

NECESSITY FOR C PRESERVED. HH SHOWING NORTHEAST, FORT RENO.

THE SECTION WEST OF ROCK CREEK.

S an important entrance to Rock Creek Park and in connection with the high western section of the District, we propose that a parkway be formed in the valley of Broad Branch, which enters the park at its most western point. The valley is in part gentle and open, with scattered trees, and in part steep sided and heavily wooded. The treatment would be in effect that of an elongated park contained between two boundary streets and including a sufficient width of natural valley scenery to give agreeable surroundings for the main drive, bridle path, footpaths, etc. In the rough portion next the park the character would be somewhat as indicated by the section on page 92, but in general it would be more open and gentle. The width between boundary streets would vary from 200 to 700 feet.

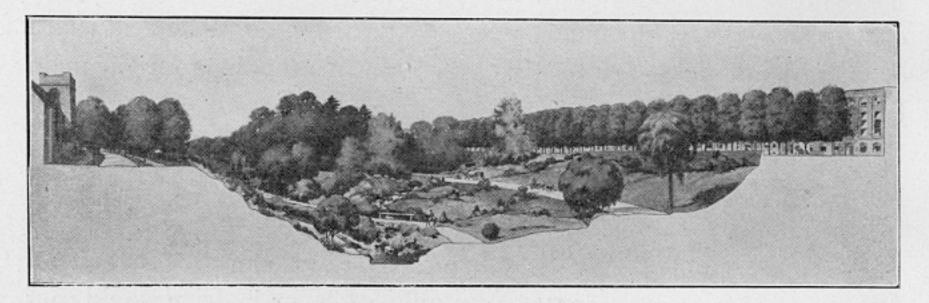
The course would be a little north of west to Connecticut avenue, a distance of about three-quarters of a mile. The main drive would pass under the avenue, but a branch road would connect with it at grade, thus putting the parkway in touch with Chevy Chase and the main line of transportation. Beyond Connecticut avenue the branch of the valley followed by the parkway turns to the southwest and reaches Fort Reno.

The site of Fort Reno, now occupied by a reservoir, is the highest point in the District, 425 feet above tide level, and commands remarkably wide views in all directions. It is highly desirable that this summit be preserved from exclusive private occupation, and we recommend the acquirement of a sufficient area to protect the view against obstruction by houses of ordinary height on the adjacent slopes. A circle 2,000 feet in diameter would attain this end and its boundary would permit the construction of a border street at good grades. A short link of parkway would connect Fort Reno along the ridge to the south with Tenley Circle

at the junction of Nebraska avenue and the Tenleytown road. This circle is the point of junction with another important line of parkway.

To the west of Rock Creek the only considerable tract of public open land is that at the receiving reservoir, in the extreme corner of the District overlooking the gorge of the Potomac. This has therefore been taken as the main objective point of the principal parkway on the west, which follows almost the shortest line between the two reservations.

The Soapstone Branch, which enters Broad Branch where the latter joins Rock Creek, about a mile below the end of Broad Branch Parksoapstone Parkway. Way, flows through a rather narrow, well-timbered, and beautiful valley, heading in open land near Fort Reno and Tenleytown. This valley is crossed by Connecticut avenue at a point where it is flanked by two high wooded peaks or knuckles

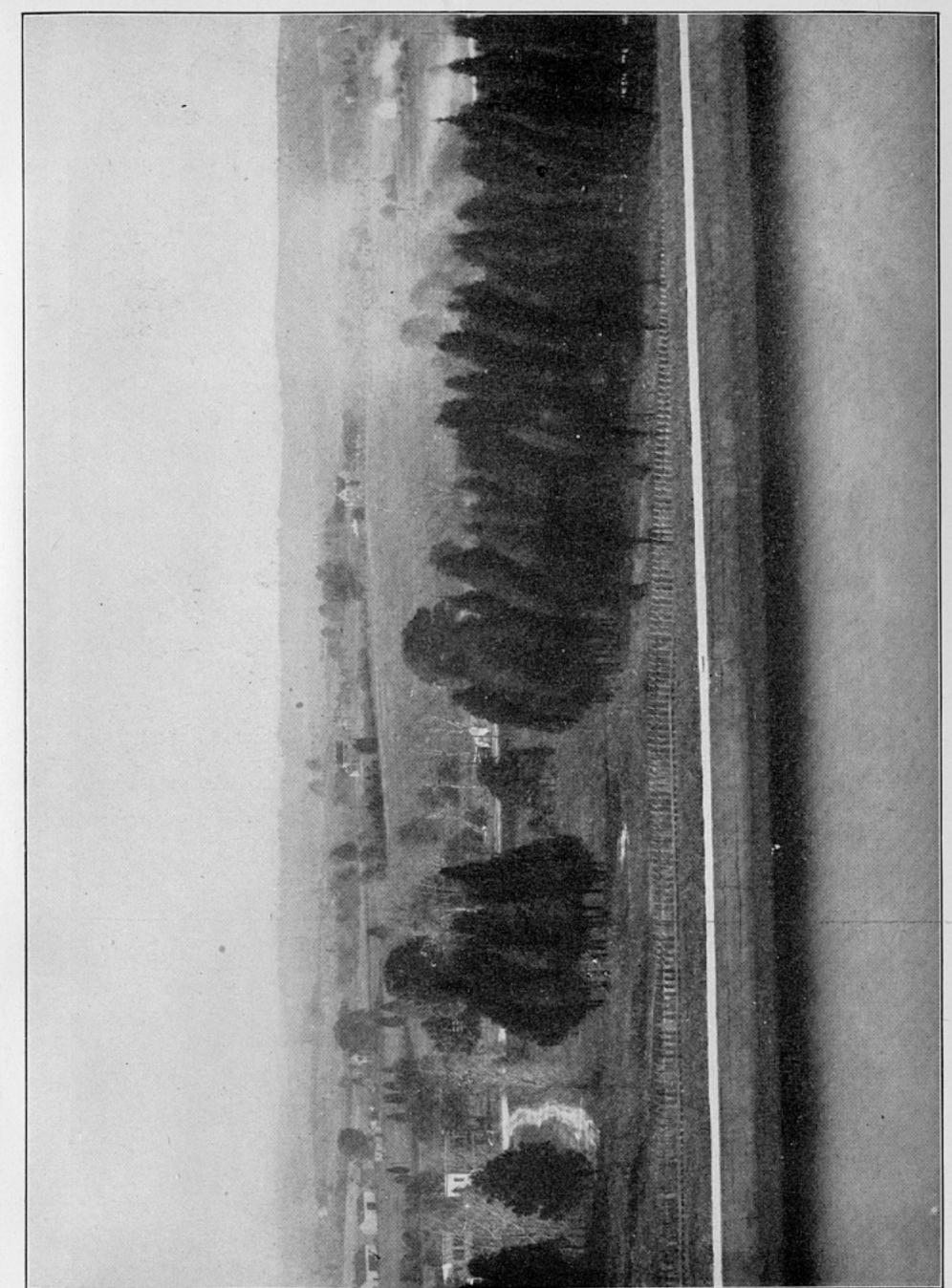


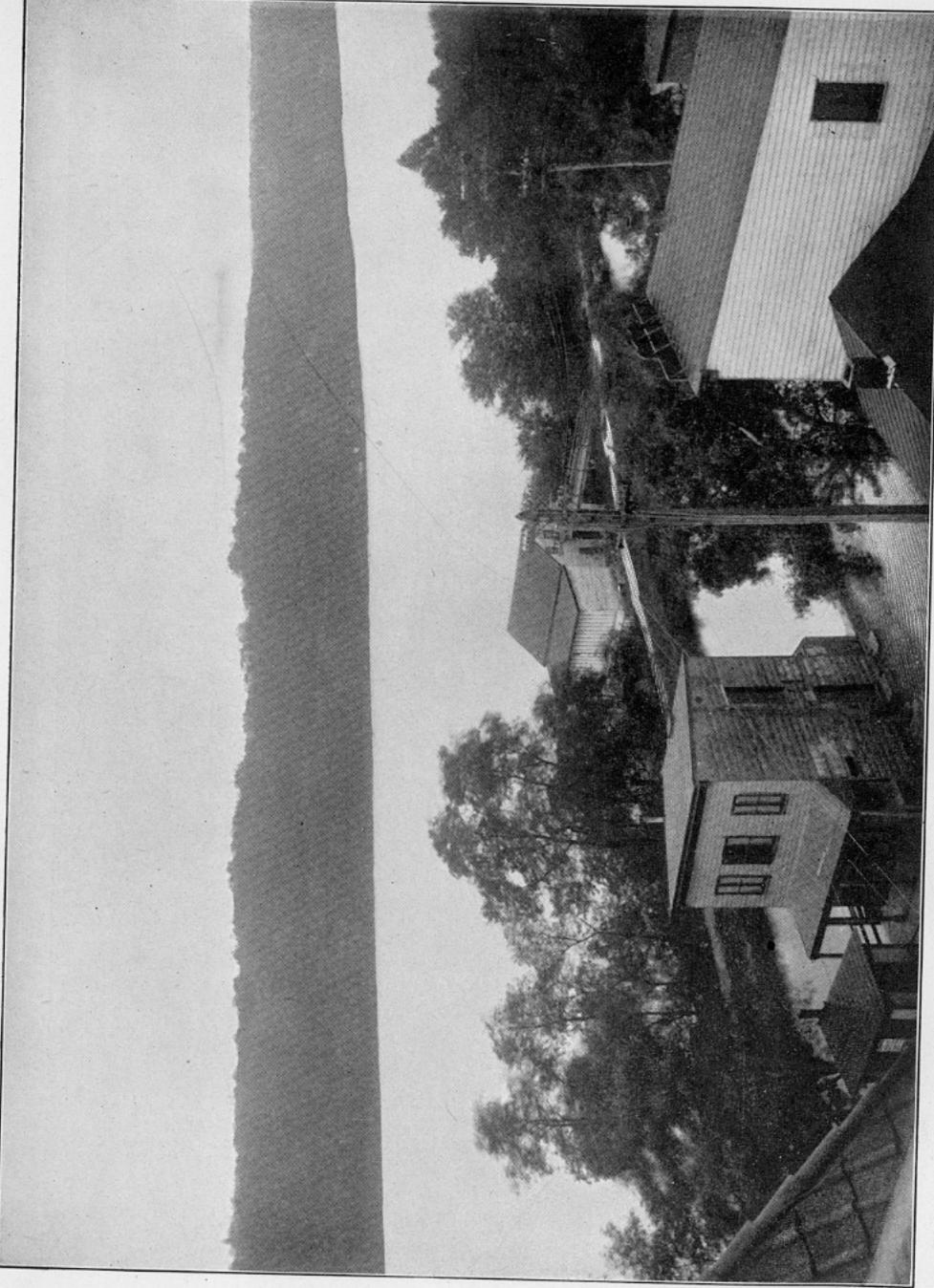
No. 13.—Typical section of one of the Valley Parkways, such as Piney Branch, Soapstone Creek, and Georgetown Parkways.

rising to an elevation of over 300 feet. Simply as a western entrance to Rock Creek Park from Connecticut avenue the lower portion of this valley seems quite essential. It is so steep sided that it would be costly of development for building purposes, while nothing could be better adapted to use as a park entrance, as it affords an easy grade and pleasant scenery within narrow limits.

The two knuckles immediately west of the avenue ought also to be preserved, on their own account, as interesting topographical features rising high above the streets, and affording to those who will climb them extended views toward the east and toward the Monument.

As part of a through parkway, the valley offers an opportunity for the drive to pass under Connecticut avenue with its heavy and swift suburban electric cars, and to rise through the opener and broader stretch to the west, reaching by a slight turn on an easy grade one of



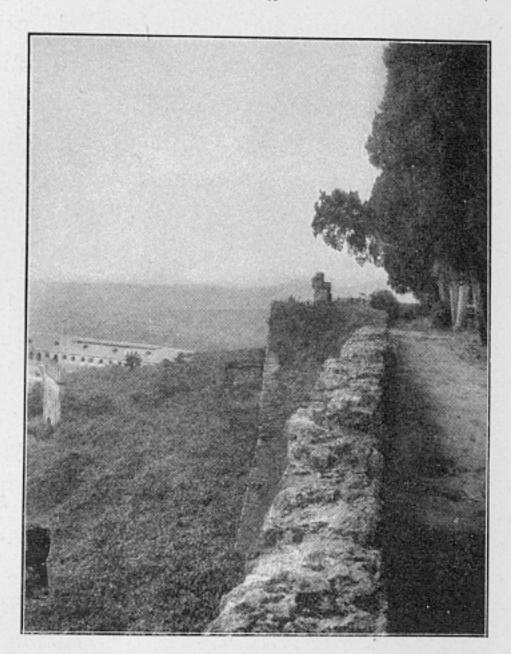


SHOWING NECESSITY OSED DRIVE, AQUEDUCT BRIDGE, FR CONTROL OF THE

the spurs of the high ridge in which the western portion of the District culminates. From this point, at an elevation of 340 feet, is to be obtained another extensive eastern view down the valley and over Rock Creek Park to Soldiers' Home, a view that might well be marked by a terrace or concourse, especially as the character of the parkway would change at this point from the informal type appropriate in the wooded valley to a formal avenue across the high plateau, the terrace thus making a strong terminus for the latter and emphasizing the drop into the valley. The formal section would be a widening of Yuma street,

laid out but not constructed, and would lead directly to a circle at the junction of Nebraska avenue and Wisconsin avenue, commonly known as Tenley Road, within 2,000 feet of the proposed Fort Reno Park, the highest point in the District of Columbia. In connection with Nebraska avenue extended, a branch drive on easy grades can easily be provided to Fort Reno, thus bringing it within easy reach of Rock Creek Park and the city.

