# SECOND

watur

# ANNUAL REPORT

#### OF THE

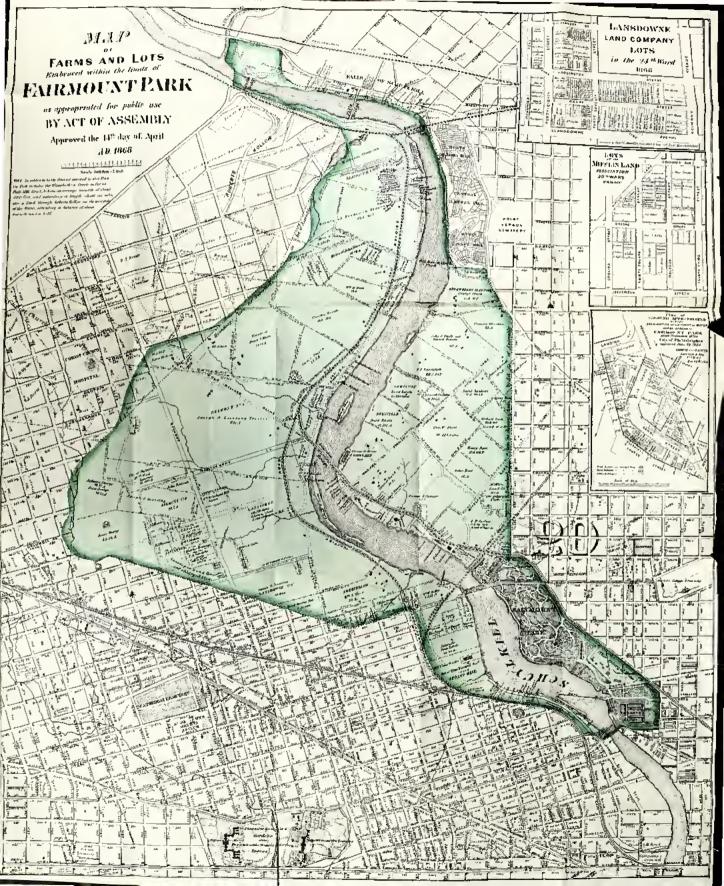
Commissioners of Fairmount Park.

### **PHILADELPHIA:**

KING & BAIRD, PRINTERS, 607 SANSOM STREET.

1870.





Digitized by the Internet Archive in 2017 with funding form This project is made possible by a grant from the institute of Museum and Library Services as administered by the Pennsylvania Department of Education through the Office of Commonwealth Libraries

# SECOND

# ANNUAL REPORT

OF THE

Commissioners of Fairmount Park.

## PHILADELPHIA:

KING & BAIRD, PRINTERS, 607 SANSOM STREET.

1870.

# 1870.

### COMMISSIONERS OF FAIRMOUNT PARK.

N. B. BROWNE, THEODORE CUYLER, SAMUEL W. CATTELL, DANIEL M. FOX, FREDERIC GRAFF, JOSEPH HARRISON, JR., STRICKLAND KNEASS, MORTON McMICHAEL, GEORGE G. MEADE, HENRY M. PHILLIPS, ELI K. PRICE, J. H. PUGH, GUSTAVUS REMAK, WILLIAM SELLERS, LOUIS WAGNER, JOHN WELSH.

#### OFFICERS OF THE COMMISSION.

President, HON. MORTON MCMICHAEL.

Vice-President,

MAJOR-GENERAL GEORGE G. MEADE, U. S. A.

Treasurer, N. B. BROWNE.

Secretary,

DAVID F. FOLEY, Office of the Commission, 224 S. Fifth St.

> Chief Engineer, JOHN C. CRESSON, Office at Fairmount Park.

Park Solicitor, CHARLES HENRY JONES, Office No. 136 S. Sixth St.

#### COMMITTEES.

Land Purchases and Damages.

ELI K. PRICE, Chairman.

HENRY M. PHILLIPS, WILLIAM SELLERS, JOSEPH HARRISON, JR., N. B. BROWNE, JOHN WELSH.

Plans and Improvements.

THEODORE CUYLER, Chairman.

GEORGE G. MEADE, JOSEPH HARRISON, JR., STRICKLAND KNEASS, FREDERIC GRAFF, WILLIAM SELLERS, JOHN WELSH, GUSTAVUS REMAK, N. B. BROWNE.

#### Finance.

JOHN WELSH, Chairman.

N. B. BROWNE, WILLIAM SELLERS, JOSEPH HARRISON, JR., GUSTAVUS REMAK.

#### Auditing.

STRICKLAND KNEASS, Chairman.

FREDERIC GRAFF, J. H. PUGH, GUSTAVUS REMAK, SAMUEL W. CATTELL.

Superintendence and Police.

#### GUSTAVUS REMAK, Chairman.

GEORGE G. MEADE, LOUIS WAGNER, J. H. PUGH, SAMUEL W. CATTELL.

#### Executive.

#### MORTON MCMICHAEL, Chairman.

GEORGE G. MEADE, N. B. BROWNE, ELI K. PRICE, THEODORE CUYLER, JOHN WELSH, STRICKLAND KNEASS, GUSTAVUS REMAK.



# OFFICE OF THE COMMISSIONERS OF FAIRMOUNT PARK, PHILADELPHIA January 29, 1870.

## To the Presidents and Members of Select and Common Councils :

In the first annual report of the Park Commissioners a narrative of the origin of the Park, and the successive steps by which it advanced from its insignificant inception, when it consisted of only five acres, to its present magnificent area of nearly three thousand acres, was succinctly given. That narrative, curious and instructive as it is, need not now be repeated. As soon as conveniently may be it is the intention of the Commissioners to furnish, as a contribution to our local history, a more complete review of those movements, which, at first and for a long period slow and wearisome and discouraging, afterwards became rapid, animated and successful; and also to present, so far as records and traditions will enable them to do so, an account of the various estates comprised within the Park borders. Many of these, it is well known, through their owners and occupants, were identified with the social and civil progress of Philadelphia in all its earlier career; and such an account, while

intrinsically full of interest, will, it is believed, give a new value to the Park, by clustering around its most attractive portions inspiring memories of the deeds and the men of times long since passed away, but the benefits of whose labors still survive for the edification of the present and coming generations.

