Do	109	1,180	Between Eighteenth and Nineteenth streets west, at intersection of Virginia avenue and C street north.
Do	110	7,250	Between Seventeenth and Eighteenth streets west, at intersection of Virginia avenue and B street north.
Trapezoid	111	10,237	Between Eleventh and Twelfth streets west, at intersection of Virginia avenue and B street south.
Do	112	8,695	Between Ninth and Tenth streets west, at intersection of Virginia avenue and C street north.
Do	114	10,428	Between Sixth and Seventh streets west, at intersection of Virginia avenue and C street south.
Do	115	8,075	Between Sixth and Seventh streets west, at intersection of Virginia avenue and D street south.
Triangle	116	4,625	Between Four-and-a-half and Sixth streets west, at intersection of Virginia avenue and D street south.
Do	117	16,775	Do.

TABLE II.—*Reservations under one acre in extent*—Continued.

Name.	Official number.	Area.	Location.
		Sq. feet.	
Trapezoid	118	14,414	Between Second and Third streets west, at intersection of Virginia avenue and E street south.
Triangle	119	405	Between First and Second streets west, at intersection of Virginia avenue and E street south.
Trapezoid	120	4,032	Between First street west and Delaware avenue, at intersection of Virginia avenue and E street south.
Triangle	121	2,580	Between South Capitol and Half streets west, at intersection of Virginia avenue and F street south.
Trapezoid	122	15,916	Between Fourth and Fifth streets east, at intersection of Virginia avenue and I street south.
Triangle	123	16,183	Between Sixth and Seventh streets east, at intersection of Virginia avenue and I street south.
Trapezoid	124	9,828	Between Sixth and Seventh streets east, at intersection of Virginia avenue and K street south.
Do	125	18,054	Between Eighth and Ninth streets east, at intersection of Virginia avenue and K street south.
Do	127	25,972	Between Eleventh and Twelfth streets east, at intersection of Virginia avenue and L street south.
Triangle	128	7,272	Between Twelfth and Thirteenth streets east, at intersection of Virginia avenue and M street south.
Do	129	15,225	Between Thirteenth and Fourteenth streets east, at intersection of Virginia avenue and M street south.
Do	130	3,932	Between Thirteenth and Fourteenth streets east, at intersection of Virginia avenue and Water street southeast.
Do	131	1,298	Between Twenty-sixth and Twenty-seventh streets west, at intersection of New Hampshire avenue and E street north.
Do	132	1,268	Between Twenty-sixth and Twenty-seventh streets west, at intersection of New Hampshire avenue and F street north.
Do	133	8,816	Between Twenty-fifth and Twenty-sixth streets west, at intersection of New Hampshire avenue and G street north.
Do	134	9,426	Between Twenty-fifth and Twenty-sixth streets west, at intersection of New Hampshire and Virginia avenues.
Do	135	1,014	Between Twenty-fourth and Twenty-fifth streets west, at intersection of New Hampshire avenue and H street north.
Do	136	630	Between Twenty-fourth and Twenty-fifth streets west, at intersection of New Hampshire avenue and I street north.
Do	137	1,750	Between I and K streets north, at intersection of New Hampshire avenue and Twenty-fourth street west.
Do	138	2,200	Between K and L streets north, at intersection of New Hampshire avenue and Twenty-second street west.
Do	139	1,995	Between L and M streets north, at intersection of New Hampshire avenue and Twenty-second street west.
Do	140	6,995	Between Twenty-first and Twenty-second streets west, at intersection of New Hampshire avenue and M street north.
Do	141	1,536	Between M and N streets north, at intersection of New Hampshire avenue and Twenty-first street west.
Do	142	1,987	Between N and O streets north, at intersection of New Hampshire avenue and Twentieth street west.
Do	143	988	Between Nineteenth and Twentieth streets west, at intersection of New Hampshire avenue and O street north.
Do	144	12,264	Between Seventeenth and Eighteenth streets west, at intersection of New Hampshire avenue and S street north.
Do	145	3,838	Between Sixteenth and Seventeenth streets west, at intersection of New Hampshire avenue and T street north.
Do	146	5,400	Between Sixteenth and Seventeenth streets west, at intersection of New Hampshire avenue and U street north.
Do	147	3,760	Between Fifteenth and Sixteenth streets west, at intersection of New Hampshire avenue and Sixteenth street west.
Do	148	4,120	Between Fifteenth and Sixteenth streets west, at intersection of New Hampshire avenue and Fifteenth street west.
Do	149	7,470	Between Nineteenth and Twentieth streets west, at intersection of Connecticut avenue and Q street north.
Do	150	6,435	Between Seventeenth and Eighteenth streets west, at intersection of Connecticut avenue and M street north.
Do	151	3,025	Between Seventeenth street and Connecticut avenue, at intersection of Rhode Island avenue and M street north.
Trapezoid	152	1,940	Between Thirteenth and Fourteenth streets west, at intersection of Rhode Island avenue and P street north.

