

APPENDIX L L.

ANNUAL REPORTS OF LIEUTENANT-COLONEL THOMAS  
LINCOLN CASEY, CORPS OF ENGINEERS, FOR THE FIS-  
CAL YEAR ENDING JUNE 30, 1879.

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PUBLIC BUILDINGS AND GROUNDS IN THE DISTRICT OF COLUMBIA.

OFFICE OF PUBLIC BUILDINGS AND GROUNDS,  
*Washington, D. C., June 30, 1879.*

GENERAL: During the past year the labor upon the public buildings and grounds in the charge of this office consisted principally of the work necessary for their care and preservation. With the large extent of grounds, some 200 acres, already ornamented, the appropriations available could do little more than keep them in order, and the many improvements that can be suggested could only be applied in a few places and then mainly by way of experiment. The planting of foliage and flowering plants in several of the reservations has proved a success and in future seasons can well be extended, while the introduction of asphalted walk upon the main lines of travel through the parks meets with favor from those having daily occasion to use them. The more important and detailed operations were as follows:

IMPROVING GROUNDS SOUTH OF EXECUTIVE MANSION.

The continuation of the filling of the unfinished portions of these grounds was commenced as early as practicable in July, 1878, and contracts were entered into for earth and soil sufficient to grade the elliptical parade nearly to its central line. These contracts were completed early in the spring and the new grounds sown with grass-seeds and winter rye. In addition to this filling, some 34,500 cubic yards of earth received from other sources was used in the portion of the grounds bordering on Seventeenth street to bring them up to a grade ready to receive the soil. The unused gravel and concrete beds of roadways through the center of the semicircular inclosure south of the Executive Mansion were removed and the spaces they occupied converted into lawn. The iron railing and flagged foot-walk about this portion of the grounds, broken by an unused gateway, were made continuous. The old wooden fence about the court-yard of the Executive stables was removed and an iron fence set in its place. Along the border of so much of the central ellipse as has been graded a row of elm trees was planted and all the dead trees in the reservation were cut out and removed.

Upon the request of the Engineer Commissioner of the District, authority was granted to run the large 8-foot intercepting sewer diagonally across the lower portion of these grounds. As soon as this portion of the sewer is finished, the grading of the central ellipse will be continued and the roadway about it constructed.



## WASHINGTON MONUMENT GROUNDS.

A small piece of the grading and sodding of the embankment of the West Lake on B street north was completed early in July, 1878, when the custody and control of the lakes passed to the United States Commission of Fish and Fisheries. The main roadway between the East and West lakes was recoated with screened gravel 6 inches in depth. Loose stones, &c., were removed from the roadways in other portions of the grounds and low places in the same were dressed with a coating of screened gravel.

A number of American elms were planted bordering the roadways, to replace trees destroyed by mischievous persons; and several trespasses across the lawns were broken up, and sown down in grass-seed and winter rye.

A number of signs were placed at entrances of roadways prohibiting the passage of heavily-loaded wagons and teams through these grounds, and a person was temporarily stationed to secure the observance of these rules, and divert this kind of travel from the gravel roadways.

## GREENHOUSES AND THE NURSERY.

At the greenhouses needed repairs were made as required, and additional shelving was put in place, increasing the growing space for ornamental plants.

The usual care has been extended to the general collection of plants during the year. About 50,000 subtropical flowering and foliage plants, and some 10,000 hardy ornamental plants and flowering shrubs, were propagated during the winter and spring months.

At the nursery, the care required in the cultivation of the general stock of trees and shrubs has been extended. About 5,000 young trees and shrubs grown at the nursery were transplanted in nursery rows during the season, and a quantity of seed saved from valuable trees growing in the public grounds was sown in beds prepared for the same. Two thousand eight hundred and seventy-six evergreen and deciduous trees and shrubs were purchased during the year, a portion of which were planted in the various parks, and the remainder were temporarily planted in the nursery preparatory to their final planting in the public grounds.

## SMITHSONIAN GROUNDS.

The roadways and walks of this park have been kept in as good condition as was practicable during the year. The major portion of these grounds is not provided with suitable drainage, and the surface water from the sloping surfaces of the park settles on the surface of some of the lower roadways, rendering them miry and unsuitable for travel in wet weather. To remedy this defect as far as practicable, they were raised with a heavy coating of gravel, and the gutters were repaired. The main approach to the Smithsonian building was regravelled and rolled. Over 3,000 cart-loads of gravel were hauled from reservation No. 17, and used on the roads in this park during the year.