If there has heretofore existed a division of opinion as to the desirableness of a great park for Philadelphia, the result of the experiment thus far made in that direction has certainly removed it. On that subject there is universal accord. Though still comparatively in its infancy, and with no strikingly visible improvements, except the laying out of roads and foot-paths, which give access to some of its conspicuous features, the Park has not only been a source of gratification to hundreds of, thousands of visitors, but it has already become, in the estimation of the country at large, a suggestive and distinctive symbol of our metropolitan advancement. Famous as this city has been, along from its very foundation, for its benevolent and charitable associations, and for the institutions of learning and science which, keeping even pace with its growth, have here matured into acknowledged superiority, it is not to be denied that, especially of later years, apart from business motives, it has not presented in so large a degree as it should have done, those inducements to strangers to come, or to tarry when here, which are among the most vigorous indications of metropolitan wisdom. Our churches, our schools, our libraries, our hospitals, our galleries of art, our collections in natural science, all

bore, as they still bear, favorable comparison with similar objects elsewhere, and in places of mere amusement we were not notably deficient; but, while possessing environs of exceeding beauty, from the want of suitable facilities of approach, our advantages in this respect were immeasurably lost to us. In spring the mud, in summer the dust, in autumn the slime, and in winter the slush, which cause so much discomfort on our highways, have, except to our own citizens, made the hills and the vales and the groves which offer so many and such varied charms in our immediate vicinity almost wholly unfamiliar. Many persons whose journeyings brought them to Philadelphia, came and went with no better notion of its topography than that it is built in the centre of a plain, having no greater irregularity of surface than an occasional mound of cobble stones, and no rural surroundings besides scattered ranges of cattle pens and lengthened stretches of cabbage gardens. The extension of the Park has dispelled such illusions. For all who choose to pass its portals, there are walks and drives, miles after miles in extent, which, leading through scenes of unsurpassed loveliness, conduct to the fairest and the brightest prospects.

The importance of large open spaces in great cities as means of health and enjoyment to the inhabitants is too obvious to need comment. Their value as sources of attraction to strangers is equally apparent. For the people of Philadelphia the Park had become a necessity. The rapid expansion of the material limits of the city, the immense increase of its population, and the constant

enlargement of its industries and its traffic demanded, as well for sanatory as commercial reasons, that it should be supplied with the opportunities for fresh air and agreeable relaxation which only extensive parks can furnish. Such being the case, it was most fortunate that the site selected was procurable, for it is no exaggeration to say that, in all the requisite adjuncts and auxiliaries, it is unequalled. Lying in what in a few years will be the very heart of the city; exhibiting, singly and in combination, every variety of picturesque aspect; presenting contours, both smooth and broken, adapted to all forms of embellishment, and soils suited to all kinds of cultivation; bountifully endowed with stately and umbrageous trees; irrigated by numerous brooks, which, as they meander from the higher to the lower levels, babble over pebbly bottoms, or leap in flashing cascades, or spread into shining pools; and partly composed of two romantic streams, flowing for miles between banks of verdurous lawn, or sloping woodland, or rock-girt-precipice; Fairmount Park, considered in reference to the uses for which it is intended, and the situation it occupies, may justly claim to be without a rival. Superb and elegant as are many of the parks belonging to European capitals, except in the architectural and sculptural adornments which the lavish application of wealth has bestowed, or the grand and graceful arboreous avenues which the careful nurture of centuries has secured, there is no one among them which is its superior, while in natural capabilities it far excels them all.

And if the people of Philadelphia have been fortu-

nate in the site selected for their Park because of these natural capabilities, they are still more fortunate in the economic results which that selection involves. For many years the gravest topic submitted for municipal deliberation had been one connected with the water supply Whether that supply could continue to be of the city. drawn in sufficient abundance and of the desired purity from the Schuylkill, or whether it would have to be sought in more distant regions, were questions which deeply exercised not only the public functionaries, but all thoughtful citizens. In the discussion of these questions it became manifest that if the latter alternative were adopted, it would compel an outlay of many millions of The formation of huge artificial lakes and the dollars. construction of long lines of aqueducts through a rugged country, as experience elsewhere had shown, could only be accomplished at enormous expense, and, when completed, the cost of maintenance and repair would be proportionably heavy. To avert this, but one course was feasible, and that was the dedication of the Park as its boundaries are now defined. The fact was urgent that if some early measures to prevent the spread of manufacturing establishments along the margins of the Schuylkill and its tributaries were not adopted, the unavoidable discharge of impurities from these into the river would render its waters certainly unpalatable and probably unwholesome. Already, indeed, the oil refineries, and other works of a noxious character, whose debris was deposited in the stream, had, at intervals, communicated a repulsive taint to its flavor, and their growing numbers threatened

to render it altogether insalubrious. By obtaining an amount of land on both sides of the river, from the bridge at Callowhill street to the Falls, sufficient to secure positive control of the drainage into it between those points, and by erecting a sewer to receive and carry off the drainage from Manayunk, Falls Village and intermediate places, the purity of the water, in the judgment of scientific experts, would certainly be preserved; and thus protected, it was not doubted that, with proper reservoirs for storage, the supply would be ample, unless in exceptional cases of drought, for more than double the present number of residents. Now, as the price of the land acquired and to be acquired for this purpose, and the sum to be applied to the contemplated sewer, will not, according to the most liberal calculation, be equal to one-half the estimated cost of bringing the water from a distance, singular and paradoxical as the statement may seem, it is, nevertheless, true that, by this purchase, Philadelphia will actually save money, and practically get a Park for In other words: without the acquisition and nothing. disposition of this land, it would not be possible to protect the Schuylkill from such contamination as would speedily make its waters unfit for general use, and in that contingency a resort to remoter sources of supply would be inevitable. Such a resort could not be successfully had without the expenditure of at least twice the amount expended in procuring the grounds in Fairmount It follows that the city will secure an abundant Park. supply of pure water for very much less than it would otherwise have cost; and that, in addition to this great

boon, it has obtained a spacious Park, which will yield to its citizens unfailing elements of invigoration and delight, and offer to sojourners within its gates opportunities of exercise and pleasure beneath the genial skies and amid the gracious sights which give strength to the body and bring joy to the spirit.