TABLE II.—*Reservations under one acre in extent*—Continued.

Name.	Official number.	Area.	Location.
		Sq. feet.	
Triangle	154	11,930	Between Twelfth and Thirteenth streets west, at intersection of Rhode Island avenue and P street north.
Trapezoid	155	1,856	Between P and Q streets north, at intersection of Rhode Island avenue and Tenth street west.
Triangle	156	868	Between Ninth and Tenth streets west, at intersection of Rhode Island avenue at Q street north.
Do	157	9,185	Do.
Do	158	687	Between Sixth and Seventh streets west, at intersection of Rhode Island avenue and R street north.
Do	159	6,630	Do.
Do	160	2,530	Between Fourth and Fifth streets west, at intersection of Rhode Island and New Jersey avenues and S street north.
Trapezoid	161	960	Between L and M streets north, at intersection of Vermont avenue and Fourteenth street west.
Do	162	960	Between M and N streets north, at intersection of Vermont avenue and Fourteenth street west, at front of Martin Luther's statue.
Do	163	7,700	Between O and P streets north, at intersection of Vermont avenue and Thirteenth street west.
Do	164	1,700	Between P and Q streets north, at intersection of Vermont avenue and Thirteenth street west.
Triangle	165	2,467	Between Twelfth and Thirteenth streets west, at intersection of Vermont avenue and R street north.
Trapezoid	166	3,150	Between R and S streets west, at intersection of Vermont avenue and Twelfth street west.
Triangle	167	3,300	Between Eleventh and Twelfth streets west, at intersection of Vermont avenue and S street north.
Do	168	4,087	Between Tenth and Eleventh streets west, at intersection of Vermont avenue and Eleventh street west.
Trapezoid	169	3,045	Between S and T streets north, at intersection of Vermont avenue and Tenth street west.
Triangle	170	11,695	Between Ninth and Tenth streets west, and T and U streets north, at intersection of Vermont avenue and Tenth street west.
Do	171	8,170	Between Twenty-second and Twenty-third streets west, at intersection of New York avenue and C street north.
Trapezoid	172	3,967	Between Thirteenth and Fourteenth streets west, at intersection of New York avenue and H street north.
Do	173	12,840	Between Eleventh and Twelfth streets west, at intersection of New York avenue and I street north.
Do	174	13,482	Between Tenth and Eleventh streets west, at intersection of New York avenue and I street north.
Do	175	5,450	Between Ninth and Tenth streets west, at intersection of New York avenue and K street north.
Do	176	5,960	Between Sixth and Seventh streets west, at intersection of New York avenue and K street north.
Do	177	540	Between Fifth and Sixth streets west, at intersection of New York avenue and L street north.
Do	178	7,181	Between Fourth and Fifth streets west, at intersection of New York avenue and L street north.
Do	179	9,064	Between Third and Fourth streets west, at intersection of New York and New Jersey avenues and M street north.
Triangle	181	22,152	Between First and Second street west, at intersection of New York avenue and M street north.
Do	182	4,712	Between First street west and North Capitol street, at intersection of New York avenue and M street north.
Do	183	4,712	Between First street east and North Capitol street, at intersection of New York avenue and N street north.
Do	184	7,618	Between North Capitol and First streets east, at intersection of New York avenue and O street north.
Do	185	7,618	Between First and Second streets east, at junction of New York and Florida avenues and O street north.
Do	186	7,272	Between Thirteenth and Thirteen-and-a-half streets west, at intersection of Ohio avenue and C street north.
Do	187	4,028	Between Fifth and Sixth streets west, at intersection of Louisiana avenue and D street north.
Do	188	3,718	Between Third and Fourth streets west, at intersection of Indiana avenue and D street north.
Do	189	2,296	Between First and Second streets west, at intersection of Indiana avenue and C street north,
Do	190	6,450	Between P and Q streets north, at intersection of New Jersey avenue and Fourth street west.
Trapezoid	191	5,735	Between Third and Fourth streets west, at intersection of New Jersey avenue and O street north.
Do	192	8,550	Between Third and Fourth streets west, at intersection of new Jersey avenue and N street north.
Triangle	193	9,386	At intersection of New Jersey avenue and I street north and Second street west.
Trapezoid	194	5,725	Between H and I streets north, at intersection of New Jersey avenue and I street and Second street west.

TABLE II.—*Reservations under one acre in extent*—Continued.