A number of unsightly paths across the lawns were broken up, sown down in grass-seed and rolled; and wide trespasses along the margins of the principal roads were resodded and further protected by temporary stake and wire fences. The lawns were mown frequently during the spring and summer months and kept clean by frequent rakings. The valuable trees that were not too large for removal with safety, and were

growing upon the site of the new National Museum in these grounds, were removed and transplanted in other portions of this park.

## RESERVATIONS FROM SEVENTH STREET TO THIRD STREET SOUTH-WEST.

A number of evergreen and deciduous trees and shrubs were planted in these grounds during the year. The roadways and walks were dressed with screened gravel and rolled, and kept in as good condition as practicable under the circumstance that no provision has as yet been made to carry off surface drainage from the same. A number of paths across the lawns were broken up and sown down in grass seed. The margins of the roadways and walks through the grounds and the margin bordering the sidewalk on Seventh street, southwest, were resodded, and edged and protected from further inroads of travel by stake and wire fences. The drain-pipe from the fountain basin in this park having become choked and unserviceable, a new 6-inch terra-cotta pipe drain was laid connecting with the sewer on Seventh street. The jet and overflow pipes were also repaired.

Work was commenced on the unimproved portion of these grounds between Sixth and Fourth-and-a-half streets and Missouri and Maine avenues. The surplus soil hauled from Judiciary Square, on the removal of the District jail-building, and dumped in these grounds was used in grading the low portions of the same, and the surplus clay was removed to the nearest dumping-ground. The main roadway from Sixth street and Missouri avenue to Fourth-and-a-half street was outlined, excavated, gravelled, and rolled. The walks in this portion of the grounds were also outlined, excavated in part, and prepared for gravel. The post and chain fence on Missouri avenue was repaired twice during the year.

## RESERVATIONS EAST OF THE CAPITOL.

The enclosed parks and partly improved reservations east of the Capitol have been kept in as good condition as was practicable. The lawn surfaces were mown twice each month of the growing season. The pavement gutters bordering the triangular reservations on various avenues were kept clean and free from weeds. The grass margins bordering the same were trimmed and edged as needed and the trees and shrubs were staked and properly pruned. Flower-beds were prepared and planted with ornamental foliage and flowering plants in a number of these reservations and have been kept in as good condition as means at hand would permit. No water-pipes have been laid in these triangular reservations, and the lawns, trees, shrubs, and flower-beds have to be watered in dry weather by the laborers employed in their care, from the street hydrants, which, in many instances, are remote from these improved triangles.

In Lincoln Park the walks were rolled after heavy rains during the season and kept free from weeds, loose gravel, and stones. The trees, shrubs, and lawn surfaces generally received all needed care and attention and were kept in good order.

The chimney of the watchman's lodge in this park was repaired and a terra-cotta wind-guard was placed on the same to increase the draught, before defective. The tin roof was also repaired and painted. The drains from this lodge, having become choked, were taken up and a new 6-inch terra-cotta-pipe drain laid from the same, connecting with the Eleventh street sewer.



Work was commenced during the year on the triangular reservations at the intersections of Delaware and Massachusetts avenues and First street, and Maryland avenue and Third street northeast, and improvements completed as follows:

The two triangles at the intersection of Delaware and Massachusetts avenues and First street were graded, surface-soiled with good loam, and sown down in grass seed and winter rye, and rolled. A number of evergreen and deciduous trees and shrubs were planted in the same. Water and drain pipes were introduced in the largest triangle. Walks were laid out, excavated, graveled, and rolled. Park settees were placed in suitable positions on the walks, and an ornamental rock-work fountain basin was constructed in the center of the same, and furnished with suitable jet, overflow, and waste pipes, &c. A flower border was prepared around this basin and planted with foliage and flowering plants. These reservations were also inclosed with park post-and-chain fences.

The triangular reservation at the intersection of Maryland avenue and Third street northeast was graded, surface-soiled, sown down in grass seed, and rolled, and inclosed with park post-and-chain fence. A portion of the clay removed from this reservation (the surface of which was mainly about 6 feet above established grades) was hauled to Stanton Place, and a sufficient quantity placed around the base of the pedestal of the equestrian statue of General Greene in the center of this park to temporarily secure its foundation. Two triangular reservations on Massachusetts avenue, between Third and Fifth streets, were also filled to grade with soil, &c., hauled from this reservation.

#### JUDICIARY PARK.

A number of trees and shrubs were planted in this park, and the walks, drain-lodges, and gutters were kept in good repair during the year. About 1,000 cart-loads of gravel hauled from reservation No. 17 were used in the roadways and walks of this park, which are not provided with a sufficient number of drain-lodges to secure a proper surface-drainage. The lawns were mown frequently during the growing season, and a number of paths across them were broken up and sown down in grass seed. The margins of roadways and walks were resodded and edged, as required, to keep them in proper order.