Up to the 31st of December, 1869, the amount paid by the Commissioners to owners of land, with whom the valuation had been reached by mutual agreement, was three million one hundred and twenty-five thousand four hundred and forty-one dollars and sixteen cents, and for necessary Court charges, in this connection, one thousand six hundred and thirty-eight dollars and eighty-two cents, and the amount paid for land, for which the damages were assessed by juries, was eighty-one thousand one hundred and thirty-nine dollars and forty cents, and for charges, fifty dollars and fifty cents, making a total for land purchases of three million one hundred and twentyseven thousand and seventy-nine dollars and ninety-eight cents, and for land damages eighty-one thousand one hundred and eighty-nine dollars and ninety cents; in all, three million two hundred and eight thousand two hundred and sixty-nine dollars and eighty-eight cents. These figures, it must be borne in mind, include, beyond the fee simple of the soil, the numerons buildings erected and the improvements of various kinds made upon it. As portions of the land which was indispensable were peculiarly adapted to manufacturing purposes, many of these improvements were of a costly character; but, while the owners have been equitably compensated, the Com-

missioners believe that, taking the whole body of the land as the basis of calculation, it has been obtained on terms quite as moderate as could have been expected. When it is remembered that the properties acquired by the Commissioners embrace two hundred and sixty-three distinct parcels, and spread over very many miles, and that in numerous cases, in the very nature of things, the negotiations were tedious and complicated, some idea may be formed of the amount of labor performed in this behalf by the Committee on Land Purchases and Damages, to whom the duty was delegated. That Committee, in addition to the personal visitations made for information and examination, met on each Friday throughout the year, without any intermission; and to their zealous industry and their thorough knowledge of the subjects with which they had to deal it is mainly due that so much has been achieved, and with such entire satisfaction.

While the process of reducing into actual possession the land constituting the Park is still in progress, no system of improvement which at once embraces the whole and each of the parts can be finally adopted. But as rapidly as they have come into possession of contiguous pieces, the Commissioners have endeavored to make them available for present uses, and, so far as practicable, to adapt them to their ultimate purposes. In that portion of the Park which lies east of the Schuylkill and north of Girard avenue the tracts they now hold are separated by intervening tracts, which still remain unadjusted or unadjudicated, and except in the way of surveys and preparation they have not been able to effect much. In so much of the western portion of the Park as is now thoroughly under their control, they have laid out carriage roads and footpaths through some of the most attractive scenery, and have removed with all convenient speed every obstacle to its general enjoyment by This description of work is under the the public. special care of the Committee on Plans and Improvements; and a detailed statement of what has been thus done and projected will be found in the copious and elaborate report of the Chief Engineer.\* The Lansdowne drive, to which that report refers, was formally opened on the 24th of June, 1869; and the ceremony was participated in by the judicial, legislative and executive authorities of the city, assisted by a vast assemblage of citizens. The occasion was in all respects one of marked and memorable interest.† But what especially distinguished it was the presence and active co-operation of the venerable Jesse George, on the summit of whose munificent gift of land to the City the crowning act was performed. Rebecca George, who, actuated by the same generous and patriotic motives, had united with her brother in his most liberal donation, shrunk, with womanly delicacy, from any display in the face of such a crowd as was then gathered; but when without any formal parade, on the following 16th of September, the burgee flag, inscribed with the title "George's Hill," was hoisted to the masthead of the Concourse, over

\* Vide Appendix No. 1.† Vide Appendix No. 2.

which it is henceforth to float, she took part in the unostentatious demonstration. In less than two months from the date of this occurrence, Rebecca George was no more. She had nearly attained four-score years, and during her whole life was a pattern of the unobtrusive goodness which characterizes the religious community to which she belonged. Simple in her tastes and habits, she was at the same time, earnest, sincere, affectionate and faithful. From childhood upwards she had been the companion and friend of her brother; and, when he determined on the noble act which has inseparably associated their family name with Fairmount Park, she cordially joined with him. The respect due to a public benefactress was shown to her memory by the municipal government. Councils passed resolutions of culogium and regret, and appointed a joint committee to attend her funeral along with the Mayor, and the Park Commissioners placed upon their minutes the following tribute:

Resolved, That the Fairmount Park Commissioners with sorrow record on their minutes the decease of Rebecca George, on the 10th day of November, 1869, in the seventy-ninth year of her age.

Resolved, That this Commission, in common with all the citizens of Philadelphia, owe to the memory of Rebecca George a debt of gratitude for the liberal spirit she manifested in the grant of her share of "George's Hill" to the city.

Resolved, That this Commission, for themselves and their successors, and for the citizens of Philadelphia, again declare their purpose that the name of Rebecca George, and that of her honored brother, shall in all future time be associated with their pleasure, health and enjoyment when visiting that most beautiful part of the Park, "George's Hill;" and that it shall stand a monument to their name and honor forever.

Resolved, That we sincerely sympathize with our city's benefactor, Jesse George, in this his great bereavement, in the loss of his only near relative and home companion of upward of three-fourths of a century; and with these resolutions we tender to him our sincere condolence and very respectful regards, together with our desires that he may continue in the enjoyment of health and long life.

*Resolved*, That the Commissioners will attend the funeral of Rebecca George at the adjournment of this session.

The establishment of a Park guard, and its adaptation and training, have occupied the serious attention of the Commissioners, and, thanks to the diligent supervision of the Committee on Police and Superintendence, it now possesses great efficiency and renders excellent service. As a rule, the visitors to the Park, of all ages and classes, have exhibited the most laudable order and good conduct, and the instances of wilful violation of decorum or wanton depredation of property have been relatively few. Whenever these have occurred, prompt arrest and certain punishment have taught the offenders that they cannot do wrong with impunity; and the salutary influence of such examples has deterred the evil-minded from similar aggressions. The regulations adopted for the government of the Park have proved most effective. Prepared, as they have been, so as to give to all the largest liberty in the use and enjoyment of the advantages which the Park offers, consistent with a decent respect for propriety of demeanor; and proclaimed in so many ways that the most unobservant cannot truthfully plead ignorance of their requirements, they have commended themselves to general favor, and have commanded general compliance. While imposing restraints designed only to prevent unwarranted license, the Commissioners have assiduously sought to furnish to the masses of the people every facility of access to, and recreation within, the splendid domain which owes its existence to their liberality, and which is sacredly set apart that they, and the masses of the people who are to succeed them, may find in it a blessing and a solace forever. Steamboats and row-boats have been encouraged to ply on the Schuylkill; wheeled vehicles have been authorized, at moderate rates and with suitable safeguards against imposition, to carry passengers over the grounds; arrangements for cheap fares and frequent trains have been made with the railroads that penetrate the Park, and places for temperate refreshment have been provided. And, as an earnest of what they hope to effect hereafter, during the past summer the Commissioners inaugurated a series of afternoon concerts, which, though neither upon so large a scale nor so often repeated as they could have wished, proved eminently successful, and will stimulate to renewed exertions in furtherance of the same object.