Name.	Official number.	Area.	Location.
		Sq. feet.	
Trapezoid	195	12,572	Between G and H streets north, at intersection of New Jersey avenue and First street west.
Do	196	5,170	Between E and F streets north, at intersection of New Jersey avenue and First street west.
Do	197	4,402	Between Twelfth and Thirteenth streets west, at intersection of Maryland avenue and D street south.
Do	198	5,029	Between Ninth and Tenth streets west, at intersection of Maryland avenue and D street south.
Do	199	4,132	Between Ninth and Tenth streets west, at intersection of Maryland avenue and C street south.
Do	200	10,098	Between Sixth and Seventh streets west, at intersection of Maryland avenue and C street south.
Triangle	201	22,095	Between Third and Four-and-a-half streets west, at intersection of Maryland avenue and B and Canal streets south.
Garfield circle	202	6,361	At junction of Maryland avenue with First street southwest.
Triangle	203	10,296	Between First and Second streets east, at intersection of Maryland avenue and A street north.
Do	204	7,820	Between First and Second streets east, at intersection of Maryland avenue and B street north.
Do	205	12,152	Between Second and Third streets east, at intersection of Maryland avenue and B street north.
Do	206	4,860	Between Sixth and Seventh streets east, at intersection of Maryland avenue and D street north.
Trapezoid	207	3,213	Between Seventh and Eighth streets east, at intersection of Maryland avenue and D street north.
Do	208	3,720	Between Eighth and Ninth streets east, at intersection of Maryland avenue and E street north.
Do	209	4,496	Between Tenth and Eleventh streets east, at intersection of Maryland avenue and E street north.
Triangle	210	10,860	Between Eleventh and Twelfth streets east, at intersection of Maryland avenue and F street north.
Do	211	4,588	Between Twelfth and Thirteenth streets east, at intersection of Maryland avenue and F street north.
Do	212	4,095	Between Thirteenth and Fourteenth streets east, at intersection of Maryland avenue and G street north.
Do	213	3,330	Between Thirteenth and Fourteenth streets east, at intersection of Maryland avenue and G street north.
Do	214	2,100	Between O and P streets south, at intersection of Delaware avenue and Third street west.
Do	215	6,039	Between Second and Third streets west, at intersection of Delaware avenue and N street north.
Trapezoid	216	6,039	Between Second and Third streets west, at intersection of Delaware avenue and M street south.
Triangle	217	552	Between L and M streets south, at intersection of Delaware avenue and Second street west.
Do	218	2,100	Between K and L streets south, at intersection of Delaware avenue and Second street west.
Trapezoid	219	25,642	Between I and K streets south and Delaware avenue and Second street west.
Do	220	11,340	Between I and H streets south and Delaware avenue and First street west.
Triangle	221	4,576	Between G and H streets south, at intersection of Delaware avenue and First street west.
Do	222	405	Between F and G streets south, at intersection of Delaware avenue and First street west.
Trapezoid	223	10,815	Between E and F streets south and Delaware avenue and First street west.
Do	224	25,240	At intersection of Massachusetts and Delaware avenues, First street east, and F street north.
Triangle	225	4,508	Between F and G streets north, at intersection of Delaware avenue and First street east.
Trapezoid	226	23,482	Between G and H streets north, at intersection of Delaware avenue and First street east.
Triangle	227	4,628	Between L and M streets north, at intersection of Delaware avenue and Second street east.
Trapezoid	228	7,093	Between M and N streets north, at intersection of Delaware avenue and Second street east.
Do	229	9,702	Between First and Second streets east, at intersection of North Carolina avenue and E street south.
Do	230	16,368	Between Sixth and Seventh streets east, at intersection of North Carolina avenue and B street south.
Triangle	231	506	Between A and B streets south, at intersection of North Carolina avenue and Eighth street east.
Trapezoid	232	7,837	Between Eighth and Ninth streets east, at intersection of North Carolina avenue and B street south.
Do	233	7,406	Between Eighth and Ninth streets east, at intersection of North Carolina avenue and A street south.
Triangle	234	900	Between Ninth and Tenth streets east, at intersection of North Carolina avenue and A street south.
Do	235	10,556	Between Thirteenth and Fourteenth streets east, at intersection of North Carolina avenue and A street north.

TABLE II.—*Reservations under one acre in extent*—Continued.