From the Tenley circle, continuing on the widened Yuma street, a distance of about 1,000 feet brings the line to the



No. 154.—Terrace, Villa d'Este, Tivoli, showing how a declivity commanding a view is used and emphasized, not disguised.

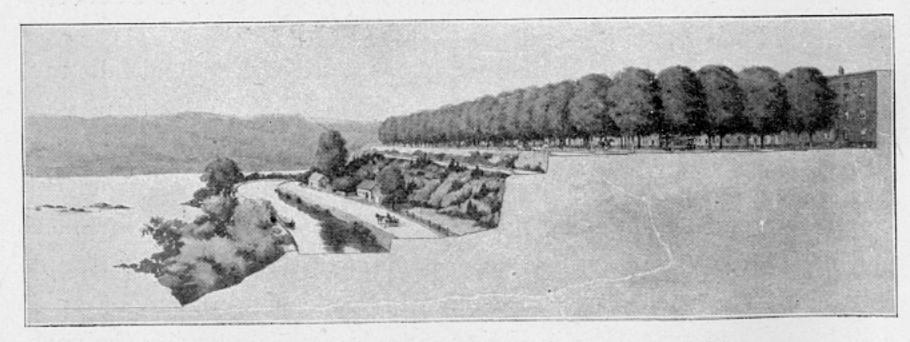
western escarpment of the narrow plateau, where the land falls rapidly and steadily from its elevation of 410 feet, disclosing a view that sweeps due west over mile after mile of rolling country in Maryland and across the river to Virginia. To descend from this height it would be possible, by cutting at the top of the escarpment and filling heavily as the bottom, to avoid excessive grades, but to do so would be to ignore the opportunity here offered by the topographic conditions. Instead of so doing, we should advise carrying the parkway level out to the very brink, there ending it in a projecting concourse commanding in its perfection the sunset view, preserved from the intrusion of future buildings by the acquisition of the slope in

view below; then, turning the road, it can be carried down upon a very easy grade by means of two reverses on the hillside, giving the opportunity at some future time of developing a splendid series of terraces facing the view and the mile-long continuation of the parkway to the reservoir and the District line.

The receiving reservoir grounds, 281.75 acres in extent, situated at the westerly edge of the District, close to the Potomac River, lie partly in the State of Maryland. That portion in Receiving reservoir. the District is heavily wooded and the land is of a basin-like formation. No views of any importance are to be had from this land except that portion which touches the palisades of the Potomac. From this portion, however, views up and down the river are to be had, and in the remainder time and care will develop some very beautiful woodland scenery to which the large pond-like reservoir will give great interest. This land should, therefore, be treated consistently with a view to its ultimate development as a park. An adjacent block of land, including the site of Battery Vermont, purchased by the District for a girls' reform school is no longer needed for its original purpose, and may be grouped with the receiving reservoir for park purposes.

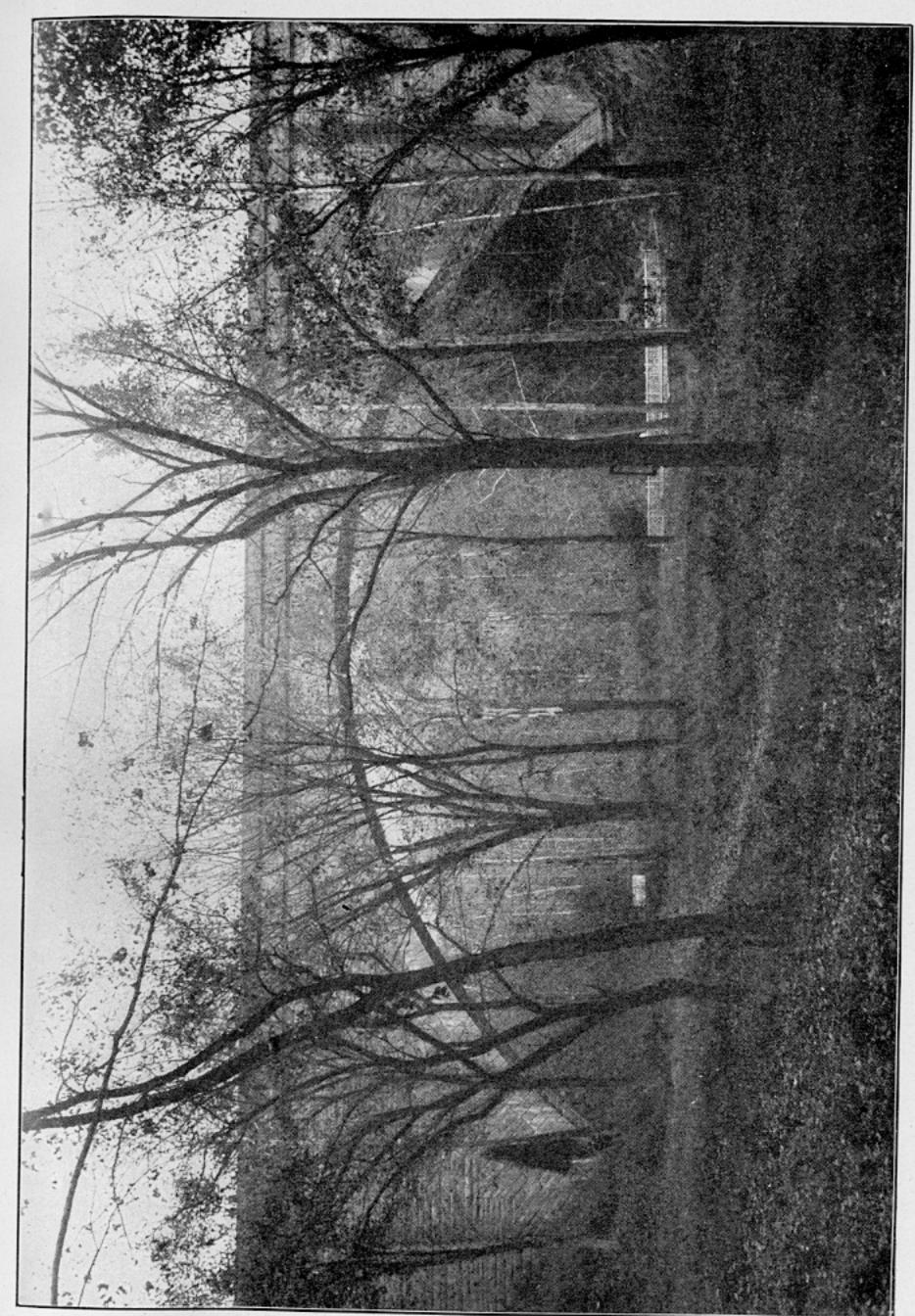
At the receiving-reservoir grounds is reached the gorge of the Potomac and the popular Conduit road, which provides the only way, except by trolley cars, to see the gorge from above.

As its construction was a mere incident to the installation of the water supply, the location of the Conduit road was not fixed with regard to aesthetic effect, but from the fact that in many parts of

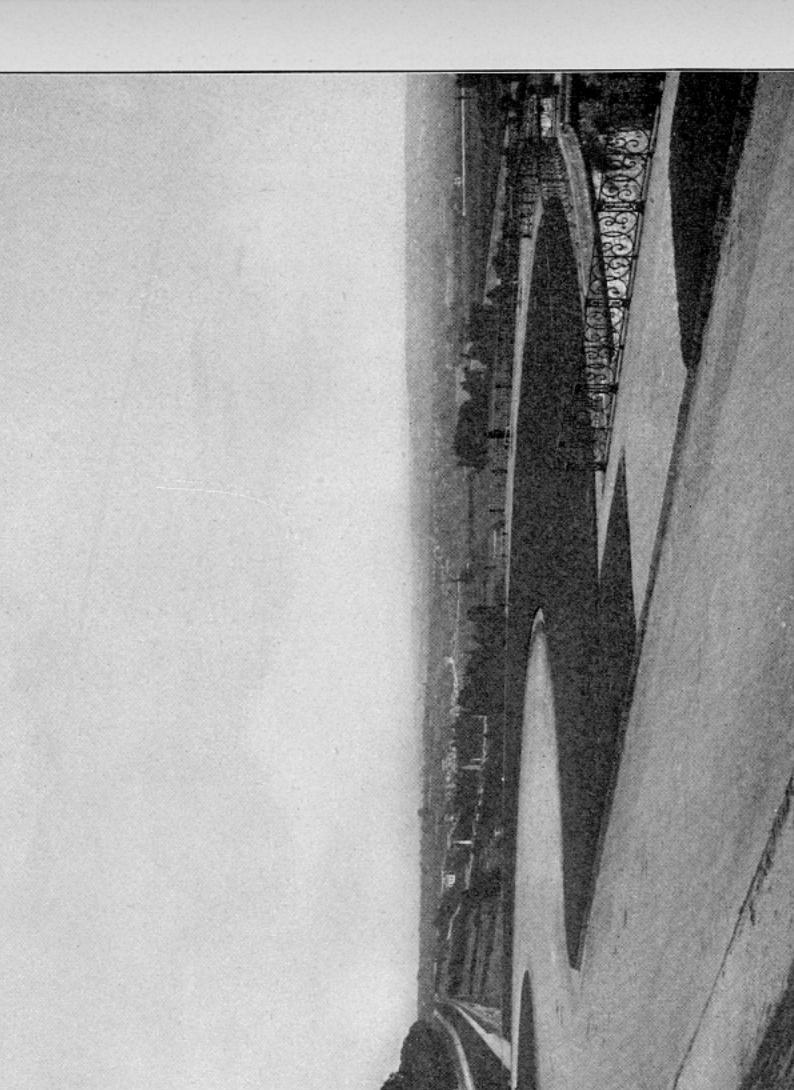


No. 14.—Typical section of Potomac Drive, a short distance above Aqueduct Bridge.

its course it follows near the edge of the declivity, presenting very fine views, and because its grades are generally good, it is more resorted

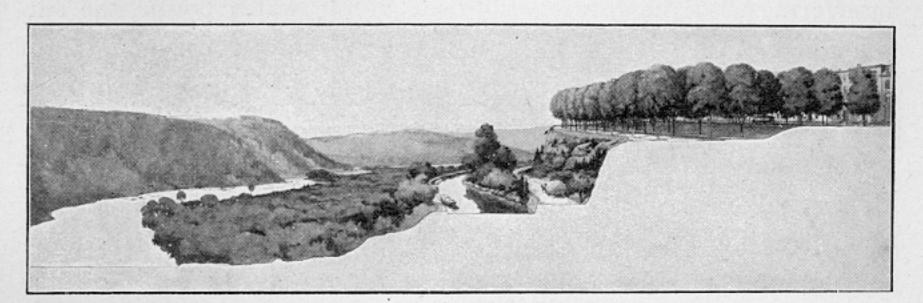


NO. 178.—CABIN JOHN BRIDGE, A PORTION OF THE WASHINGTON AQUEDUCT SYSTEM



to than any drive leading out of the District, except the one to Arlington. We believe that permanent provision should be made for the ends that are filled in a temporary and partial manner by the Conduit road and that this provision should take the form of what might be called a cliff drive along the Potomac, including in the holdings, in order to prevent objectionable occupancy, all the unoccupied steep land from the top of bluff down to the river.