On the 13th of September, 1869, the corner-stone of a monument to the memory of Alexander Von Humboldt was laid in a portion of the Park set apart for the purpose. The time chosen was the centennial anniversary of the birth of the world-renowned philosopher; and the ceremonies, which were imposing and impressive, were conducted by the Grand Lodge of Masons in the State of Pennsylvania, in connection with the Park Commissioners, the German Society (at whose instance the matter was begun) and other institutions. At some future day it may be presumed that statues and monuments will form conspicuous ornaments of the Park grounds; but it is the intention of the Commissioners to scrutinize with watchful care all applications in this particular, in order that none shall be admitted which will not stand as memorials of eminent public services or virtues, and illustrate in their design and execution the highest attainments of art. In the present case permission was granted to lay the corner-stone "on condition that no monument shall be erected thereon until the design for the same shall be accepted by the Park Commission; and with the further condition that any monument, when so erected, shall be the property of the Park Commissioners, to be exclusively controlled And similar conditions will be exacted from by them." all who solicit similar privileges.

Among the events of the year just closed there is one that deserves notice as the first step in a movement which may result in a permanent institution that will give the Park an additional hold upon popular regard. In various parts of the Park grounds are chestnut and walnut and other nut-bearing trees, numbering over four

thousand, of which many hundreds gave promise of a plentiful crop. It became the subject of consideration to devise a plan that would give the enjoyment of this harvest to the public, without incurring the risk of the disorder and dangers that might ensue from its indiscriminate gathering by all comers. Hence arose the idea of appropriating the nuts to the school children of the city. And to avoid confusion in the first trial of the experiment, it was deemed advisable to confine the invitation to the public schools, whose perfect discipline it was believed would secure the best arrangements for the safety and comfort of the large throngs of young people. An invitation was accordingly given to the Board of Controllers, who entered heartily into the project, and, by the co-operation of the school directors of the various districts and of the teachers, were enabled to make the holiday a complete success. So great was the appreciation of it as to give rise to a suggestion for instituting two Park holidays, one in June for botanical and floral recreation, and one in the autumn for nut-gathering. The date of nutting-day last year was the Sth of October, which was at the period of the first ripening of chestnuts. The walnuts fell a week earlier, and the hickory nuts a week or two later. The number of persons present on the occasion was estimated to be sixty thousand, and the principal embarrassment in arranging for the visit grew out of the difficulty of transporting such multitudes of children and teachers to the Park from homes scattered over the wide area of the city. The trouble from this cause may be diminished in future by arranging the schools

in two or more divisions, to come on different days. With such an arrangement, the pupils of private schools and inmates of children's homes could also come on appointed days, accompanied in all cases by their teachers or caretakers. In this way the people of Philadelphia may be brought into closer mutual sympathy by a feeling of common interest in the improvement and maintenance of the Park.

Since the last report, some changes have taken place in the personnel of the Commission. On the 1st of January, 1869, the Hon. Daniel M. Fox was installed as Mayor of the city, and became ex-officio a member of the board. On the same day James H. Castle, a valuable and active Commissioner, who had fulfilled his duties most faithfully and intelligently, felt constrained by the urgency of his private business to relinquish his seat, and the District Court appointed Morton McMichael, whose official term as Mayor, and with it his functions as Commissioner, had just expired, to fill the vacancy. At a meeting held immediately thereafter, on the motion of Mayor Fox, Mr. McMichael was re-elected President, a post he had occupied from the outset. On the 19th of June Joseph F. Marcer resigned his position as Secretary of the Board. Mr. Marcer, in virtue of his office as President of Common Council, was a member of the original Commission, and while the difficult work of moulding and constructing the novel organization was in progress, he rendered important aid by his knowledge of affairs, and by the skill with which he discharged the onerous and exacting duties of Secretary, in which

capacity he continued to act [being a Commissioner, of course, without compensation] until the date mentioned. On the resignation of Mr. Marcer, David F. Foley, who, as Assistant Secretary, had given ample proof of his industry and abilities, was promoted to the principal place, with a suitable salary. On the 7th of October Louis Wagner, successor to Mr. Marcer as President of Common Council, was added to the Commission; and on the 3d of January, 1870, Samuel W. Cattell, then chosen President of Select Council, replaced William S. Stokley, whose service in that relation ceased. During his connection with the Commission Mr. Stokley exhibited the same zeal and energy which have distinguished him in the various public stations he has held.

From what has been stated, it will be seen that while all has been done for the Park that a judicious disposition of the means at command would sanction, it can only be regarded as having entered upon the first stages of initiation. Pending the topographical survey, which, from the extensive area to be gone over, and the interruptions unavoidably encountered, required a large force and a long time for its consummation, no permanent plan for action could be adopted. Anxious as the Commissioners were to give to the public the use of the Park as fast as the different tracts of which it is made up came into their possession, they did not wait for any preliminaries except such as were absolutely essential. fences and other obstructions could be As soon as removed they opened provisional roads and paths, and erected such temporary structures as the exigency demanded. In this course, so long as it will promote the accommodation and convenience of the public, they propose to persevere. But something more is necessary. The surveys are now nearly finished, and all the data for a broad and comprehensive system of improvement, embracing the entire Park in all its relations and dependencies, will soon be at their disposal. Feeling the great responsibility which rests upon them, they have resolved to consult the highest talent in engineering and landscape gardening they can find, as to what that system of improvement should be. Educated and trained, as several of the Commissioners have been, as engineers, and aided, as they are, by the taste and skill of their own accomplished Chief Engineer, with the general information as to park requirements which all the members of the Board feel they possess, it is from no want of confidence in their ability to grapple with the ordinary questions that may arise, they are impelled to seek this assistance. But in so wide a field of operations as Fairmount Park includes, and with so many and such various objects as it contains, they think that, in order that the parts may harmonize with each other and with the whole, it is essential that the knowledge which only comes with experience, and the faculties of perception, selection, apposition and distribution, which must be sedulously cultivated in this special pursuit before they can master its difficulties, should be employed, if for nothing else, at least to sketch the picture which other hands may execute. In this, however, as in everything belonging to the administration of the Park, the Commissioners will keep constantly in view the strictest principles of economy. They realize that nature has been so prodigal in her bounties—has granted so profusely her choicest favors to the Park, that discreet utilization, rather than sumptnous decoration, will be needed; and to this end they will direct the attention of those to whom they may apply for instruction.