Name.	Official number.	Area.	Location.
		Sq. feet.	
Trapezoid	236	8,883	Between Thirteenth and Fourteenth streets east, at intersection of North Carolina avenue and B street north.
Triangle	237	600	Between Fourteenth and Fifteenth streets east, at intersection of North Carolina avenue and B street north.
Do	238	7,698	Between Fourteenth and Fifteenth streets east, at intersection of North Carolina avenue and B street north.
Do	239	10,351	Between Fifteenth and Sixteenth streets east, at intersection of North Carolina avenue and C street north.
Do	240	5,642	Between Twelfth and Thirteenth streets east, at intersection of South Carolina avenue and C street south.
Do	241	5,046	Between Twelfth and Thirteenth streets east, at intersection of South Carolina avenue and C street south.
Do	242	21,900	Between Second and Third streets west, at intersection of Georgia avenue and S street south.
Do	243	20,878	Between First and Second streets west, at intersection of Georgia avenue and R street south.
Do	244	20,234	Between Half and First streets west, at intersection of Georgia avenue and R street south.
Do	245	24,727	Between South Capitol and Half streets west, at intersection of Georgia avenue and Q streets south.
Do	246	20,520	Between South Capitol and Half streets east, at intersection of Georgia avenue and Q streets south.
Do	247	30,975	Between Half and First streets east, at intersection of Georgia avenue and P street south.
Do	248	1,500	Between First and Second streets east, at intersection of Georgia avenue and G street south.
Do	249	5,180	At intersection of Georgia avenue and Fourth and N streets southeast.
Do	250	1,827	At intersection of Georgia avenue, N, Fifth, and Canal streets southeast.
Do	251	10,914	Between Eighth and Ninth streets east, at intersection of Georgia avenue and M street south.
Do	252	10,700	Between Eleventh and Twelfth streets east, at intersection of Georgia avenue and K street south.
Do	253	9,144	Between Twelfth and Thirteenth streets east, at intersection of Georgia avenue and K street south.
Do	254	10,753	Between Twelfth and Thirteenth streets east, at intersection of Georgia avenue and I street south.
Trapezoid	255	6,510	Between Fourteenth and Fifteenth streets east, at intersection of Georgia avenue and G street south.
Triangle	256	,937	Between Fifteenth and Sixteenth streets east, at intersection of Georgia and Kentucky avenues and G street south.
Do	257	15,748	Between Seventeenth and Eighteenth streets east, at intersection of Georgia avenue and E street south.
Do	258	8,972	Between Eighteenth and Nineteenth streets east, at intersection of Georgia avenue and E street south.
Do	259	5,395	Between Twelfth and Thirteenth streets east, at intersection of Kentucky avenue and B street south.
Do	260	3,850	Between Thirteenth and Fourteenth streets east, at intersection of Kentucky avenue and B street south.
Do	261	2,116	Between Thirteenth and Fourteenth streets east, at intersection of Kentucky avenue and D street south.
Do	262	2,040	Between Fourteenth and Fifteenth streets east, at intersection of Kentucky avenue and D street south.
Do	263	1,762	Between Fourteenth and Fifteenth streets east, at intersection of Kentucky avenue and Fifteenth street east.
Do	264	2,592	Between Fifteentn and Sixteenth streets east, at intersection of Georgia and Kentucky avenues and G street south.
Do	265	1,462	Between Fifteenth and Sixteenth streets east, at intersection of Kentucky avenue and H street south.
Do	266	5,742	Between Twelfth and Thirteenth streets east, at intersection of Tennessee avenue and B street north.
Do	267	6,348	Between Thirteenth and Fourteenth streets east, at intersection of Tennessee avenue and B street north.
Do	268	5,043	Between Thirteenth and Fourteenth streets east, at intersection of Tennessee avenue and D street north.
Do	269	3,250	Between Fourteenth and Fifteenth streets east, at intersection of Tennessee avenue and E street north.
Do	270	877	At intersection of Florida avenue and Twenty-first street northwest.
Do	271	687	At intersection of Florida avenue and V street north, between Seventeenth and Eighteenth streets west.
Do	272	437	At intersection of Florida avenue and Tenth street northwest.
Do	273	418	Between Ninth and Tenth streets west, at intersection of Vermont avenue and V street north.
Do	274	350	Between Sixth and Seventh streets west, at intersection of Florida avenue and T street north.
Do	275	870	Between Fourth and Fifth streets west, at intersection of Florida avenue and S street north.

TABLE II.—*Reservations under one acre in extent*—Continued.

Name.	Official number.	Area.	Location.
		Sq. feet.	
Triangle	276	870	Between First and Third streets west, at intersection of Florida avenue and R street north.
Do	277	742	Between North Capitol street and First street west, at intersection of Florida avenue and Q street north.
Circle	277a	11,310	On North Capitol street, at Florida avenue north.
Triangle	278	960	Between North Capitol street and First street east, at intersection of Florida avenue and P street north.
Do	279	484	Between Third and Fourth streets east, at intersection of Florida avenue and N street north.
Do	280	725	Between Sixth and Seventh streets east, at intersection of Florida avenue and M street north.
Do	281	700	Between Ninth and Tenth streets east, at intersection of Florida avenue and L street north.
Trapezoid	282	1,053	Between Eleventh and Twelfth streets east, at intersection of Florida avenue and K street north.
Triangle	283	600	Between Thirteenth and Fourteenth streets east, at intersection of Florida avenue and I street north.
Do	284	450	Between Canal street, at intersection of B and Second streets southwest.
Do	285	10,500	Between Canal street, at intersection of First and D streets southwest.
Do	286	1,905	At intersection of Canal, South Capitol, and E streets southeast.
Do	287	2,929	At intersection of Canal street, H street south, and Half street east.
Trapezium	288	11,462	Between H and I streets south, at intersection of New Jersey avenue, Canal, and First streets east.
Triangle	289	1,520	At intersection of New Jersey avenue, Canal, and I streets southeast.
Do	290	5,700	At intersection of South Capitol, I, and H streets southwest.
Do	291	2,280	At intersection of I and Half streets southwest, on west side of canal.
Do	292	8,125	Between L and M streets south, and Half and First streets west, on west side of canal.
Do	293	2,100	At intersection of canal and N streets south and First street west.
Do	294	11,400	At intersection of Water street, N street south, and Sixth street west.
Do	295	9,108	Between U and V streets south, at intersection of Water and Half streets west.
Do	296	9,954	Between T and U streets south, at intersection of Water and Half streets west.
Do	297	1,750	Between R and S streets south, at intersection of South Capitol and Water streets.
Do	298	3,250	Between Twelfth and Thirteenth streets east, at intersection of N and Water streets south.
Do	299	7,875	Between Fourteenth and Fifteenth streets east, at intersection of Water street and M street south.
Do	300	3,450	Between Fifteenth and Sixteenth streets east, at intersection of Water street and L street south.
Do	301	1,235	Do.
*Trapezoid	.....	4,124	Between Sixth and Seventh streets north, at intersection of C street and Pennsylvania avenue.
*Circle	.....	6,361	Between Sixth and Seventh streets north, at intersection of C street and Louisiana Avenue.