At the upper or landward edge would run a street for traffic and for house frontage, next below would run the trolley line, altered in places from its present location, and then, in the best position to present the changing panorama of the river, would come the pleasure drive and the promenade, fitted to the steep and irregular hillside by well-adjusted slope and wall. Still farther down comes the picturesque canal and its bordering roadway, and in places there might be call for a road

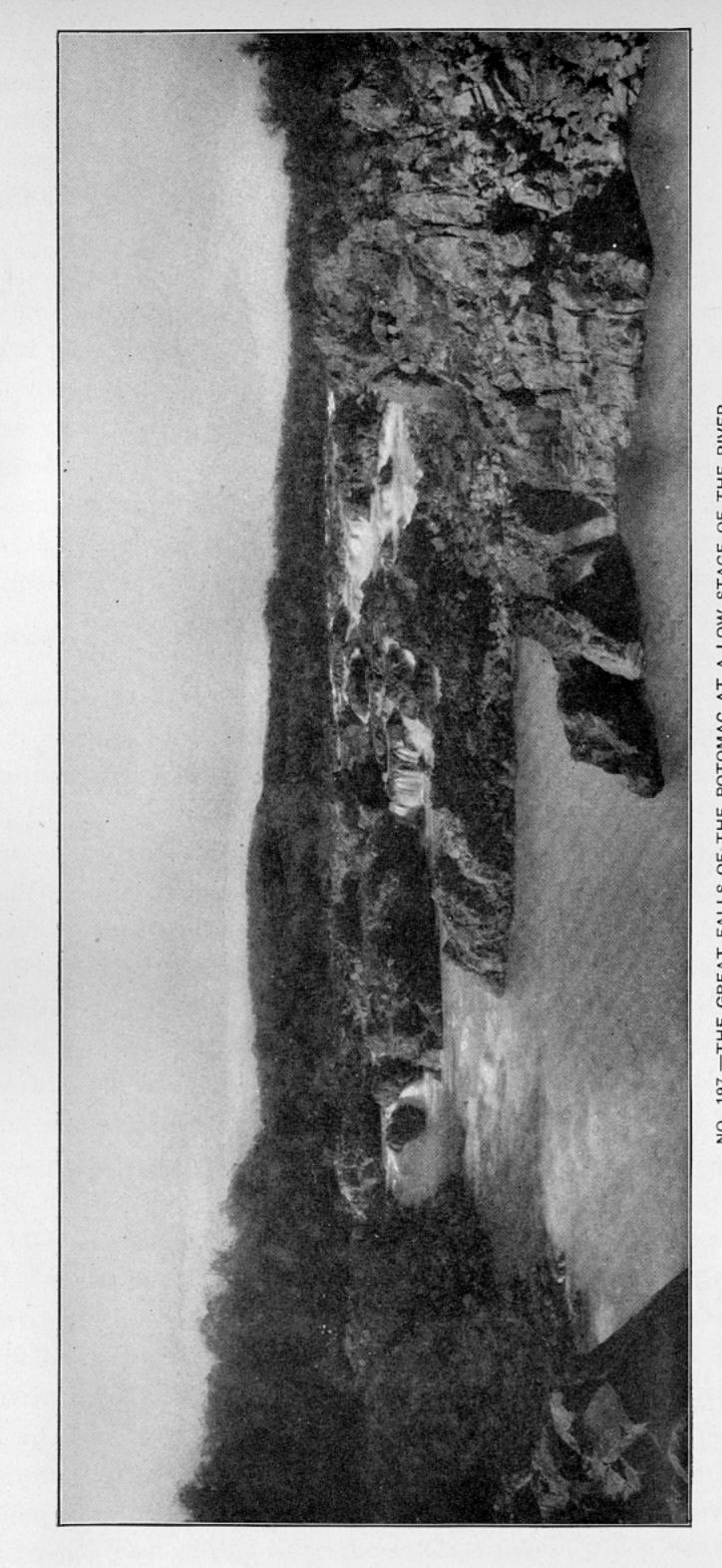


No. 16.—Typical section of Potomac Drive below the Chain Bridge.

close down by the river's edge. The arrangement of these several parts would vary with the varying conditions of the bluff, as is suggested in the accompanying typical sections, but always the effect would be picturesque and always the plunging views from the upper lines would be fine. Merely to provide for a street at the top of the slope is not enough, for, although the land is for the most part too steep to have much commercial value, yet here and there ugly and offensive buildings are likely to creep in, as they have done somewhat in the past, unless the slope is all acquired with a view to a consistent treatment. Years ago New York showed the way in the Riverside drive, and it is high time that the example should be followed here, at least so far as concerns the acquisition of the land.

But such a treatment of the river side logically ought not to stop at the District line. Indeed, the best of the scenery lies beyond, especially in the neighborhood of Cabin John Bridge and in the region just about and below the Great Falls. The Great Falls of the Potomac, considering their proximity to the capital, are quite as well worth preservation for their grandeur and natural beauty as the greater passages of scenery in the national parks of the West. Even at present, when the only means of approach is by canal or over the hilly detour by which the road is carried around the most interesting scenery, the Washington public goes to the Great Falls in sufficient numbers to maintain the pay bridge to the islands, erected by private enterprise, and with increased facilities of access the place is likely to become a deservedly popular resort. The falls form one of the greatest cataracts of our Atlantic watershed, and while they themselves can not be injured, yet the great trees that once clothed their banks have been cut, and in private hands the surroundings may be so injured as to detract greatly from the beauty and grandeur of the scene. Without interfering with the future utilization of the water power, the surroundings of the Great Falls on both sides of the river should, in our opinion, be converted into a national park, to be connected with the city by a continuous river drive.

The beauty of the scenery along the route of this proposed noble river-side improvement is so rare and, in the minds of the Commission, of so great value not only to all Washington, but to all visitors, American and foreign, that it should be safeguarded in every way. No building should be allowed between the drives and the river, and no change should come to pass in the character of the canal that will tend to transform its primitive character and quaint beauty. The canal has a charm of its own, as, half disclosed and half revealed, it winds among the trees; and not the least part of this charm, so desirable to be preserved, is the slow, old-fashioned movement of the boats and of the people on and near this ancient waterway. Already the canal is used, aside from the navigation of commerce, by pleasure seekers in canoes, and by excursion parties in various craft. More and more will the canal be thus used as an attractive route between the populous city and the natural charms of the picturesque region between Cabin John Bridge and Great Falls. The preservation and continuance of the canal in its original character will thus add elements of gayety and life to a scene much to be enjoyed by the passers-by on the neighboring and upper roadways. Beyond the canal lies an area of lowlands, here and there bowlder-strewn and set with clumps of trees. It is now available in part for pasture. As a whole it is in keeping with the



uncultivated hilltops of the Virginia Palisades, and would best be left without formal treatment.

One of the boldest of the hills rising to the north of the Potomac Palisades is that occupied by Fort Kemble. On account of the extent of its view to the southward, and still more on account of the beautiful valley sloping toward the Potomac over which this view is to be seen, we recommend the acquirement of a park of about 174 acres, serving as a southern terminus of Nebraska avenue and connecting it by a park drive in the valley with the road along the Palisades. The boundaries are fixed rather closely by the need of preserving the views intact and securing border streets on reasonable grade without excessive cut and fill.

On a neighboring hill, the site of Battery Parrott is but little less important as a view point and local park. Its boundaries, including an area of about 1.82 acres, are fixed by the streets of the highway plan and include what is needful to preserve the best views.

To bring the upper Potomac into direct connection with the city and to provide an approach from Georgetown to the Zoological Park and Rock Creek, a parkway is proposed from the end of Potomac drive at the valley of Foundry Branch, half a mile above the Aqueduct Bridge, to Rock Creek parkway near Massachusetts avenue.

The valley of Foundry Branch must be spanned by a viaduct a little north of the present electric railway trestle, and as the valley is deep, narrow, and picturesque, it would be well to preserve it as a part of the parkway between the New Cut road and the river. From this valley the line would cross the ridge upon the end of which stands the Georgetown observatory, and run on a direct line by easy grades to the gap south of the Naval Observatory. In passing through the lands of Georgetown College, which are likely to remain always agreeable and park-like, the width might be reduced to the minimum requisite for a single drive and paths. Beyond New Cut road the arrangement should be similar to that indicated on the alternative section for Rock Creek parkway on page 85.

In crossing the ridge at Thirty-fifth street and the Tenleytown road the central drive would be depressed below the side streets, both for the sake of an easy gradient and in order to pass beneath those two busy streets. East of this ridge the takings should widen out so as to preserve the charming valley scenery which extends from this point to Rock Creek. Here the parkway would be of the type indicated in section on page 86. A branch similar in treatment should connect with the Naval Observatory grounds.

The boundaries are so fixed as to provide for border streets on reasonable grades, including the best of the valley scenery and permitting the construction of a central drive, paths, and so forth, without destroying its beauty; but, in addition to these absolute requirements, a projecting piece of land of about 13.5 acres is included in order to provide a dignified and convenient entrance to the park system from U street, Georgetown, and at the same time to afford a much-needed local park and playground.

THE SECTION EAST OF ROCK CREEK.

TURNING from the western to the central section, it is of the utmost importance to secure an agreeable park-like connection between Rock Creek Park and Soldiers' Home as bringing into organic relation two of the largest and most beautiful places of recreation lying within reach of the principal residence district of the city, and considered in relation to the proposed new holdings such a connection would form one of the links binding the eastern and the western parks into a comprehensive system.

Starting from the Piney Branch entrance of Rock Creek Park at Sixteenth street, the line would continue for some distance in the valley of Piney Branch, thus taking advantage of one of the most charming passages of natural valley scenery in the District. This leads to the grounds of the Municipal Hospital, which will always be maintained in a park-like and attractive fashion. Rising from the valley by an easy grade along the southerly side of the hospital grounds, which the parkway takings would round out and complete, the route would enter a formal plaza to be created at the Seventh street entrance to the hospital, where there will be a convergence of streets, according to the adopted highway plan, from eight different directions. Between this point and the Soldiers' Home it would be easy to form, by widening Savannah street, a magnificent formal boulevard 4,000 feet in length, terminated on the west by the new hospital buildings and on the east by the Soldiers' Home itself. While the present buildings of the latter do not lie exactly on the axis of Savannah street, the projected new building, if placed so as to complete the quadrangle already partially formed, would come precisely at the head of the proposed boulevard, forming, with the hospital, a composition of great dignity.

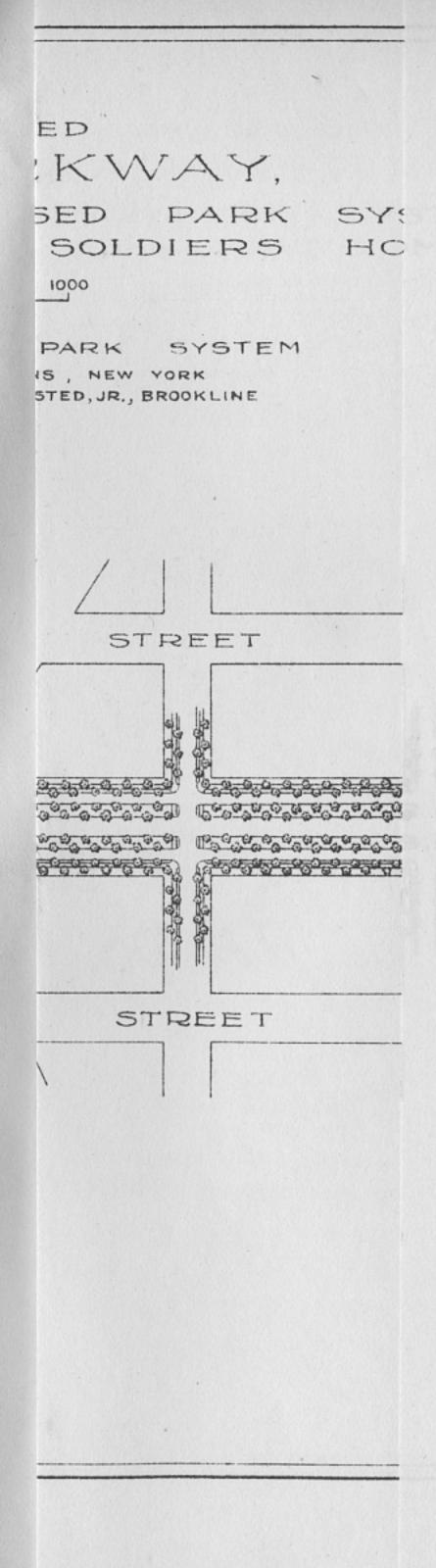
Swinging around the new building of the Soldiers' Home to the north, the continuation of the parkway would pass south of the two cemeteries and would follow the valley along the boundary of the Home to Harewood road. To secure good grades and preserve the beauty of the valley certain additional lands would have to be acquired and thrown into the grounds, compensating for some of the boundary strips that would elsewhere have to be taken from them. Following Harewood road the parkway would skirt the beautiful open valley to the west, and near the southeastern corner of the grounds would turn within the edge of the woods into the valley and follow its course,



No. 17.—Section of Savannah Parkway.

thus avoiding a grade crossing of the electric cars and surface traffic of Michigan avenue, which now crosses the valley in fill and would pass over the parkway by a suitable bridge.