While the general plan is in preparation there are certain details so evidently proper that it may be assumed they will in any event be embraced in it. Of this description is a river drive on both sides of the Schuylkill, to extend on the west beyond Falls bridge, and on the east to the mouth of the Wissahickon, and thence to follow the windings of the latter until it passes beyond the This drive has already been plotted out, Park limits. and it will be commenced as early as circumstances will permit. When completed on the eastern shore, and connected with the Wissahickon valley, it will furnish a line of park travel fully ten miles in length, through scenery diversified from the placid smoothness of a lake reposing among grassy meadows to the sweeping dash of the torrent as it struggles and roars between lofty pine-clad summits. The marginal road on the western shore will, in like manner, approach the ravine known as Roberts' Hollow, where, beneath the shade of sombre forest groups, a rapid stream rushes through a rocky channel; and, ascending by the sinuous borders of this stream, the visitor will reach the upland drive, returning by which he will have made a twelve-mile circuit. When the valley of the Wissahickon and Roberts' Hollow shall be united, as

ultimately they must be, by a bridge spanning the Schuylkill, the ride from east to west, of about eight miles, will comprise more luxuriant wildness than can be found in any other park on either continent. Simultaneously with the construction of these roads the avenues which skirt the Park on both its eastern and western frontiers will be pressed forward. The entrances leading to it will also be carefully studied (as, indeed, they already have been) so that those which afford the best and easiest access may be put in proper condition. This subject is one of the utmost consequence, both to the present and future welfare of the Park, and the Commissioners are satisfied that the public will not tolerate any encroachments or hindrances, which will unreasonably interfere with its settlement.

As soon as favorable weather will permit, a playground for children and a parade-ground for the military will be provided. The localities assigned to these are convenient and the space allotted will be ample. In the former the inducements for healthful exercise and harmless pastime will blend amusement with profit for the young; and by making the latter attractive, the revived spirit of activity which our volunteers have on recent occasions so creditably displayed may be still more incited. Further arrangements for the accommodation of the public will be made as rapidly as they can be. Suitable places for cricket, base-ball, and other athletic exercises will be set apart, and croquet grounds will not be overlooked. Bridle-paths for horsemen will soon be opened, and, in connection with these, turfy enclosures will be appropriated for equestrian exercises. In a word, without entering into particulars, the Commissioners give the assurance that they will avail themselves of every suitable opportunity to make whatever inexpensive improvements the present state of the Park will admit of, so that all may be benefitted.

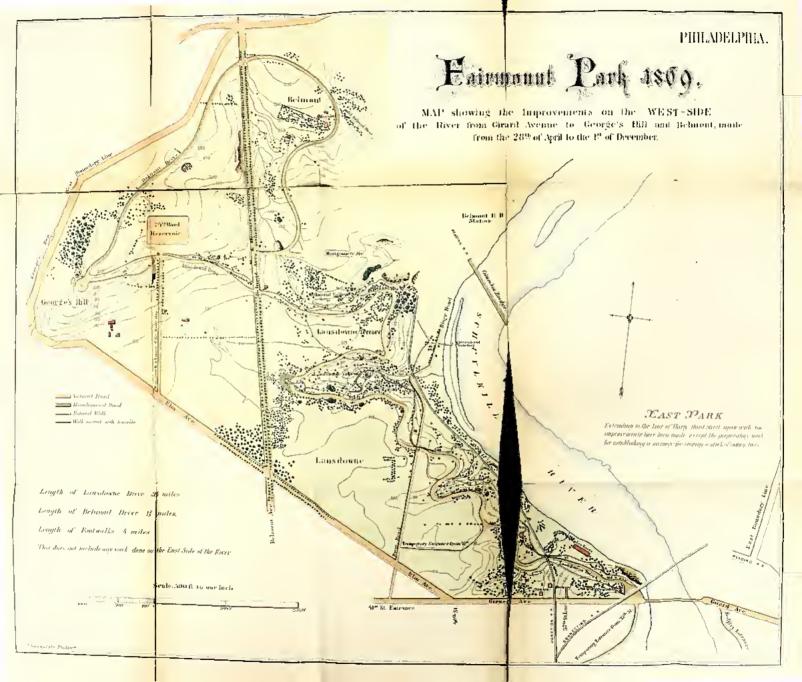
In closing their report, the Commissioners desire to express to the City Councils their grateful appreciation of the aid they have received from those bodies. While the present Park project was in its germ, Councils assisted to unfold it. When it expanded into larger proportions, they fostered its growth; and, at every step in its advance, they have helped it onward. Their own good judgment coincided with the popular wishes, which with rare unanimity pointed in this direction; and they cheerfully embodied in action what they recognized as the sentiment of their constituents. As well for reasons of an official character, as from motives of personal respect, it has been the aim of the Commissioners to cultivate such relations with the City Legislature as would induce harmony of purpose between them. Without this they knew the great work committed to their charge could not be performed. However wisely they might plan, if Councils, to whom that power was reserved, refused the necessary appropriations, their schemes would come to From the beginning, therefore, while naught. not avoiding any duties imposed on them, nor surrendering any rights they possessed, they have striven to make their acts acceptable. That they have done so is shown in this, that all they have asked has been granted, not

grudgingly and with stint, but with open hand and in full measure. It is true they have asked only for what was imperative. Aside from the sums applied to the acquisition of land, (and as to these, when once ascertained according to law, they had no discretion) they have kept their requisitions within the narrowest bounds that a gradual and moderate development of the Park would justify. They have sought no startling effects; they have approved none. Quietly, and, as they believe, prudently; steadily, and, as they hope, successfully, they have fulfilled their trust; and in rendering this account of their stewardship, they think they may reasonably expect that Councils, and that larger community which they and Councils alike represent, and to which they and Councils are alike amenable, will join with them in congratulations on the result of their efforts.