Total number of reservations under 1 acre in extent		275
Total area of reservations under 1 acre in extent	acres..	42.23
Average size of reservations under 1 acre in extent	do....	.16
Total number of all minor reservations		301
Total area of all minor reservations	acres..	166.93
Total area free from buildings	do....	161.13

CLASS B.—LARGE PARKS.

CENTRAL GROUP.

[A dagger (†) indicates control by the Joint Committee on the Library; a double dagger (‡) indicates control by the Department of Agriculture; all others are under control of the Superintendent of Public Buildings and Grounds.]

Name.	Official number.	Area.	Approximate area occupied by buildings.	Location.
		Acres.	*Acres.*	
Capitol grounds		59.1	2.5	Between B street north and B street south, First street east and First street west.
Mall:				
†Botanical Gardens.		11.8	.40	Between Pennsylvania and Maryland avenues, and First and Third streets west.
Public Gardens (Seaton Park).	5,6	19		Between Missouri and Maine avenues, and Third and Sixth streets west.
Armory Square (Henry Park).	4	14.9	3.1	Between B street north and B street south, and Sixth and Seventh streets west. Occupied in part by the Pennsylvania Railroad Company and the Fish Commission.
Grounds of Smithsonian Institution.	3	58	2.89	Between B street north and B street south, Seventh and Twelfth streets west. Occupied by the Smithsonian Institution, the National Museum, and Army Medical Museum.
‡Grounds of Department of Agriculture.		35	1	Between B street north and B street south, and Twelfth and Fourteenth streets west. Occupied by the Agricultural Department.
Grounds of Washington Monument.	2	78.5		Between B street north and B street south and Potomac Park, and Fourteenth street west and Fish Commission grounds.
Grounds of Fish Commission.		18.9		Between B street north and Potomac Park, Monument grounds and Potomac Park. Occupied by the breeding ponds of the Fish Commission.
President's Park (White Lot).	1	52.9		Between White House grounds and B street north, and Fifteenth and Seventeenth streets northwest.
Total of central group.		348.1	9.89	
To above total of 347.9 acres in central group may be added the White House grounds, although not open to public except on few special occasions.		18.5	.50	Between Pennsylvania avenue northwest, and President's Park and Treasury building and State, War, and Navy building. These grounds are occupied by the White House and its conservatories, and are highly improved.
Grand total of central group.		366.6	10.39	

Total number of reservations in central group		10
Total area of reservations in central group	acres..	366.60
Total area free from buildings	do....	356.21
Average size	do....	36.66

ZOOLOGICAL PARK.

Present area	acres..	170

ROCK CREEK PARK.

Present area	acres..	1,605.9

POTOMAC PARK.

Present area	acres..	739.4

CENTRAL GROUP.

Present area	acres..	366.6
Total area of large parks	do....	2,881.9

CLASS C.—GROUNDS CONNECTED WITH PUBLIC BUILDINGS, INSTITUTIONS, OR DEPARTMENTS, AND PRIMARILY INTENDED FOR OTHER PURPOSES, BUT INCIDENTALLY OPEN TO THE PEOPLE UNDER LIMITATIONS.

[Only those marked with an asterisk (*) are ordinarily open to the people.]