The Soldiers' Home grounds are a highly developed tract of land, 502 acres in extent, heavily treed in some sections, and in other's having an open meadow-like appearance. An extensive Soldiers' Home road system is already constructed, and there are a Grounds. number of large buildings. These grounds are set apart as a home for old soldiers of the Regular Army, and are maintained out of the proceeds of fines imposed for breaches of discipline; but by courtesy are usually thrown open to the public, forming in effect a most beautiful park. If they were to be considered simply from the point of view of the casual visiting public, the grounds might be improved by some rearrangement of the road system, lessening the grades and doing away with some of the abrupt turns on certain main lines which would then attract the greater part of the travel and thus relieve the other roads, many of which, for use by large numbers, are crooked, narrow and steep, although in themselves very picturesque and attractive. It is to be hoped that the future will see the continuation



PLAN SHOWING PROPOSED SAVANNAH PARKWAY, FORMING THAT PORTION OF THE PROPOSED PARK SYSTEM BETWEEN MUNICIPAL HOSPITAL AND SOLDIERS HOME 1000 SCALE IN FEET COMMISSION ON THE IMPROVEMENT OF THE PARK SYSTEM DANIEL H BURNHAM, CHICAGO AGUSTUS ST GAUDENS, NEW YORK FREDERICK LAW OLMSTED, JR., BROOKLINE CHARLES F MCKIM, NEW YORK NOV. 1901 TRENTON STREET RICHMOND STREET SOLDIERS HOME R.A. Outhe THE NORR'S PETERS CO. PHOTO-LITHE

of the policy which has been wisely followed in the past of concentrating the buildings at a limited number of points, and of keeping the greater part of the landscape perfectly simple and not disturbed by attempts at ornamentation.

At the head of North Capitol street there is opportunity for a very grand formal entrance, which should take the form of a triumphal arch commemorative of a great soldier and statesman.

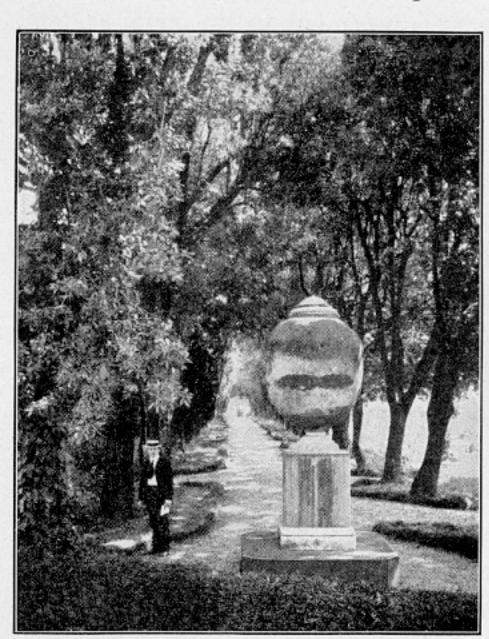
On account of its situation between the Soldiers' Home grounds and Howard Park, in the growing section of the District, and on account Howard University of its considerable expanse of water, forming an element in the Soldiers' Home landscape, the new reservoir can be made an important supplement to the park system. To that end a small strip of land should be acquired on its western side next Howard University, to provide for a drive and to afford at least a fringe of landscape under public control. The present acreage is 67.7, or with the adjacent filter grounds 101.7. The proposed addition would be about 3 acres in extent. The purchase of another block of land about 320 feet square would be desirable, in order to connect Howard Park with the reservoir, and thus with the Soldiers' Home grounds. Howard Park has a beautiful grove of large oak trees, and if thus connected and if provided with a wider entrance from the neighboring Seventh street, would not only be more accessible and useful in itself, but would form part of a most desirable southwestern approach to the Soldiers' Home.

HOSPITAL

The connection from Soldiers' Home to the proposed park on the Patterson property should follow at first the valley extending south from Michigan avenue toward Eckington. This val-Eckington Parkway. ley, now crossed diagonally by Lincoln avenue, is charmingly wooded for a distance of half a mile, and it should be the aim in fixing the boundaries to preserve this charm. The boundary streets should be so adjusted to the surface as not to mar what lies within them, and the width of taking should be such that the construction of the central drive, if carefully planned, would leave considerable breadth of the natural park-like effect undisturbed. While the width would vary, the typical arrangement would be somewhat as indicated in the cross section on page 92, although less rugged in character. Beyond the wooded portion of the valley, the width would be somewhat reduced and a formal arrangement would be adopted, although following curved lines in order to avoid abrupt angles and in order to secure good grades without great expense for construction. The Metropolitan Branch Railroad would be crossed by an overhead bridge and the parkway would join the wooded portion of the Patterson property at a high level, so that the continuation of the drive through the park woods would not be complicated by the new location of the Baltimore and Ohio tracks, which should pass under this part of the park by a short tunnel.

PARK SYSTEM OF THE DISTRICT OF COLUMBIA.

About a mile and a quarter northeast of the Capitol, just beyond Florida avenue and west of the large tract of finely Patterson Park. wooded land occupied by the Columbia Institution for Deaf and Dumb, is a beautiful piece of land, formerly the Patterson



Vista, Villa Albani, Rome.

estate. It is on the edge of the hilly section overlooking the city proper, and its northern part, high and undulating, is covered with a grove of large old trees, from the edge of which there is an inspiring outlook over the open southerly slope leading down to a broad gentle pasture enlivened by a very few outstanding trees. There is probably no better example in the whole District of the "park-like" type of landscape, using the word in its stricter sense, and its acquisition is desirable not only for the sake of its great

natural beauty, but because its stretch of nearly level greensward, lying between Eckington and Northeast Washington, would be of the utmost value to the future population of the surrounding region. The grove about the old mansion and to the north of it would be hardly less valuable, for it is of such a character and upon such comparatively gentle slopes as to adapt it to use by large numbers of people better than any other large piece of woodland available for park purposes.

The wooded portion is crossed by the line fixed by act of Congress for the Baltimore and Ohio tracks, which would here be 55 feet below

grade, and it is very desirable, if the region is to become a park, that the hill should be tunneled rather than gashed by a wide, open cut. Parallel to the track and about 200 feet from it is the line of New York avenue, as shown on the highway-extension plans. If the tracks are placed in a tunnel the avenue might be diverted slightly to the north around the hill and made the limit of the park, or it might be carried straight through as a traffic street below grade in a comparatively narrow cut crossed by the park drives and paths upon masonry arches, as is done in the case of the transverse streets in Central Park, New York.

In the development of the Patterson property as a public park the first aims should be to keep the open meadow and hillside landscape simple and undisturbed, to preserve the charming frame of woods upon the east and north, to create, by planting, a similar margin on the west and south, and to preserve the sylvan character of the rest of the estate, but would be well to set apart, in the grove and in the margin of the open, certain limited areas for popular amusements other than mere enjoyment of scenery. It might be well to convert the interesting old mansion into a sort of casino for the sale of refreshments and for other public uses.

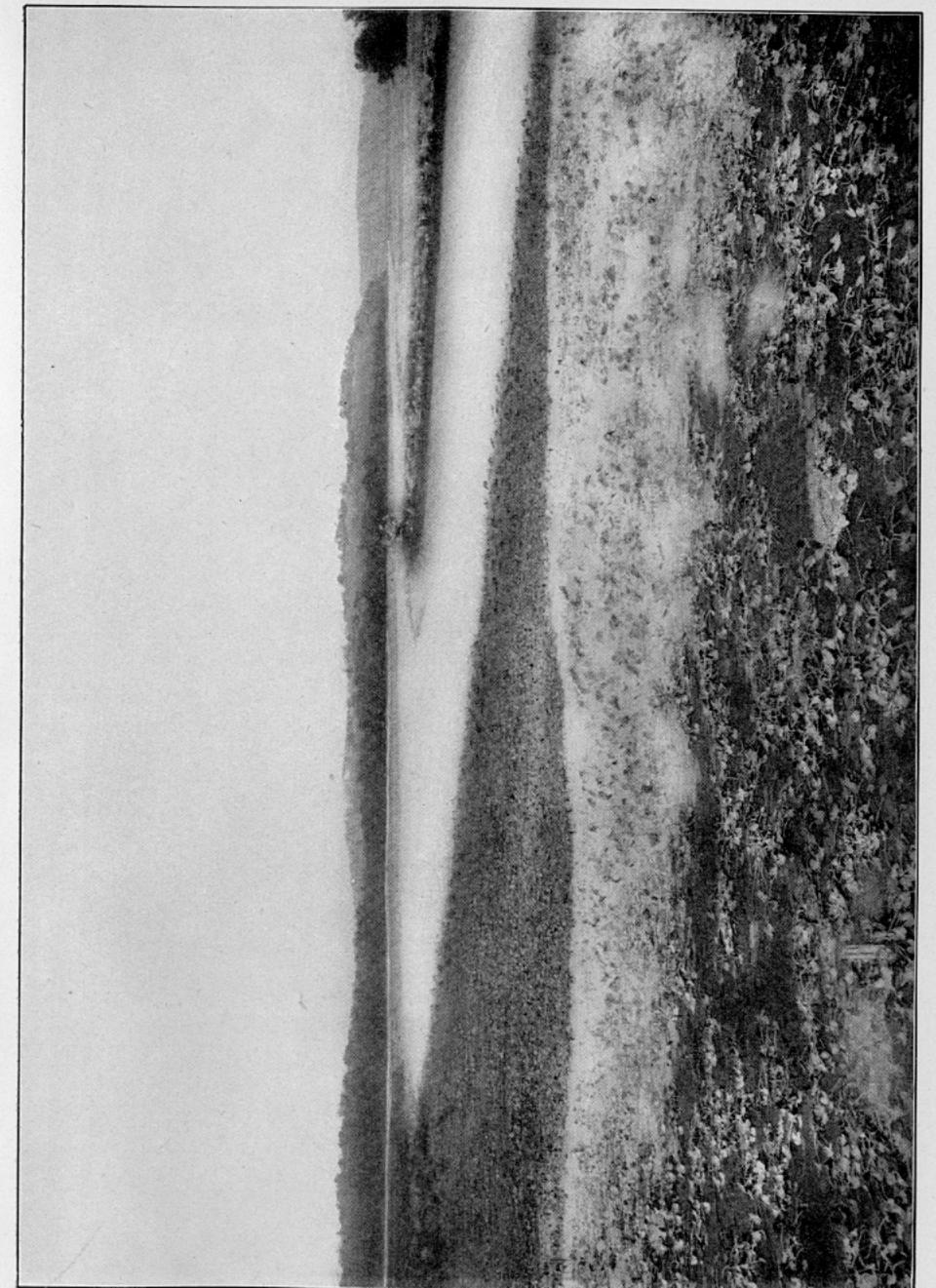
Between the Patterson property and Mount Hamilton there are no natural features of much attractiveness and a formal type of parkway Mount Hamilton would seem to meet the requirements of the case. Parkway. Two routes are open—to the north or to the south of Mount Olivet Cemetery. Either would be convenient and agreeable, but on the whole that to the north seems the better, chiefly because of easier grades in passing the base of Mount Hamilton and continuing on to Anacostia Park. Here again considerations of land cost as ascertained by negotiations with the owners should largely influence the final selection of route.