By order of the Commissioners.

MORTON MoMICHAEL, President.







# APPENDIX No. 1.

### Hon. MORTON McMICHAEL,

President of Fairmount Park Commission.

SIR:—The Chief Engineer has the honor to make report of the work done in the Park during the year now drawing to its close.

At the opening of the year 1869, nothing in the way of improvement had been commenced on the grounds recently acquired. No general plan for such improvements was adopted, nor could be, until the preliminary surveys should be completed. The labors of the Engineering Staff in the previous year had been devoted to these surveys, whenever they were not engaged in defining the boundaries of the Park, as established by Act of Assembly, and ascertaining the property lines and areas required for the use of the Committee on Land Purchases This last requirement has continued and Damages. through the current year, in addition to numerous surveys for proposed improvements, and on improvements actually located and carried out. Consequently, the work of topography has been subject to frequent interruptions, and is not yet completed over the whole area of the Park. The results of the partial topographical surveys of last year were plotted during the winter, upon maps drawn

to a large scale, on which were laid down the contour lines of the surface, and also some of the possible routes of Roads and Walks for study. A sketch of these routes was delineated on the small map, published with the first annual report. In addition to the process of staking and levelling pursued last year, a system of plane-table surveys has been instituted, which will define accurately the position of every tree, and rock, and stream, and show the exact shape of the entire surface. The results of these surveys are drawn upon maps in the field, on a scale of two inches to one hundred feet, upon sheets of uniform size, each one representing a square one thousand feet, on a side containing an area of one million square feet, or nearly twenty-three acres. One hundred and forty of these plane-table sheets will be required in whole, or in part, for the area of the Park, exclusive of the Wissahickon and Roberts' Hollow Drives, which, although part of the Park, are offshoots from it, and lie outside of its general area. When completed, they will embrace every feature within the Park requisite to form the basis of an office study of a general plan for Drives, and Rides and As the time required for the completion of Walks. these surveys would delay too long the work of improvement, it was deemed advisable to commence a certain portion of such work, without waiting for the formation of the general plan. For this purpose, a study in the field was carried out by the Chief Engineer, personally, during the season when the absence of foliage gave the best opportunity for examining and comparing the views of the landscape from different points; and a Road line

was in this way traced upon the ground, on routes well adapted to give favorable impressions of the variety and beauty of the Park scenery. The general principles adopted for the location of the Road were, that it should pass often through groves, and skirts of woodlands, so as to give the advantage of frequent shade; and by following the windings of the river bluffs, and upper borders of the lateral valleys, should lead to many elevated points, presenting views of long reaches of the river, and of the adjacent cliffs.

As a roadway laid out independently of a general plan must needs be provisional, and at some points only temporary, this line was located so as to conform nearly to the natural surface of the ground, and of such narrow width as would avoid serious damage to the scenery, and to the groves through which it was to pass. It was also designed in a manner that would not close any public road in use as a thoroughfare, and would not open at grade upon any highways but Girard and Belmont avenues. The mode of construction proposed was the most simple and inexpensive that would be compatible with securing a pleasant road in fine weather. There was to be no pretension to the style of a Park Drive, and as the alignments would be governed chiefly by the position of objects of interest, and the shape of the intervening ground, the curves must be at many points unsymmetrical, and the gradients variable. Several advantages might be expected from such provisional improvements. Roads of this simple character would be of small cost; they could be constructed expeditiously, and would therefore give the public early access to many inviting localities among graud old trees, and to pleasant views of the varied scenery of the Park. An additional argument in favor of this proposal was to be found in the fact, that large portions of the ground upon which the principal drives of a general plan must be located, are destitute of shade trees, or pleasant verdure, and must therefore require several years for their proper embellishment. If the public could be admitted at an early day to such rural drives, they would obtain to that extent an immediate enjoyment of the money expended in the purchase of the Park grounds, and be content to await the slower processes of the systematic improvements.

The plan of the proposed line of road was approved by the Board of Commissioners, and authority was given to carry it into effect under the direction of the Committee on Plans and Improvements. Appropriations were made for the various expenditures for tools and materials and labor; and a small force was placed on the work on the 20th of April. This force was increased early in May, and the work pressed forward vigorously through May and June; and the entire line from the Schuylkill River to George's Hill was opened for public use on the 23d of June, just nine weeks from the date of its commencement. The extent of the work done in this time was about three and a half miles of drive, thirty feet in width, with two concourses, one of two hundred feet in diameter on George's Hill, and another of smaller size at Lansdowne Terrace. There were also four miles of footwalks, generally eight feet wide. The style of construction was such as has just been described without stone surfacing or Park finish.

Immediately after the opening of the road, it became a favorite resort for citizens of every degree, in such numbers as to make evident the necessity of further improvements for their proper accommodation.

Under instructions given by the Board and the Committee on Plans and Improvements, the width of the road was increased at many points; the curves were made of larger sweep; a McAdam pavement was laid upon some portions, and a surfacing of coarse gravel upon others. The side slopes were shaped and sodded, and some of the borders planted with trees.

During the progress of this work many other improvements were authorized and carried on with as much activity as circumstances allowed. Numerous springs of water have been collected in marble cisterns. A tank through which there flows a constant stream for watering horses, has been constructed at a convenient spot in Lansdowne Valley, about midway along the Drive. A running fountain of spring water has been placed alongside the concourse of George's Hill. The water for supplying this fountain is raised by a small pump driven by water power, from a spring in the deep valley west of the Hill, which has long supplied drinking water to the homestead of the George family and their farm tenants. ſΓο give easy access to the new walks in the West Park for visitors coming to Fairmount on foot or in street cars, a steamboat landing was constructed on the margin of Lansdowne Island, and connected with the main land

precluded the construction of a continuous road. Later in the year some of the interposed tracts were obtained, but a few others still remain to be acquired before a proper entrance into these grounds can be effected. The interposition of two steam railroads between the old and new grounds makes this a work of much difficulty and cost.

A number of routes have been surveyed for obtaining a connecting entrance, all of which encounter serious obstacles. The line that seems least objectionable requires a rock cutting through the bold ledge along the river margin north of Girard avenue, and a tunnel beneath the Reading Railroad near Fountain Green; where a deep valley offers facilities for ascending by easy gradients from the river shore to the high plateau that forms the general surface of the Eastern Park.