Name.	Area.	Approximate area occupied by buildings.	Location, character, etc.
	Acres.	*Acres.*	
Almshouse	265.00		A new site for the District almshouse recently purchased at the southern end of the District, on the Anacostia side, adjacent to the United States powder magazine. It extends from the District line to the grounds of the powder magazine, and from Bald Eagle Hill to the shore line near Shepherds Landing. Five-sixths of this area are either flat or a very gentle slope, and the remainder is on a steep hillside that includes part of the proposed Shepherd parkway.
Girls' Reform School	19		A wooded hilltop adjoining the receiving reservoir, near the western corner of the District.
Bellevue	84		A low-lying tract containing the U. S. powder magazine, on the shore of the Potomac, near the new almshouse grounds and the southern point of the District.
City farm	66	2	A partially developed tract, with a few good trees, lying between Nineteenth street east and the Anacostia River, occupied by the almshouse and jail. The former is to be removed. These grounds will be crossed by the proposed extension of Massachusetts avenue. A portion would be occupied by the proposed Anacostia Park.
Columbia Institute for Deaf Mutes.	110.34	.84	A wooded tract north of Florida avenue on the line of Eighth street east. Its extreme northerly end would form part of the proposed belt park system.
Government Hospital for the Insane.	363.63	4.76	A hilly, wooded tract on the eastern bank of the Anacostia River, overlooking the Potomac and the city.
United States farm	59.63		An uncultivated tract lying immediately west of Giesboro road.
Military cemetery	1		
Municipal hospital grounds.	33.44		A tract of open rolling land, with scattered trees, recently acquired by District on the line of Thirteenth street extended, between Seventh street road and Piney Branch.
*Naval Observatory	89.8		A wooded upland tract on the line of Massachusetts avenue, half a mile west of Rock Creek, commanding extensive views over the city. Occupied by observatory buildings, but serving also as a place of resort.
Navy-yard	43.12	8.38	Between M street southeast and Anacostia River and Sixth and Ninth streets southeast. Principally occupied by the ordnance construction shops of the Navy.
*Old Naval Observatory (now Naval Museum of Hygiene).	16.90	.36	A hill, over 90 feet high, between Twenty-third and Twenty-fifth streets west and E street and B street north, commanding an exceptionally beautiful view.
Reform School	278	.75	A tract of high land at the northeastern boundary of the District, commanding excellent views over the Anacostia Valley and in other directions.
*Soldiers' Home	502	2.00	On the line of North Capitol street, halfway to the District line.
Washington Barracks	62	2.46	A flat, low-lying tract at the foot of Four-and-a-half street. Lately an artillery post, it is now to be the site of a school of applied engineering and of a war college.
White House grounds	18.50	.50	South of Pennsylvania avenue, between Fifteen-and-a-half and Sixteen-and-a-half streets. Open to the public only on special occasions.
Total area	2,012.36	22.05	
Receiving reservoir	281.75		On Potomac River and on western boundary of District, lying partly in District and partly in Maryland. The District portion is heavily wooded and the land is basin-like.
*Conduit road	27.50		A level drive, over water conduit, from District line to valley of Foundry Branch.
Distributing reservoir	64		On Potomac River near Conduit road and New Cut road. Has little land about it.
Reservation with water gate and pump.	3.4		In Foundry Branch Valley.
Do	2.33		Rock Creek Valley near Massachusetts avenue.
Do	.94		Washington Heights near Eighteenth street.
Georgetown reservoir	1.50		Thirty-second and U streets. Little ground around it.
Howard University reservoir	67.70		Between Soldiers' Home grounds and Howard University. To be connected with filter plant lying east.
Filter	34		Grounds.

Total number of grounds		25
Total area	acres..	2,495.48
Total area free from buildings	do....	2,473.43
Average size	do....	99.81
Total area in classes A, B, and C	do....	5,544.68
Total usually open to the public	do....	1,105.25

APPENDIX H.—LIST OF PROPOSED ADDITIONAL RESERVATIONS.

[Shown in green lines on map No. D-288.]

CLASS A.—SMALL RESERVATIONS AND FORTS.

Temporary designation.	Approximate area.	Location.
	Acres.	
Fort Baker	13.8	Near Bowen road and Overlook Inn, southeast.
Fort Bunker Hill	11.9	At Brookland, on University Heights, northeast.
Fort Chaplin	20.2	Near junction of Central avenue and Bennings road, southeast.
Fort Davis	25.7	At junction of Bowen road and Pennsylvania avenue extended, southeast.
Fort Dupont	24.8	At junction of Bowen road and Ridge road, southeast.
Fort Howard	3.7	Near River road and District boundary, northwest.
Fort Mahan	55.1	Near Bennings, northeast.
Meridian Hill	18.0	North of Florida avenue on Sixteenth street, northwest.
Battery Parrott	1.8	On Ridge road near distributing reservoir, northwest.
Battery Ricketts	3.7	On hill east of Anacostia village, southeast.
Fort Sedgwick	22.0	South of junction of Central avenue and Benning road, southeast.
Fort Slemmer	19.3	East of Soldiers' Home, near Harewood road, northeast.
Fort Stanton	66.1	On hill above Anacostia village, southeast.
Fort Stevens	12.8	At Brightwood, near Military road, northwest.
Tenley Circle	6.4	At junction of Nebraska avenue and Georgetown and Rockville road, northwest.
Fort Thayer	11.0	Near Boys' Reform School, northeast.
Fort Totten	47.7	On Bates road, north of Soldiers' Home, northeast.
Total area	364.0	

CLASS B.—LARGE PARKS.