#### FRANKLIN PARK.

The walks in this park were thoroughly overhauled during the year, and all loose stones, rough gravel, and sand were removed. A coating of screened gravel, hauled from reservation No. 17, was applied to their surfaces and rolled. Upon the path leading from the southeast to the northwest gateways, and passing around the fountain in the center of the park, a strip of asphaltum foot-walk 5 feet in width upon a broken-stone base 3 inches in depth was laid in the summer of 1878. The severe freezing weather of last winter failed to disturb the smoothness of its surface, neither was it thrown-out of line when the frost came out of the ground in the spring. The worn-out surfaces of the lawns were dug up, the exhausted soil removed and replaced with good surface-loam, and resodded. Eighteen flower-beds were laid out and planted with ornamental foliage and flowering plants on the lawns bordering the walks, and a number of decorative palms and subtropical foliage plants were placed in various open spaces of the lawns, materially increasing the attractiveness of this park as a place of public resort.

The springs were cleaned out during the year, and the fountain-basin in the center of the park was repaired.

#### LAFAYETTE PARK.

The walks in this park were thoroughly overhauled during the year and recoated with a dressing of screened gravel where needed. Worn-out places in the lawns were spaded up, the poor soil removed, replaced with good surface loam, and resodded and sown down in grass seed. The deeply shaded portions of the lawns under the trees were top-dressed with rich surface loam and sown down in orchard grass and blue-grass seed with good results. Portions of the lawns in this park are too deeply shaded to permit the growth of lawn grasses.

The clumps of overgrown English Holly in the oval spaces on the lower walks were removed and planted on the border fronting Pennsylvania avenue. The exhausted soil was removed and replaced with good surface loam and the ovals converted into flower-beds.

A large number of ornamental foliage and flowering plants were planted in prepared beds in this park, and a number of decorative palms and ornamental foliage and flowering plants were placed in open spaces on the lawns.

Galvanized iron pans, about 3 feet in diameter and 2 feet in depth, banded with 2 by  $\frac{1}{2}$  inch strap-iron, were made to fit the large antique vases in this park and suitably planted with flowering plants and vines.

A number of magnolia, English yew, and half hardy evergreen trees planted in this park, and which have successfully withstood the rigors of former winters were materially injured by the severe cold weather of the past winter, which was one of unusual severity in Washington. The supply of water in this park is inadequate to the proper care of the lawns during severe droughts and additional pipe will require to be laid.

#### TRIANGLE INTERSECTION OF RHODE ISLAND AVENUE AND TWELFTH AND P STREETS.

This reservation was graded, surface-soiled, and sown down in grass seed; water was introduced and a number of trees and shrubs were planted during the year. This triangle and the one at intersection of Vermont avenue and Thirteenth street were also inclosed with post and chain fences.

Flower-beds were laid out and planted in Fourteenth street Circle, Iowa Circle, circle and triangles around the equestrian statue of General Scott, Mount Vernon Place, reservations on Massachusetts avenue and Twelfth street, and Farragut Park, with ornamental flowering and foliage plants, and have been kept in good condition. A few flowering plants, &c., purloined by various persons, were replaced without materially injuring the attractiveness of the beds. The iron vases in the various parks have also been suitably planted with flowering plants and vines.

#### MANURE, IRON FENCES, ETC.

A compost pile was prepared in the White Lot during the season, composed of lime, manure, leaf mold, loam, and rough salt, thoroughly mixed by frequent turnings, and was applied to the lawns of various parks with good results. Thirty-six tons of Peruvian guano were also purchased and mixed with a quantity of dry pulverized loam in the proportion of three parts of loam to one part of guano, and was applied as



a top-dressing to the lawns of the various parks with well-marked beneficial results. The guano and soil were sown broadcast early in the spring months in the proportion of from 600 to 800 pounds of guano to the acre.

Four hundred new park-settees were purchased and securely fastened in positions in the various parks.

All the iron railing and port and chain fences of the public grounds were painted during the year, excepting the iron railing north of the "Mall" on B street north.

All necessary repairs were made to the iron fences inclosing the various parks as required during the year.

#### BRIDGES AND WATER-PIPES.

The Anacostia Bridge was kept in good repair during the year. Worn-out planks in the roadway and footwalks were taken out and replaced promptly where needed, without interruption to travel. New lamp-posts were placed on this bridge and are regularly lighted, facilitating the night travel. In accordance with the act of March 3, 1879, directing one of the two railroad tracks on this bridge to be removed, notice was given to the president of the Anacostia and Potomac River Railroad Company to that effect, when the company promptly removed the east track.