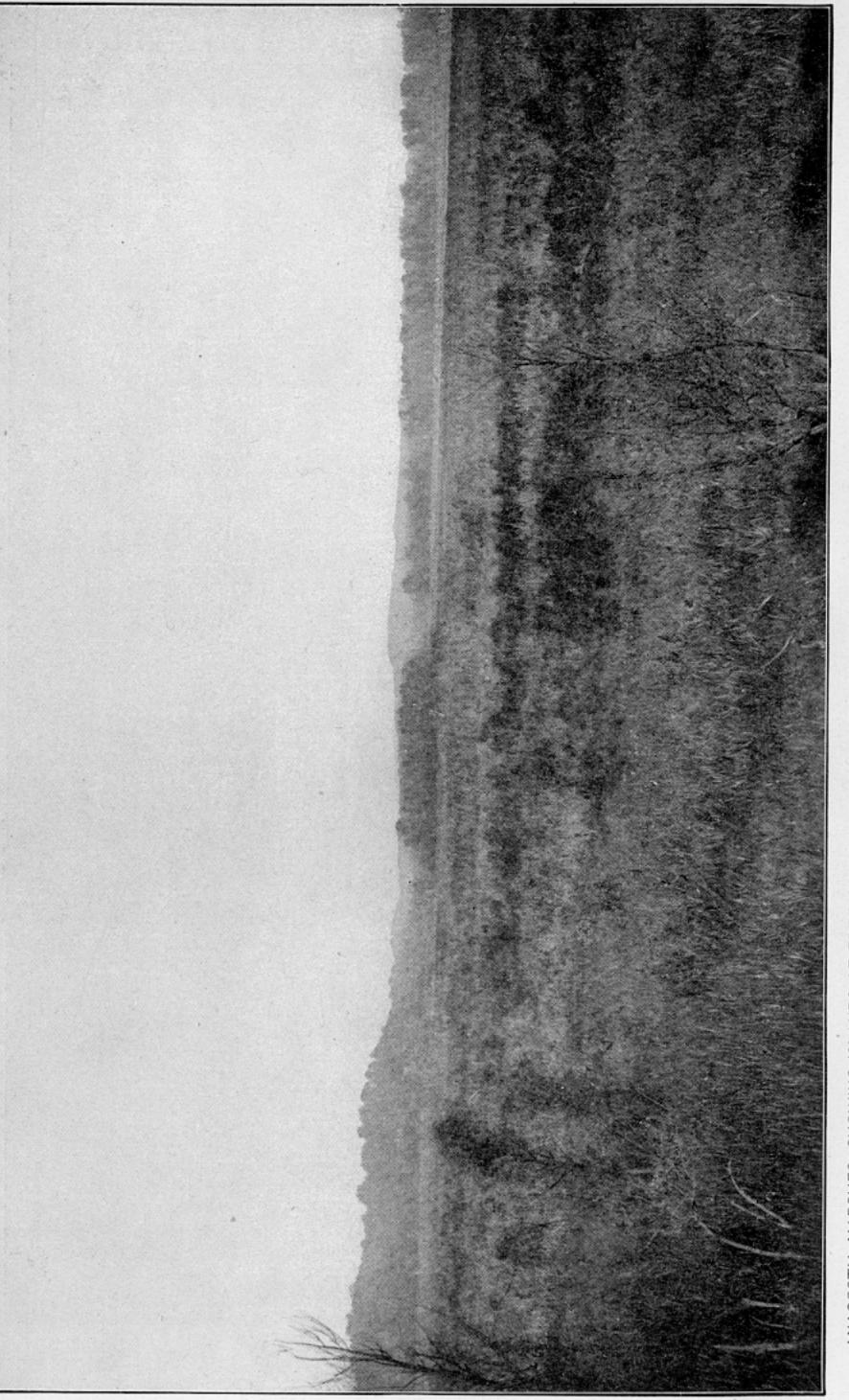
Mount Hamilton, one of the highest hills between the Anacostia and Rock Creek, rises above the general level as a steep, isolated summit, Mount Hamilton reaching an elevation of 225 feet, at a point just east of the Bladensburg road and about three-quarters of Park. a mile west of the Anacostia flats, over which it commands very extensive projects. In other directions, also, the views are remarkably good, especially across the city in the direction of the Capitol, to which it is nearer than any other hill of such considerable height. It is correspondingly conspicuous in the views from a large part of the District. It is heavily timbered with a growth quite typical of Southern mountain scenery, which gives it, together with its very steep slopes, a distinct character, to be found so perfectly nowhere else in the District.

In addition to these reasons for preserving it as a park, the cost of grading streets and cutting the land down to a level practicable for ordinary uses would be very excessive. In other words, the place is admirably adapted for park purposes and very ill adapted for anything else. The area which it is proposed to take is indicated on map No. D-288, and amounts to about 119 acres. The boundaries shown are adapted for the construction of streets on good grades.

In the development of Mount Hamilton the leading motive should be to preserve and accentuate its peculiarly mountain-like character of vegetation and surface, and to that end paths and other artificial constructions should be reduced to the minimum compatible with its convenient use by the public. It will probably be desirable, however, to build a single drive on a good grade, winding its way through the woods to a concourse at the summit, where a single white marble pavilion might be erected to serve as a shelter and to accentuate the peak as seen from a distance.

A short link of informal parkway should be provided to connect Mount Hamilton Park with the area to be reclaimed along the banks of the Anacostia River.





THE ANACOSTIA WATER PARK.

THE present outrageous condition of the Anacostia River has been so fully discussed before Congress in various reports during several years that there is no occasion for us to describe it in detail again. Suffice it to say that within the District of Columbia the Anacostia is a fresh-water estuary with a normal tide of about 3 feet, which alternately covers and exposes to the sun a great area of reeking mud flats upon which the aquatic plants constantly entangle additional deposits of mud, slime, and putrifying organic matter. Those parts of the bottom not exposed at low water are for the most part shallow and support a vegetable growth that prevents a rapid and cleansing movement of the tide, while above ordinary high-water level there are broad marshes and meadows which are flooded at varying intervals, whenever the water of the Potomac is raised by flood or contrary winds above its normal level, and which retain after each flooding innumerable stagnant pools. No conditions could be more favorable to the development of malaria, and because of these conditions the disease has made havoc with the inmates and officers of the Government Hospital for the Insane, of the jail, and of the workhouse, and with those occupied at the navy-yard and Washington Barracks, all of whom (several thousand in number) are compelled by the action of the Government to subject themselves constantly to its influence—not to mention, in addition, those unfortunate private citizens who, for one reason of another, must live within the great area affected by these deplorable conditions.

The pressing sanitary problem is simply to do away with the low, amphibious areas which are alternately flooded and exposed, and to convert them either into deep water or into dry land; but incidentally the improvements may be made to provide increased commercial water frontage, while a part of the reclaimed lands may be used as a park.

¹See report of Colonel Allen with references to previous reports.

Plans and estimates for the improvement of the river, with a view to commercial occupancy below Bennings Bridge, were prepared by Colonel Allen and submitted to Congress in 1898. For the portion above Bennings Bridge the time and the appropriation did not suffice for complete surveys and estimates, and the possibility that this section would ever be used for commercial frontage, even if improved, was thought to be so slight as not to be worth considering. The plans contemplated the dredging of an adequate channel and the filling of the remaining flats and low land to a level above the highest freshets, 14 feet above low water. An alternative provided for filling to a level merely above ordinary high tide and for excluding the higher floods by dikes. In the upper section, above Bennings Bridge, a similar treatment was proposed, but with the channel widened into tidal basins, the shores of which were to be parked. As to this section the report did not go into detail.

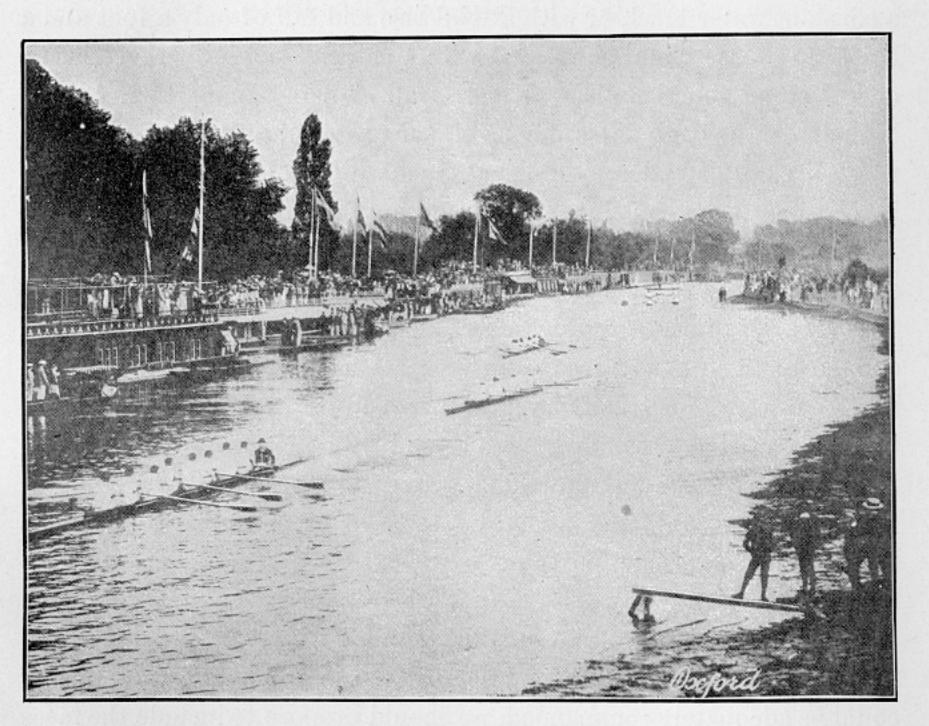
Coming to the study of the problem from a different point of view, with the benefit of Colonel Allen's investigation, we have devised a slight modification of his project which seems to have several advantages.

For the commercial section of the river we should adopt Colonel Allen's project bodily, except for certain possible changes in the lines of the channel to meet altered conditions, and to throw more of the made land on the valuable Washington side. But for the treatment above the commercial channel, in the park section, it is necessary to give a separate explanation. Pending a public discussion of the subject, we have assumed the line of Massachusetts avenue as the upper limit of commercial development. Coming at almost the same point as the Pennsylvania Railroad bridge, its draw would be the fourth in the way of river traffic, and the development of the less restricted river below those two bridges would increase the water front of the city by 143 per cent; or, if the Anacosta side be included, by 301 per cent—enough to provide for any probable development without further extension.

The principle of treatment, however, which we propose for the park section remains the same whether the section begins at Massachusetts avenue or at Bennings Bridge. That principle is to exclude the Potomac floods by a dam at the head of the commercial channel, thus avoiding the necessity for raising the large area of meadows now subject to occasional overflow.

The proposed dam would have a permanent sill either at half tide

level (el. -0.61 city datum), or at high tide level (el. +0.89 city datum). In the first case the ordinary tides would flow back and forth across the dam, rising at high tide to el. +0.89, but never falling behind the dam, below el. -0.61. In the second case the water behind the dam would have a constant level and would be renewed by the flow of the Anacostia River alone. Upon this permanent sill in either case would be erected movable gates or sections, by means of which in time of flood in the Potomac the dam would be raised in effect to elevation



Oxford-Racing on the Iris.

11.89, completely excluding the Potomac floods from the Anacostia basin.

The watershed of the Anacostia itself is so comparatively small that its outflow could accumulate behind the dam for several days during such floods without raising the level of the ponded water enough to give trouble.

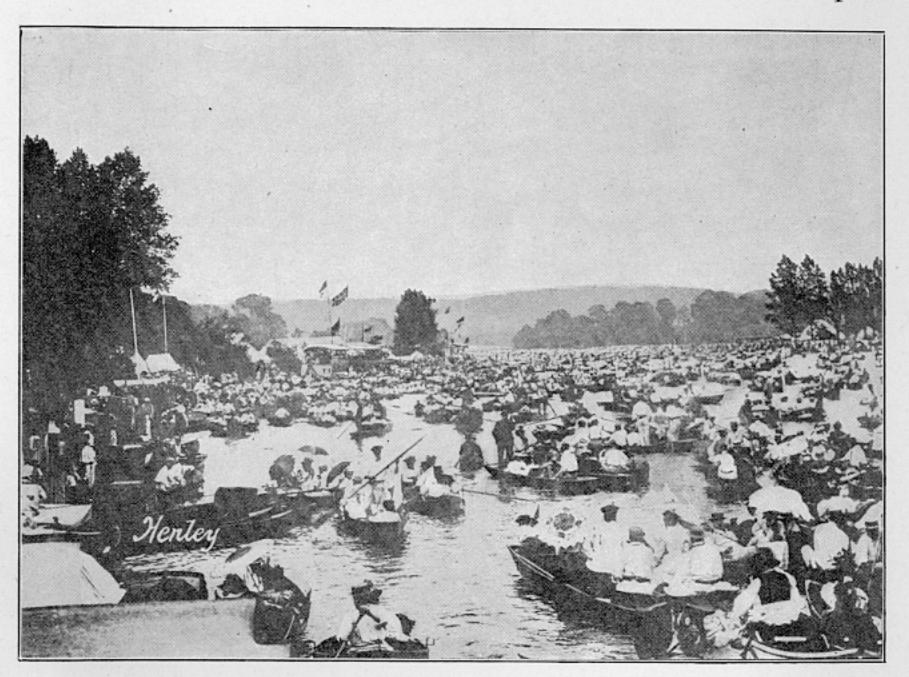
Between the dam and the District line practically all the flats now covered at ordinary high water would be dredged out to a depth of 12 feet, providing a great basin or series of basins of deep, clean water, the dredged material going to supply the additional filling needed on the commercial section. Such fragments of flats as were not thus exca-

vated would be raised by filling above ordinary high-water mark, but the greater part of the meadows, with their numerous and beautiful clumps of trees, would not be raised, thus avoiding about 500,000 cubic yards of filling and preserving a great deal of charming natural scenery. If the summer flow of the Anacostia proves upon closer investigation sufficient to replenish and renew the water of these basins, the tide would be excluded completely; 1 but, if not, the half-tide dam would be adopted and the water would be refreshed by the regular ebb and flow. With a constant water level, or with a tidal rise and fall of only a foot and a half, the shores could be treated with a natural looking gravel beach or low stone shore in place of a sea wall showing more than 12 feet high above the ordinary water level, such as would be called for if the floods are not excluded by a dam. Such a wall, dignified and effective in a formal urban embankment, would not only be tedious and dreary in appearance about a park lake having 7 miles of shore, but would add enormously to the cost of construction.