		Acres.	
Anacostia Park.	water.	535	Between Massachusetts avenue and District line, on Anacostia River, northeast.
	land	608	
		1,143	
Analostan Island		88	In Potomac River, west of Mall.
Mount Hamilton Park		119	On Bladensburg road, northeast.
Fort Kemble		147	At head of Chain Bridge road, northwest.
Patterson Park		140	Adjoining Columbian Institute for Deaf-Mutes, northeast.
Fort Reno		70	At Tenley near Georgetown and Rockville road, northwest.
Total area		1,707	

CLASS C.—ADDITIONS TO GROUNDS CONNECTED WITH PUBLIC BUILDINGS, INSTITUTIONS, OR DEPARTMENTS AND PRIMARILY INTENDED FOR OTHER PURPOSES BUT INCIDENTALLY OPEN TO THE PEOPLE UNDER LIMITATIONS.

	Acres.	
Howard University Reservoir.	8.1	On westerly side of Howard University Reservoir, northwest (three small parcels).
Old Naval Observatory	19.3	On westerly side of old Naval Observatory, northwest.
Soldiers' Home or filter grounds.	12.8	On southerly end of Soldiers' Home grounds, east of filter grounds, northeast.
Washington Barracks	30.2	On westerly side and southerly end of Washington Barracks.
Total area	70.4	

Total area in classes A, B, and C, in acres, 2,141.4.

CLASS D.—PARKWAYS AND PARK CONNECTIONS.

Temporary designation.	Approximate area.	Location.
	Miles.	
Broad Branch parkway	2	From Tenleytown to Rock Creek Park, via Fort Reno Reservoir and Broad Branch Valley, northwest.
Eckington parkway	1.2	From Soldiers' Home to Patterson estate, northeast
Georgetown parkway	1.6	From Rock Creek, at Massachusetts avenue, to Foundry Brook Valley, northwest.
Mount Hamilton parkway	.75	From Patterson estate to Mount Hamilton, northeast.
Piney Branch parkway	1.6	From southern end of Rock Creek Park to Seventh street road at Municipal Hospital grounds, northwest.
Potomac Palisades	3.2	From Foundry Brook Valley, along the Potomac River, to District line, northwest.
Quays	8.5	Rock Creek mouth to Mall, northwest; Mall to Washington barracks, southwest; Washington barracks to Navy-Yard, southwest and southeast; Navy-Yard to Massachusetts avenue, and returning on eastern side of Anacostia River to Giesboro Point, southeast.
Riverside drive	2.8	From Giesboro Point to United States Powder Magazine, and from Powder Magazine to District line, southeast,
Rock Creek parkway	2	From Zoological Park to Potomac River, northwest.
Savannah parkway	.8	From Municipal Hospital grounds to northern end of Soldiers' Home grounds, northwest.
Shepherd parkway	2.7	From grounds of Government Hospital for the Insane to Bald Eagle Hill, near site for new Almshouse, southeast.
Soapstone Creek parkway	1.2	From Tenleytown to Rock Creek Park, northwest.
Soldiers' Home parkway	1.2	From Rock Creek Church road along easterly side of Soldiers' Home to Michigan avenue, northeast.
Stickfoot Creek parkway	1.75	From Anacostia River to Hamilton road, southeast.
	31.30	
To which may be added streets and avenues which should be widened and parked to form adequate connections:		
Fort drive	17.	From Rock Creek, at Military road, following the chain of old forts to Anacostia River, and from Anacostia River, following the forts on the ridge, to Government Hospital for the Insane.
Nebraska avenue	1.25	From Ridge road to Tenleytown, northwest.
Yuma street	1.75	From Tenleytown to receiving reservoir, northwest.
	51.30	
Mount Vernon road	14.	
Total length	65.30	

APPENDIX I.—PROPOSED ADDITIONS TO EXISTING PARKS.

[Shown in green lines on map No. D-288.]

ZOOLOGICAL PARK.

1. To extend the park at its southerly end to the nearest street as laid out on the highway-extension plans a strip of land is needed. This land is a steep hillside facing the park and has been occupied in part by a cemetery. It immediately overlooks Adams Mill road, one of the principal entrance-drives of the park.

Area of above proposed addition (about) ..... acres.. 5

2. At the southeasterly side, beginning at the Adams Mill road and extending along the westerly slope of Lanier Heights to Kenesaw avenue, lies a strip of land that is needed in order to put under control of the park authorities a steep hillside close to the creek, from which in places fragments are constantly rolling down into the park to the great danger of animals and visitors. It is, moreover, very intimately a part of the parks cenery, and its development for private purpose would be a great injury. The line recommended coincides with the nearest street of the highway-extension plan and would make it possible to provide a new park entrance to take the place of Old Quarry road.