Benning's Bridge was thoroughly overhauled early in the year and all decayed stringers, caps, posts, and braces were removed and replaced with new timbers. The entire flooring of this bridge was taken up, all decayed planks removed and replaced with new plank. In the prosecution of this work only one side of the bridge was taken up at a time, to avoid interruption to the constant travel over this bridge.

The water-pipes used to convey the spring-water to the Capitol, Executive Mansion, and State, War, and Navy Departments were kept in thorough order during the year, and a piece of the 4-inch main in the Executive Mansion grounds, some 525 feet in length, which had become clogged with rust and dirt, was replaced by new pipe.

#### EXECUTIVE MANSION, ETC.

At the Executive Mansion the necessary repairs upon the building, greenhouses, furniture, &c., were made as necessity required. The conservatory, which is built of wood, is so much decayed that there is great danger of its roof and upper portions being blown off during some sudden summer storm. The structure should be renewed in iron, as being more durable and cheaper in the end to the government than a wooden building. Estimates for an iron building of the same style and shape as the present wooden one are inclosed.

Attention is also called to the roadways leading to the northern entrance of the Executive Mansion, and the muddy condition of these roads in the winter and spring. The discomfort and injury to the people visiting the house at these seasons would seem to require that the roads should be paved, and an estimate is made for that purpose.

For the refurnishing of the Executive Mansion a larger sum is required for the year ending June 30, 1881, than is usually supplied. No refurnishing of carpets or upholstered articles has been practicable for some years back and much of that on hand is nearly worn out.

The telegraph lines to connect the Departments with the Government

Printing Office and Capitol have been kept in thorough order during the year. New and much taller poles have been put up in places where the growth of the trees began to affect the insulation of the line, and all joints in the wire were carefully gone over and soldered, thus securing perfect continuity in the conductors. A number of new poles were procured to replace those originally erected, some of which are badly decayed near the ground.

The necessity for additional watchmen upon the public reservations is rendered more apparent from year to year as these spots become greater resorts for the people. As stated in former reports—

Each reservation containing either a piece of statuary, a lodge, a fountain, ornamental vases, and drinking fountains requires a watchman, not only to preserve this property from injury, but to make minor repairs of the walks and sodding, to keep the paths and lawns free of papers and shavings and other rubbish dropped or blown upon the grass and shrubbery, and also to preserve order among and protect those who may chance to visit the squares for their personal pleasure and comfort.

The necessity of putting in order many of the unimproved reservations, particularly those on Capitol Hill in the vicinity of the extensive private improvements made in that section of the city, is strongly urged. The points requiring immediate attention are Seward Place, at intersection of Pennsylvania and North Carolina avenues; North Carolina avenue between Second and Third streets; South Carolina avenue between Fourth and Sixth streets, and the several triangular reservations lying along these avenues as far east as Eleventh street.

Reservation 17, and the grounds to the northwest of it reclaimed by filling in the old canal, can be rendered not only an attractive park, connecting with the stretch of parks terminating at the Botanical Gardens, but it is believed a row of forest trees in this locality would act as a screen to the Capitol for the miasmatic vapors approaching that building from the southwest and the Potomac flats.

On the 31st of May last, the Office of Public Buildings and Grounds was removed from the "Towson House," corner of Seventeenth and F streets northwest, into the office rooms prepared for its use in the old building, Navy Department.

#### ESTIMATES OF AMOUNTS REQUIRED FOR THE FISCAL YEAR ENDING JUNE 30, 1881.

Salaries of employes, &c., public buildings and grounds under Chief of Engineers:	
1 clerk.....	\$1,600
1 messenger.....	840
1 public gardener.....	1,800
1 foreman and laborers employed on the public grounds.....	26,000
2 drawkeepers at the Navy Yard and upper bridges.....	1,440
1 watchman at Franklin Square.....	660
1 watchman at Lafayette Square.....	660
4 watchmen in Smithsonian grounds, at \$660 each.....	2,640
1 watchman in Judiciary Square.....	660
1 watchman in Lincoln Square.....	660
1 watchman in Iowa Circle.....	660
1 watchman in Rawlins Square.....	660
1 watchman for McPherson and Farragut Squares.....	660
1 watchman for Washington Circle and neighboring reservations.....	660
1 watchman for Fourteenth street Circle and neighboring reservations.....	660
1 bridge-keeper at Chain Bridge.....	660
Contingent and incidental expenses Office Public Buildings and Grounds.....	500
	\$41,420