An examination of the grounds near the River Bluffs of Edgely, Ormiston and Rockland, gives evidence that there remain yet to be developed views of scenery, not surpassed in loveliness by any of those opened on the opposite shores of the river.

A tract of about eighteen acres lying near the northern extremity of the east line of the Park, that was set apart as a Nursery, has been prepared for that purpose by thorough drainage and subsoil ploughing. A portion of it is planted with the Norway Spruce seedlings imported last spring. Many of these had perished before their arrival, in consequence of unusual delay of the voyage, and heating in the ship's hold. The protracted drought of the season has been somewhat damaging to the remaining young plants, but some eighty thousand appear to have survived and will probably continue to grow. Should these all flourish, their cost of importation will have been under one-fourth of a cent a piece, and the annual expense of their cultivation will be less than one and a-half cents each, making their cost at the end of five years about eight cents a piece. If all that were imported had lived, their average cost would be less than half this small sum.

A green-house authorized for propagating plants from seeds and cuttings has been built on the Nursery grounds and put in operation.

A large building, situated on Landing avenue, heretofore known as the Rialto Hotel, has been put in repair and fitted up for Park Offices; giving accommodations for the Engineers and Draughtsmen, and for general business, and quarters for the Park Guard and Harbor Police.

Another building on the Sweet Briar grounds, west of the Schuylkill, has also been partially fitted up for the use of the officers engaged on the improvements in that vicinity.

There are many other old mansions upon various portions of the Park grounds, which may be usefully applied to similar purposes, and also as residences for persons employed, whose presence in the extensive domain will be of service in preventing dangers that might arise, if the whole of its large area should be left uninhabited.

Several small structures, authorized for sheltering the Guards at remote and exposed points, have been constructed upon different models deemed suitable for the different localities.

Railroad sidings have been constructed for the reception of furnace einder to be used in surfacing roads.

A stone-breaking machine, driven by a steam engine, is established at the Belmont Stone Quarry, for breaking the road material obtained at that place.

The Steam Road Roller, weighing twenty tons, imported from England, has been put at work on such of the new drives as are prepared for its use, with excellent effect in maintaining a hard and even surface.

A Steam Dredger, built under the orders of the Board, is working upon the silt bars along the river shore, improving the condition of the Pool, and furnishing material for embankments at much less cost than it can be obtained by any other process.

The foregoing statement embraces the principal mechanical works carried on during the year, omitting only a few of less conspicuous character, but perhaps not less important for the convenience of visitors, especially of those to whom the Park grounds afford their only opportunity for the free enjoyment of rural scenery and fresh air. The work of laying out and supervising these various constructions imposed on the Engineer Department a large amount of special duty in addition to the general surveys. Their diversified labors can be most clearly exhibited by a brief statement, derived chiefly from the reports of the Principal Assistant Engineers who had the work in charge.

A party was arranged early in January under the direction of Principal Assistant John D. Estabrook for a hydrographical survey along the shores of the Schuylkill. Soundings were taken on the east bank from Fairmount to Laurel Hill, and on the west bank from Lansdowne Island to Solitude. The intervals of distance were generally one hundred feet in the direction of the river, and twenty-five feet in right angles to that direction. Soundings were noted both to the top of the mud and to the hard bottom; in some places through thirty-two feet of mud; and all were referred to City Datum line. A total of one thousand seven hundred and thirty soundings were recorded. The other work in charge of Mr. Estabrook included a topographical survey of Lemon Hill and Sedgely grounds, determining the location of all drives and walks, trees and buildings, and contour lines. Similar work was done on the east bank of the Schuylkill from Girard avenue to Columbia bridge, and in the valleys near Fountain Green and Engle and Wolf's, also at Thirty-third street and Connecting Railroad, and near Ridge avenue on the Wharton, Edgely, Arnest and Randolph tracts, comprising in all an area of one hundred and ninety acres, and requiring thirty-eight and a half miles of rectangular lines to be staked, on ground at some points very much broken. Surveys, plans and estimates were made for three different lines through the heavy rock bluff along the river, above Girard avenue, and for two river lines at different elevations, from the Skating Club house to Girard avenue. Similar work was done for Park entrances, under the Reading Railroad

at Coates street and Fountain Green, over the same road north of Coates street, over the Connecting Railroad at Master street and under it at Jefferson street. These embraced plans for nine bridges and seven and a half miles of drives. Estimates and surveys for six proposed boat landings and forty-six thousand feet of tile drainage were also completed. The constructions in his charge were the boat landing on Lansdowne Island, the tile and culvert drainage at Edgely, the entrance from Girard avenue to Sedgely; also the repairs to Girard avenue and to Coates street, and the work of the dredger along the river shore. The boat landing consisted of a landing pier of crib work, seventy by thirty feet, connected with the island by a timber platform eighty feet in length, resting on this and two small intermediate crib piers. From the island to the main land was a Howe truss bridge of seventy feet span, supported on timber abutments fifteen feet above the canal. The extraordinary high water of October 4th, which rose seven feet above the piers, swept a quantity of timber drift under and against the platform, carrying it away, and also the planked decks The main pier and the Howe truss bridge of the piers. were not injured.

The drainage of the Edgely and Wharton tracts comprises twenty thousand feet of tiles and seven hundred and sixty feet of brick culvert. An immediate benefit of this drainage is shown by the facility of ploughing, a few hours after rain, in ground that was too wet to be worked except in very dry weather.

The entrance from Girard avenue to Sedgely forms a

drive about six hundred feet in length, partly through a cut seventeen feet deep, with a heavy fill next the river of forty-seven feet. It is to be surfaced with stone and gravel. The width of the carriage way is to be forty feet, with a foot walk ten feet wide, outside of which will be a raised guard bank, planted with a low hedge.

The draughting in this office has occupied about one month on designs for river works, five months on bridges and buildings, and six months on topographical and general plans.