Area of above proposed addition (about) ..... acres.. 6.4

3. At the westerly side of the park there is a considerable area between Connecticut avenue and the present boundary. North of Cathedral avenue this is too narrow to allow a double row of lots, and if no further action is taken the frontage of the park for 1,000 feet on each side of the main entrance will be upon a row of back yards. One of two things should be done: Either to take the whole tract and bring the park frontage out to Connecticut avenue, or to provide for a new street parallel with Connecticut avenue and about 400 feet away from it extending from Cathedral avenue to Klingle Ford Valley, and to sell off the small strip of park land lying outside of the street. The first would be the more dignified and desirable treatment, but as the land does not form an essential part of any park landscape the second would be perfectly reasonable, and, in view of the high price of the lots facing on the avenue, perhaps, the wiser course. If the second alternative is adopted, however, it is essential that some additional land should be taken at the entrance in order to give it greater dignity. In either case it would be desirable to secure the low land in the Klingle Valley adjacent to the park for the better protection of its borders, and in order to provide for the construction of a road leading from the high land near Connecticut avenue to the northern part of Rock Creek Valley.

The area of the whole tract in question is (about) ..... acres.. 21.6

The park area which would be sold if the second project were adopted is about 7.06 acres, and the area to be acquired in Klingle Valley about 11.5 acres.

Total area in acres of proposed addition to Zoological Park 33.0
Total area in acres of Zoological Park as increased 203.0

ROCK CREEK PARK.

East side.

1. To rectify the boundary between Rock Creek Park and the small subdivision at the corner of Klingle Ford road and Park road so as to permit the construction of a boundary street it is necessary to take small pieces from the rear of this subdivision. A boundary road built at this point would follow the crest of the steep hillside and furnish a view into the valley of the creek 100 feet below, without letting the private land intrude into the landscape.

Area of above proposed addition ..... acres.. 0.75

2. Between the southwesterly corner of Blagden estate and Rock Creek Park a triangular piece should be taken to extend the park at this point to the nearest street of the highway-extension plan.

Area of above proposed addition (about) ..... acres.. 6

3. Between the southerly end of Colorado avenue, an improvement now under construction, and Blagden Mill road, which is now the park boundary, lies a strip of land which should be added to the park, not only in order that the park may be brought to Colorado avenue, which will become one of the principal park entrances, but to include a high, steep ridge now private property but forming one side of the gorge of Rock Creek. The present boundary is within 250 feet of the stream.

Area of above proposed addition (about) ..... acres.. 21

4. From the reservoirs near Blagden Mill road to the northern limit of the park Sixteenth street, when extended, should form the park's eastern boundary, as has been contemplated from the beginning. The desirability of bringing the park continuously to Sixteenth street is so obvious as a matter of dignity as to need no argument, but it may be said, in addition, that many of the pieces in question are also requisite to protect the landscape of the valley from the intrusion of buildings. The lands required are as follows:

Combined area of fourteen pieces between the reservoirs and Rock Creek Ford road ..... acres.. 33.36
Combined area of two pieces immediately north of Rock Creek Ford road, acres 11.18
Area of the single piece between the foregoing group and the northern limit of the park ..... acres.. 2.7
Area of the piece at the northeastern corner of the park (about) ..... do.... 20.1

North end.

5. The northern limit of the park should be extended to the recently constructed road, the position of which was fixed by the shape and slope of the hills.

Area of the required land ..... acres.. 24

West side.

6. Near the northern end of Daniel's road a considerable tract of private land juts into the park. It was originally intended to include this land, and it was omitted only on account of lack of funds. Its acquisition is certainly desirable, but as it does not form an essential part of any important park landscape a reasonable boundary street could be devised which would exclude the greater part of it, together with some of the adjacent park land to the south. It does not, therefore, fall in the same class with the other essential additions proposed.

Area of the whole tract ..... acres.. 50.26
Least area which would provide for a suitable boundary street (about) ..do... 14

7. From the point where Broad Branch road joins the park to Soapstone Creek a proposed street of the highway-extension system follows the crest of steep hillsides which overlook the park boundary in the valley below, now defined by Broad Branch road. The strip of land between the latter and the highway-extension road is essential to the preservation of the beautiful scenery of Broad Branch Valley and the opposite hillside already purchased. It is, moreover, on account of its extreme steepness very ill adapted to private development.

Area of this piece (about) ..... acres.. 38

8. In the region of Pierce's mill, and north to Soapstone Creek, are broad hillsides rising from Rock Creek to a peak 220 feet above it and 500 yards away, slopes between them and the present boundary of the park. This should be taken because of the extreme narrowness of the park at this point and because the character of the land makes it actually part of the park landscape. If it remains in private hands and is occupied by buildings and streets, these will be to all intents and purposes as much within the park as if erected on the land already bought for park purposes.

Area of this piece (about) ..... acres.. 95

9. At the southwestern end of the park, and on the old Klingle estate, a small piece of land should be taken in order that the boundary of the park may be brought to the proposed street of the highway-extension system.

Area of this piece ..... acre.. .20

Total area in acres of proposed additions to Rock Creek Park (about) . 302.55
Total area in acres of proposed additions to Zoological and Rock Creek parks (about) 335.55
Total area in acres of Rock Creek Park as increased 1,908.48