The result of the proposed treatment would be a great lake, deep enough to be clean and free from vegetation, refreshed by a sufficient flow of water, kept free from mosquitoes and malaria by its depth, by the unobstructed sweep of the wind, and by its clean shores, and surrounded by natural meadows and groves that need only to be cultivated and protected from inundation to become a charming park. The lake would provide opportunities for boating, such as are eagerly seized upon where they exist near other great cities, and the meadows, besides their landscape beauty, would provide the best of playing fields. To protect and inclose this landscape and to give points from which it could be adequately commanded, we should propose to include the faces and crests of some of the bordering hills on the Washington side, one of which is already owned by the District Reform School, while a large part of the marsh land is claimed by the Government. The total area of the proposed park is 1,143 acres, of which 535 would be occupied by water. The proposed boundaries, which are indicated on the map to face page -, are such as to permit the construction of border streets, and, in fact, coincide for the most part with the lines of streets already laid down upon the highway extension plan. In addition to the border streets, there would be a main drive within the park on each side of the water, generally near the boundary, in order to leave the central area unobstructed, and in order to keep upon higher ground overlooking

the meadows and the lake, but sometimes running close along the shore. Secondary drives and cross connections would be required in places, and, of course, a series of paths. Boathouses, arranged so as to accommodate skaters in winter, should be important features at the points where the park is reached by main lines of transportation, and bathing facilities should be freely provided.¹

At the northwesterly corner of the proposed Anacostia park is a group of commanding hills occupied by the Boys' Reform School. A portion of this land should be transferred to the control of the park



Henley-A suggestion of Anacostia Park.

authorities, both on account of the importance of the hill in the land-scape of the park and because of the view which can be obtained from it down the Anacostia Valley. At the southwesterly corner a similar transfer should be made of a portion of the city farm, which is occupied by the jail and temporarily by the almshouse. The buildings of the Reform School and of the jail are few in proportion to the area of their grounds, and if treated with due regard to their appearance from the park will supplement its landscape materially.

¹See report of Colonel Allen with references to previous reports.

¹See Appendix A on public bathing places.

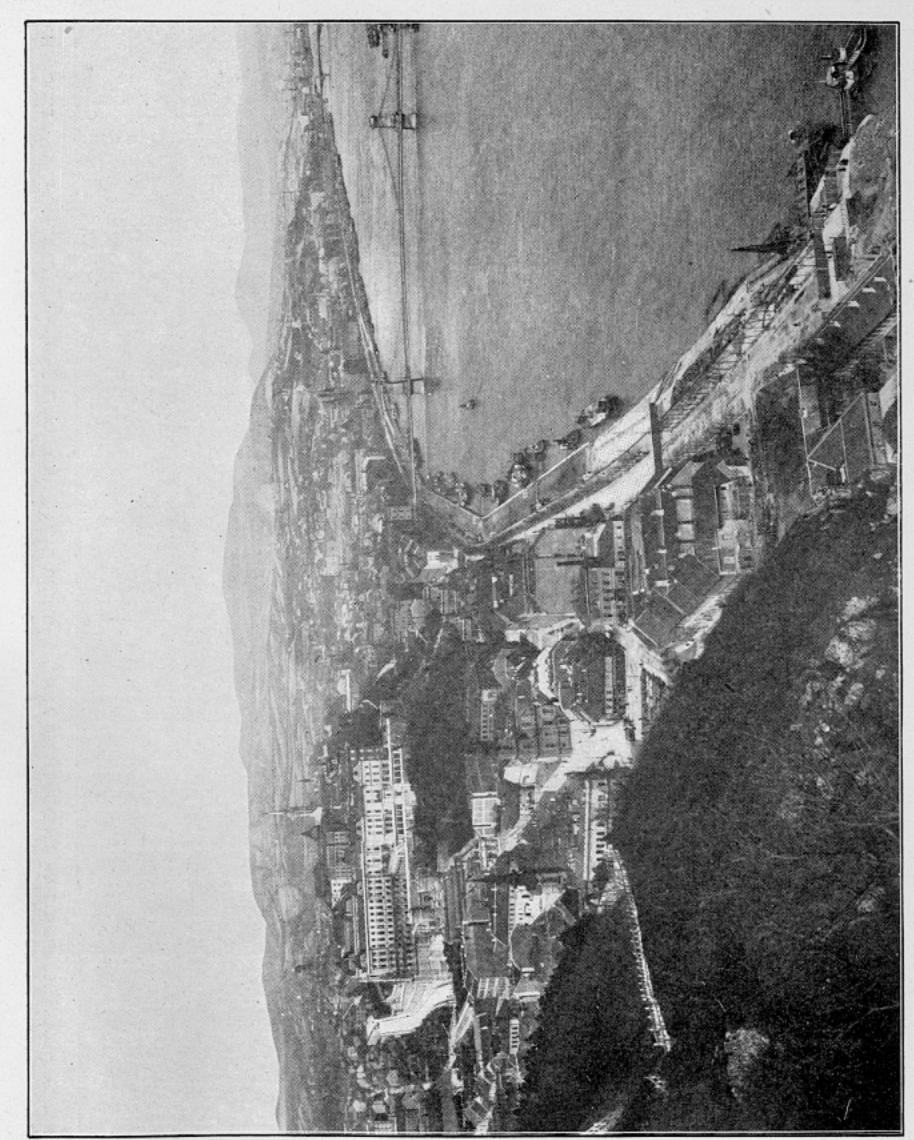
THE FORT DRIVE.

HILE for the reasons already discussed no systematic series of minor reservations has been selected for the outlying districts, it is necessary to mention the chain of forts which occupied the higher summits in the northern part of the central section, extending from Fort Stevens, near Rock Creek Park, to Fort Thayer, near the Reform School. The views from these points are impressive in proportion to their commanding military positions, and they are well worth acquirement as future local parks, in addition to any claim their historical and military interest may afford. The boundaries, shown upon map No. D-288, are fixed mainly with respect to the character of the views from each fort and the possibility and importance of keeping them permanently open. The areas of the proposed parks¹ are therefore somewhat adjustable, depending upon the attitude of the landowners.

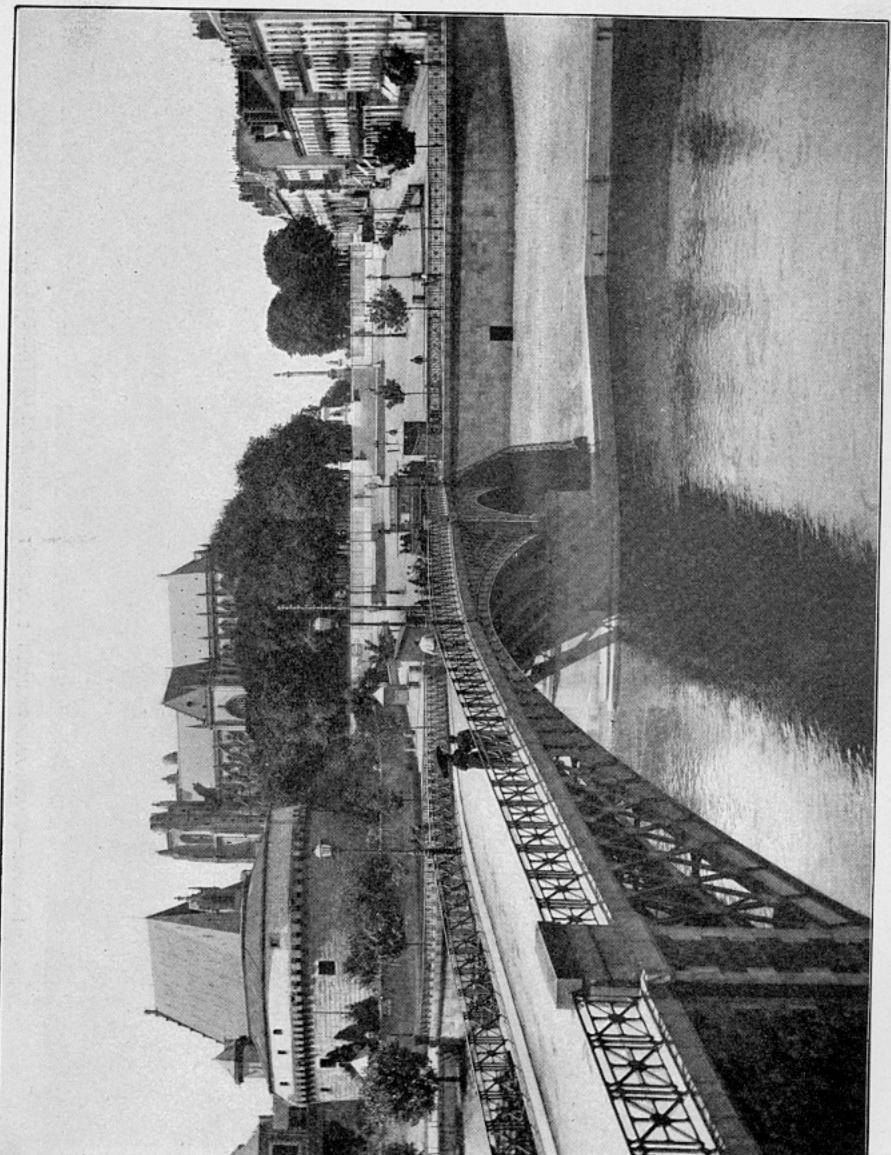
To connect the series advantage is taken of the street laid out for the purpose in the highway plans, but it should be increased to a more liberal width than now provided, which is only 90 feet between houses, the same as H street in the city. With the forts indicated on the map—Stevens, Totten, Slemmer, Bunker Hill, and Thayer—and with such other small parks and view points as may be selected later, a northern park circuit of great interest would thus be formed, having views off into the country in contrast with the principal inner circuit of larger parks, presenting views chiefly south toward the city.

In the section east of the Anacostia a similar chain of hilltop forts marks the points of most commanding view. With the Anacostia and the Potomac below and the city of Washington spread out beyond and the hills of Virginia in the distance, these are the most beautiful of the broad views to be had in the District. Forts Mahan, Chaplin, Sedgwick, Du Pont, Davis, Baker, Stanton, Greble, and Battery Ricketts can be linked together readily by means of the permanent system of highways with a few modifications and some widening into a drive comparable in beauty with that along the Potomac Palisades, but utterly different in character.

In connection with this hill-crest circuit, starting from the north-eastern end of Anacostia Park and returning to the shore of the Potomac at the southern corner of the District, it is important to secure four other areas of considerable extent in the eastern section.



NO. 192.-QUAYS AND BRIDGES, BUDAPEST. BUDA SIDE OF THE DANUBE



APPROACH OF

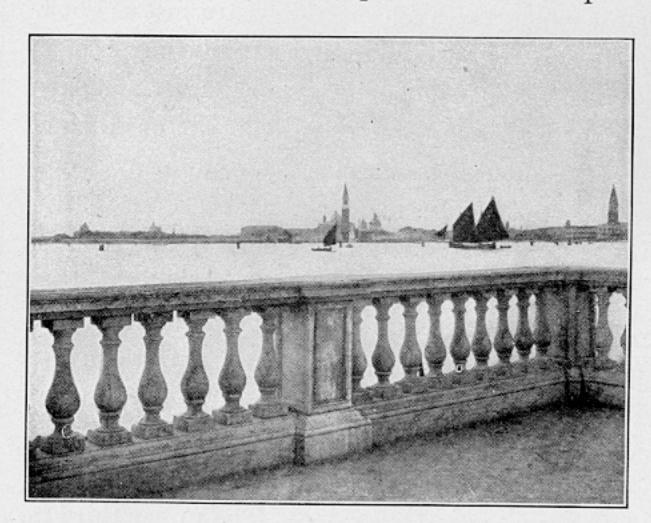
THE ANACOSTIA SECTION.

IRECTLY on the axis of Massachusetts avenue, extending from the lowland near the river to the ridge occupied by the fort drive, is an area of successive plateaus and ridges falling into a curiously balanced relation about the line of the avenue. It seems hardly likely that another large park would be needed so near the proposed Anacostia park, but the land is so admirably adapted as a site for a large public institution that it would be a wasteful use of land to cover it with private houses for which the adjacent ridges are just as good. The area which seems particularly adapted to such a public purpose, as shown upon map No. D-288, is defined by symmetrical boundary streets upon good grades, with comparatively little cut or fill, and amounts to about 270 acres—about the same size as the Reform School, the Government Hospital for the Insane, or the new Poor Farm, somewhat larger than the Columbia Institution for Deaf and Dumb, and smaller than the Soldiers' Home. It is to be hoped that this land will be purchased by the Government while it remains undeveloped and the opportunity exists.

About 2 miles southwest of the proposed Hillside Reservation the valley of Stickfoot Creek runs down from the Fort Drive on the stickfoot creek main ridge to the river at a point opposite the navy-yard and near Anacostia Bridge. The upper third of the valley is included in the grounds of the Government Hospital for the Insane, in the middle third runs Sheridan avenue, following the right bank of the creek and bordered by open land, and the lower third runs through open lowland and flats. A parkway should be provided for in this valley to give convenient and agreeable access to the Fort Drive from the Anacostia Bridge. The lower third, where there are no topographic features to determine its character, should be a formal affair, with a central drive, parkings, and two side streets. The central drive would pass under Nichols avenue and in the middle

third of the valley would follow the brook, with a narrow irregular border of valley scenery. Sheridan avenue would form one side street and the opposite boundary, as drawn, would provide for another, rising gradually along the hillside so as to reach the edge of the plateau in the upper third of the valley on the Government hospital land. The main drive should connect with the Fort Drive. The land taken from the hospital is for the most part entirely unavailable for building or for cultivation, while, with its good tree growth, it would provide a most agreeable approach to the drive along the ridge, dividing it into a northern and southern circuit of convenient length.

South of the Government Hospital for the Insane the ridge continues nearly level to Fort Preble and Bald Eagle Point, with a steep slope all along to the lowland along the Potomac. The views from this ridge are so remarkably fine, and the steep slope is so ill adapted to ordinary city subdivision, that a wide parkway, running nearly parallel with the present Giesboro road, is



No. 183.—Terrace, Venice, illustrative of water-front treatment in connection with a formal design.

much to be desired. It should provide at the edge of the narrow plateau a street for house frontage, together with a park drive and paths commanding the view, and it should include the whole slope below, in order to control the outlook by preventing the erection of obstructive

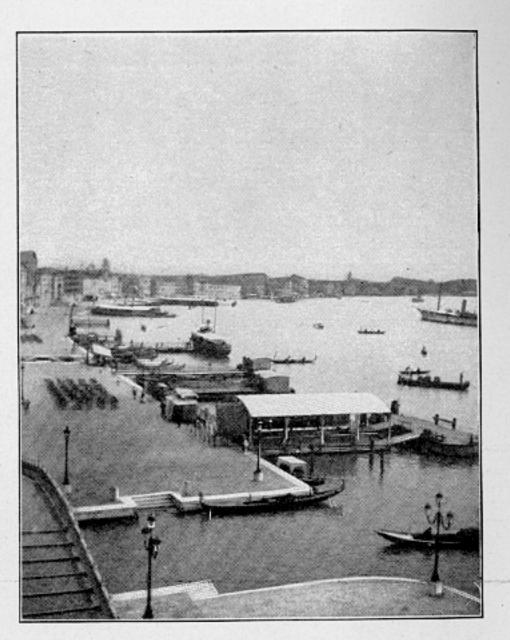
buildings and the too continuous growth of tall trees. The boundaries shown on map No. D-288 not only provide for these requirements, but include a very beautiful oak grove upon the plateau, on land otherwise as well adapted for building as for park purposes. At the southern end a small portion of the land recently acquired for the almshouse should be transferred to the parkway, to provide for a connection between the ridge and the shore of the Potomac.

Provision should be made for the public control of the entire water front from the Government property at the southern end of the Dis
Anacostia embank. trict to Anacostia Park at Massachusetts avenue.

Along the Potomac, from Shepherds Landing to Giesboro Point, the shores are nearly level agricultural land 10 or 20 feet above the river. A margin about 200 feet in width should here be acquired, with a view to the construction of a road and such other means of making the water front available as the development of the back country may ultimately require.

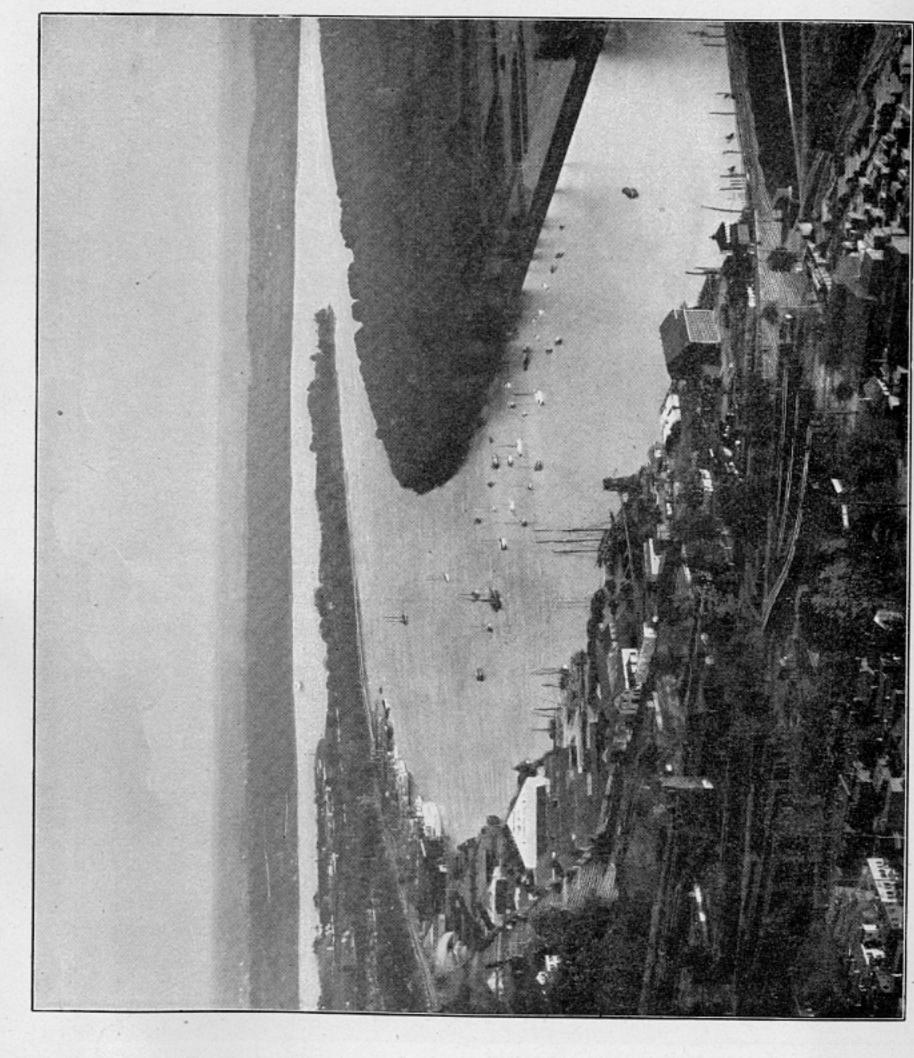
Along the Anacostia, from Giesboro Point to Massachusetts avenue, there is a wide margin of flats which must be reclaimed as

discussed in connection with the Anacostia Park. The greater part of the reclaimed lands will best serve the interests of the community if utilized for commercial purposes under private ownership, but the portion in front of the Government hospital should be added to the grounds of that institution. Whatever disposition may be made of the reclaimed land, however, the embankment itself and its immediate margin should remain under public control. The final character of its improvement can well await the future development of the



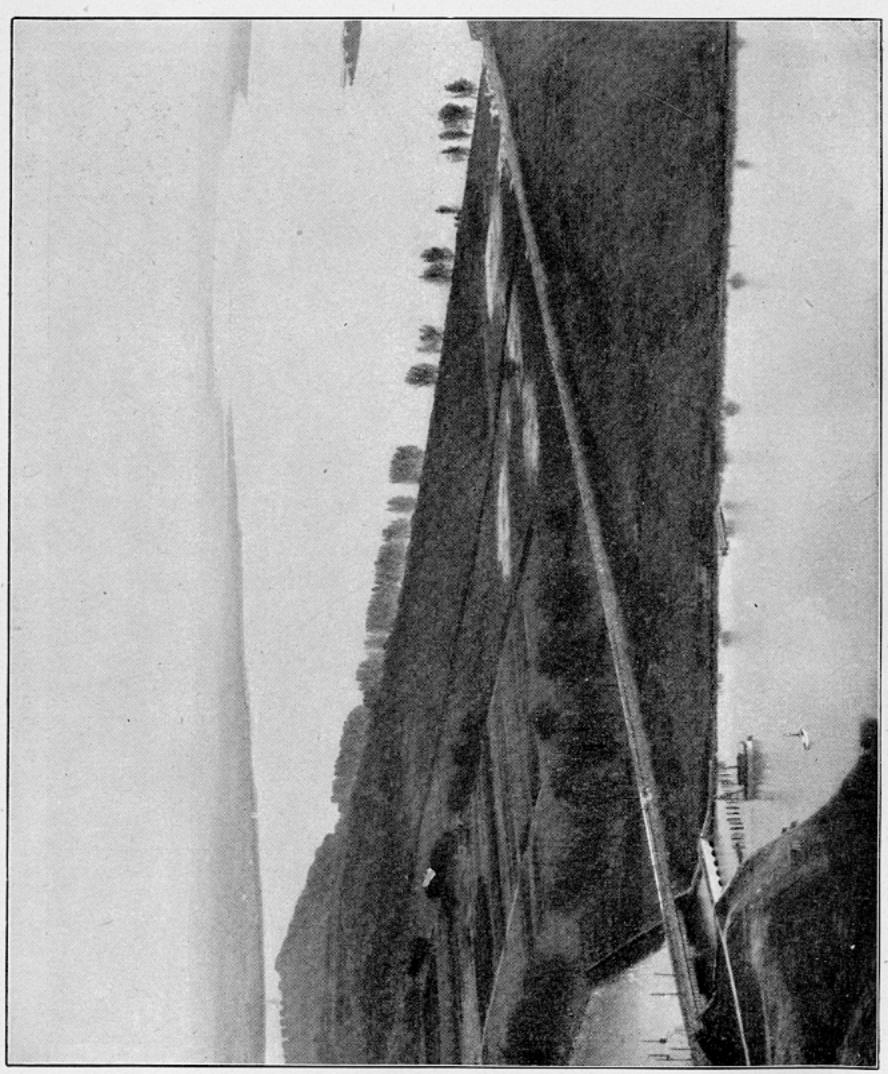
No. 198.-The Quays at Venice.

conditions which are to surround it, but it is not unlikely that the arrangement proposed for Georgetown Harbor (page 84), with a commercial quay and a separate high level drive and esplanade, will prove desirable in the future here.



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War College and Engineer School.



NO. 194.-POTOMAC PARK, FROM THE WASHINGTON MONUMENT.

WASHINGTON EMBANKMENT AND POTOMAC PARK.

the Washington side of the Anacostia River it is equally important that the permanent public control of the water front should be made a part of the channel improvement and that a consistent comprehensive project should be adopted for its treatment in connection with the improvement of the western water front along Washington channel, recently brought under public control by the decision of the courts. A decision upon the method of improvement involves, in addition to questions of appearance and expense, the careful consideration of so many interests, private property rights, the needs of the navy-yard and of the school of engineers and war college 1 at the Washington Barracks, and, above all, the convenience of commerce, that the Commission is not prepared to make a definite recommendation; but it seems highly important that the water-front improvement should be utilized to the utmost in providing a southern parkway connection between the Anacostia section of the District and Potomac Park, against which the Washington embankment would terminate at the northwestern end of Washington channel on the line of Long Bridge.

Potomac Park is a low-lying tract of land and water about 739 acres in extent, between Washington Channel and the Potomac River. It is crossed at about its center by Long Bridge, carrying the tracks of the Alexandria and Washington Railway, and also a carriage drive. It was formed on a shoal in the river by the deposit of material dredged in the ordinary operations of preserving and improving the channel. Its surface is a few feet above ordinary water level, but it is submerged at times of flood,

¹The Secretary of War has caused plans to be prepared for an army war college and an engineer post and engineer school of application, all to be located at the Washington Barracks, at the junction of the Potomac and Anacostia rivers and bordering on the Washington channel. The contemplated expenditure for the war college is \$400,000, and for the engineer post and school of application \$860,000. (See House Doc. No. 90, Fifty-seventh Congress, first session.)

and the engineer's plans contemplate additional filling. The greater part of the park is surrounded by a low stone wall, the primary object of which is to retain the mud dredged from the channel. This gives the shore a rather formal appearance, emphasized by rows of poplar and willow trees, planted to bind the earth together. Dredging operations are still carried on, and material is being deposited on the park area.

The form and situation of the land suggest at once the landscape of natural river bottoms—a suggestion that can hardly be improved upon as a guide in the development of the park. Of the many types of river-bottom scenery, the one which seems best adapted to the conditions is that of great, open meadows, fringed by trees along the water side and diversified by occasional outstanding masses and single trees serving to focus the meadow area into a series of connecting compositions without completely obscuring its extent. On account of the view of the water and the sweep of breezes through the Potomac Valley, the pleasantest portion of the park is bound to be the strip along the river side. Here should be carried the principal drive and paths, running almost continually within a long and narrow grove of tall-stemmed river trees, which will afford shade without seriously obstructing the summer breeze, which is said to blow here with more frequency than at any point within the city. The central part of the area should be kept as simple as possible, in meadows unbroken by paths and roads, except for a few cross connections devised to fit in with such occasional trees as the landscape calls for, while on the side toward Washington Channel would be another nearly continuous mass of foliage. If such a treatment is adopted it will be unnecessary to fill the whole area of the park above the level of the extreme floods, for if the sides were raised to that level they would serve as dikes, and their slight elevation above the central meadow would enhance the effect of the landscape, especially if the inner slopes are made very gradual. A similar treatment in respect to the dikes is to be seen at Budapest, in the park of Margaretten-Insel, in the Danube, where the views from the paths that run along the dike are very beautiful, both inward toward the meadow and outward toward the river.

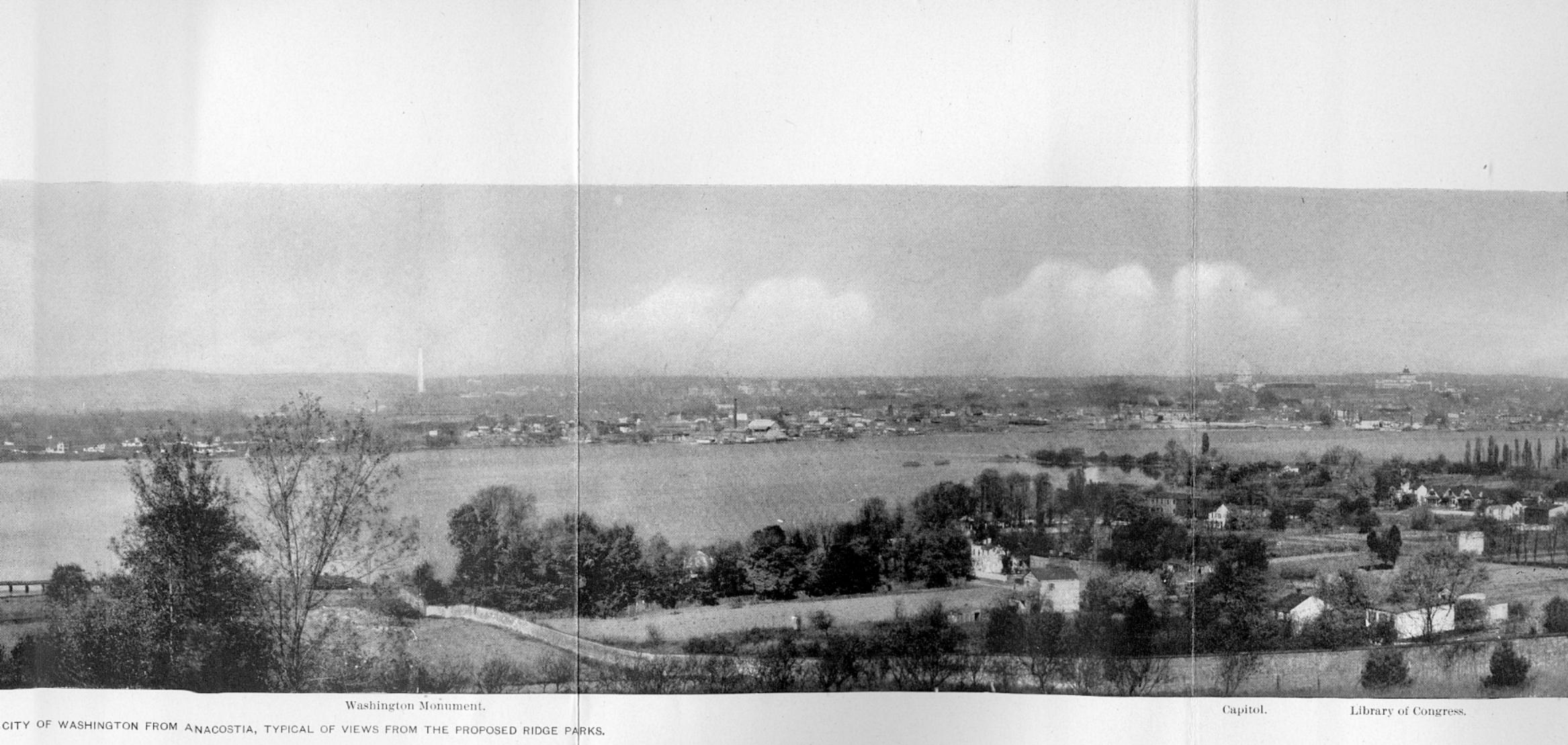
Not the least advantage of such an extremely simple and absolutely informal landscape for Potomac Park is due to its position next to the strongly formal and elaborate scheme of the central group, to which it would serve as a very happy foil and contrast.

Except for a portion of the shore growth, where young willows and poplars are already growing, the trees for Potomac Park will all have to be planted, and because of the richness of the soil and other favorable conditions the idea suggests itself that in selecting these trees a collection should be got together that would form a living museum of the greatest interest; in short, a National Arboretum. In considering this idea we have felt that as the land has been set apart as a park, the first importance must be given to its perfection as a beautiful place of recreation; and it is obvious that the miscellaneous introduction of a great variety of trees of all colors, forms, and sizes would utterly destroy the restful simplicity of the landscape which we have described. Nevertheless, we believe that it would be possible, by a wise choice and arrangement of species, to group in the planted area along the easterly side of the park a great series of trees and shrubs and herbs which should represent in a synoptic manner all the important types of vegetable life capable of growing at Washington, and to do so, by the exercise of sufficient care and skill, without in any degree injuring the character of the dominant park landscape. Such a collection would bear the same relation to a theoretically complete botanical series that the various collections exhibited to the public in the National Museum bear to the working collections stored away in drawers and boxes for the use of specialists, and it would contain the most beautiful and interesting species of each important group.

It would add a feature of great interest and value to the park without interfering with its essential qualities of landscape, and we can recommend this treatment as the best provision for the systematic botanical collections which this Government is sure sooner or later to maintain, if we may judge from the experience of other countries.¹

Omitting the northern portion, which is required for the completion of the Mall and its connections, the whole area of Potomac Park should at once be carefully laid out in accordance with the above general scheme, the proportions and forms of its different open and planted areas carefully studied, and the lines and grades of roads and paths worked out in detail in conformity with these masses and with the necessary approaches to the new Long Bridge and railroad bridge, in order that the filling now going on may be economically applied toward a definite result.

¹ Appendix E on a Botanical Collection.





THE MOUNT VERNON ROAD.

HE great desirablility of connecting Mount Vernon with the capital by an agreeable and dignified approach was recognized by Congress in 1889, when the Chief of Engineers was called upon for a survey and estimate for such a national road; and the resulting report of Colonel Hains (S. Ex. Doc. 106, Fifty-first Congress, first session) sets forth very clearly the various, routes studied at that time.

Although such a road would lie wholly beyond the limits of the District, its importance as supplementing the park system of Washington requires that we should mention it and again urge upon Congress its great value. If it were desirable merely on account of the historic associations with Mount Vernon we might hesitate to refer to it in this connection, but as a matter of fact it would present such a series of beautiful views of the broad portion of the Potomac Valley as would give it a priceless recreative value for the future population of the District in addition to its sentimental value as linking the nation's capital with the home of its founder.

After a personal examination of the territory traversed by the routes discussed in Colonel Hains's report, we have no hesitation in recommending his line No. 6, with a few minor modifications, as affording opportunity for the most refreshing and delightful drive to be had in any direction from Washington, and not to be equaled at any great capital in the world. No one who has not climbed laboriously by steep hills, bad roads, and crooked, untraveled lanes to the crests along which this line sweeps can fully realize the grandeur of the views, but they may be suggested by those to be had from Arlington, from the ridge road beyond Fort Albany, and from Mount Vernon itself.

As stated in Colonel Hains's report, the lines were laid down subject to revision, and we have noted several points, especially near Shuters Hill, near Spring Bank Run, and at the two ends, where upon more detailed study marked improved improvements could be secured. At the northern end the route would, of course, connect with the Memorial Bridge. The latter, crossing from the Washington side of the Potomac on a straight line for the Arlington mansion, would lead to a circle or plaza near the base of the hill, whence to the right would lead a drive curving up the wooded valley to the mansion on the height and to the left would reach off the Mount Vernon road.

The terminus of such a great national road at Mount Vernon ought to have the most careful and sympathetic study, for with all its tremendous historical associations Mount Vernon is not designed on the scale of a great public monument, but on the more delicate, dômestic scale of a gentleman's country place, a character which has been most skillfully preserved by the Mount Vernon Association, and which does far more to bring to the visitor a feeling of the personal presence of Washington than the bald historical fact of his residence there. It will be no easy problem to design a terminus dignified and adequate for a broad national road of pilgrimage some 15 miles in length and to relate this terminus frankly to the Mount Vernon mansion as the main object of the pilgrimage without intruding a discordant public note into that place which should speak not of the statesman, but of the private gentleman of Virginia who there made his home.

At the time Colonel Hains's estimates were made the necessary land was reckoned at \$100 an acre, and formed a trifling part of the cost. Although in eleven years the land has risen somewhat in value it is still moderate in price, and we should therefore recommend that in those places where the line follows a hill crest commanding an exceptionally beautiful view sufficient land be taken upon the lower slopes, in addition to the regular width of the road, to preserve the view permanently from obstruction. The building of the electric railway since the submission of Colonel Hains's report has somewhat altered the situation, making it extremely probable that there will be further increases in the value of lands along the route and possible interference with it by new improvements in case all action is delayed for several years.

It therefore seems to us that while the construction of a great and costly highway might well be postponed till the population of Washington comes to feel its need more keenly, it would be the part of wisdom to secure the land for such a route without further delay.

CONCLUSION.

In submitting their report the Commission desires to make acknowledgment of their indebtedness to those persons who have assisted in the work of preparing the plans and illustrations, and who have responded with enthusiasm to the unusual demands on their time in order to finish the task within the appointed time.

To Mr. William T. Partridge, under whose able direction the drawings were prepared, and to Messrs. Baer, Butler, Chapman, Crow, de Gersdorff, Elliott, Githens, Harmon, Johnson, Kaiser, Merz, Morris, Mundy, Shephard, Trueblood, Walker, and Weekes, who were associated with him in this work, the Commission desires to express its sense of obligation, not only for the skillful manner in which the work was executed, but for the interest and untiring devotion which brought it to successful completion within a very limited period.

The Commission also desires to make grateful acknowledgment to the artists, Messrs. Bacher, Bacon, Blum, Curtis, Hoppin, Graham, Guerin, McCarter, Rodeman, Ross, Sears Gallagher, and Percival Gallager, whose graphic rendering of the designs contributes so largely to an intelligent understanding of the work of the Commission.

In the compilation of maps, plans, and other data in regard to parks and the existing conditions throughout the District, in the study of the ground for the selection of proposed park areas, in preliminary studies for the treatment of all the areas considered, and in the preparation of its plans for publication, the Commission has had the invaluable help of Mr. James G. Langdon, assisted in part by Mr. R. A. Outhet and Mr. E. A. Douglas.

Very respectfully,

Daniel H. Burnham.
Charles F. McKim.
Augustus Saint Gaudens.
Frederick Law Olmsted, Jr.

To Hon. JAMES McMILLAN,

Chairman Senate Committee on the District of Columbia.