An extraordinary duty, out of the usual routine of Park work, arose from the effects of a southeasterly rainstorm that prevailed on the 3d of October, and produced on the 4th a flood in the Schuylkill, of greater magnitude than any before recorded. Upon its subsidence, a survey was made for the purpose of measuring and placing on record the flood line, at various points between Fairmount Dam and the head of the Pool, distant thirty-four thousand seven hundred feet. The levels are referred to an assumed plane at high tide in the Delaware river, designated on the official surveys as the City Datum. At the foot of Coates street, near Fairmount Water Works, the top flood line was 15.73 feet above City Datum, or 11.64 feet higher than the top of the Dam. At the head of the Pool, a short distance below Flat Rock, the top flood line was 32.44 above City Datum; showing a difference of 20.8 feet in the level of the water surface, in a distance of six and two-thirds miles, or an average fall of three feet per mile. This average descent was not distributed uniformly along the

course of the stream, but was broken into a number of steep inclines, separated by intervals of nearly level surface.

In the first mile from the head of the Pool the fall was about four feet; next came a fall of 3.5 feet in two thousand—equal to nine feet per mile. In the next forty-two hundred feet, the fall was only 1.4 feet, or 1.76 feet per mile; immediately below this it was 5.2 feet in thirtyfive hundred, or 7.8 feet per mile. Then follows a space of fourteen hundred feet, with a fall of only four tenths of a foot, or 1.5 feet per mile, succeeded by a steep incline of 1.5 feet in eight hundred, or nearly ten feet per mile. Again, a pool thirty-eight hundred feet in length, with a descent of only six-tenths of a foot, is followed by a fall of 1.4 feet in sixteen hundred, and next by a nearly level space of forty-four hundred feet, with only four-tenths of a foot fall; and one of eight hundred feet with 1.4 fall. And, finally, after an interval of forty-two hundred feet, in which the fall is only four-tenths of a foot, comes a distance of twenty-two hundred feet on which the level is one-tenth of a foot highest at the down stream end. The causes of these irregularities were carefully noted and recorded on the plotted survey. They arose from obstructions to the flow, by sharp bends or islands, or narrowing of the channel between bluffs, or the masonry of bridges, or by the entrance of flood waters from large tributaries, the level spaces being on the up-stream side of these obstructions.

The duties devolving upon Principal Assistant Samuel L. Smedley have been various and important. All sur-

veys for the outlines of the Park and division lines of tracts embraced in it are under his especial direction. He has also been charged with some works of construction, and with the general topographical survey. At the beginning of the year the survey for determining the area of the Wissahickon Park had made some progress. An axial line over eight miles in length had been established from the Stand-pipe in the Twenty-fourth Ward to Chestnut Hill, and had been located at convenient points where it crossed the Wissahickon creek; connections being made with the lines as they were run and angles turned. The first line run was located along the turnpike road, upon which the measured distance from Ridge avenue to Paul's Mill road was found to be six miles and four hundred and twenty feet. The bends of the valley and turnpike required sixty-eight stations on To keep clear of the dense undergrowth that this line. covered the precipitous banks of the creek, two lines were run through the open grounds on the hill tops on each side, with supplemental lines wherever openings permitted an approach to the crest. These separate plottings were connected on a preliminary plan. A line was then run for two miles along the western crest to ascertain the practicability of locating a ride or drive along the boundary. When it became apparent that the area included within such lines would be greater than was thought admissible, being nearly equal to that of the large Park, and making with it an aggregate of four thousand acres, this course was abandoned. After a careful examination for determining points best suited to the purpose, approximate stations were fixed, from which openings were made through the woods, to give proper lines of sight. From these observations a plan was drawn, embracing an area of four hundred and fifty acres, which, with some slight modifications, was approved by the Commissioners on the 15th of May; and after being duly certified was filed in the Survey Department in accordance with the Act of Assembly. The lines thus designated by law were next to be permanently marked on the ground by marble monuments inscribed with the Park initials. To secure the utmost accuracy in locating these stones, their positions were fixed by offset measures and angles, from the base line along the turnpike road. Many of the stations on the turnpike were also permanently marked by similar stones, and designated on the official plan. One hundred and four of these monuments have been planted.

This work was completed about the end of September. The general width across the valley between the boundary lines is from five hundred to six hundred feet. The narrowest place is three hundred and fifty feet for a short distance, and the widest over two thousand feet.

The number of courses on the boundaries are forty-one on the east bank, and thirty-one on the west, varying in length from one hundred and fifty feet to thirty-three hundred feet, their total length being over twelve miles. The map of the Wissahickon Park, herewith presented, is an exact copy of the official plan reduced photographically to a convenient scale. The descriptions and plans of the properties embraced within the lines of this survey which were collected during its progress, have been preserved for future use in making the plottings for the Committee on Land Purchases and Damages. A survey for determining the proper line for the River Drive in front of Laurel Hill Cemetery, and from thence to the mouth of the Wissahickon, occupied much time both in To avoid any disturbance of imfield and office work. provements in the Cemetery, some of which were situated on the verge of the Rock Cliff, the line was thrown as much as was allowable toward the river, requiring a series of soundings which were extended out to a distance of fifty After several experimental locations, a line was feet. agreed on, and was marked by twenty-five marble monuments on a line distant ten feet from the boundary described by courses and distances in the Deed of Conveyance from the Cemetery Company. The shore lines and all the properties and buildings between Laurel Hill and the Wissahickon, have been surveyed and drawn to a scale; and contour lines for every five feet of elevation have been taken over the rocky mound that rises on the land of Powers and Weightman near the junction of the Wissahickon and Schuylkill.

The Roberts' Hollow survey was commenced early in October and is pressed forward with all practicable diligence. Lines and levels have been run from Falls Bridge to Belmont avenue, along the valley and on the hills each side of it. A number of cross sections have been taken, and five feet contours completed between the Hollow and City avenue, along the Hill side bank of the Reading railroad, for the purpose of ascertaining the most favorable points for a bridge across the Schuylkill. The work is plotted as it progresses, on a scale of an inch to a hundred feet. For a high bridge in this locality the most remarkable facilities are presented, both for support and approach, by the isolated mound above mentioned situated upon the land of Powers and Weightman, on the east bank just below the mouth of the Wissahickon.

The Park boundaries west of the Schuylkill have been staked, and the levels taken for an avenue one hundred feet wide, from Girard avenue and Fortieth street to George's run, and thence to Simpson's dam near the river. The fences have been set up along both sides of this avenue for a distance of nearly two miles, where the work was stopped to await negotiations with the property owners.

The opening and fencing of the boundary along Thirtythird street has been delayed for the same reason.

A survey is now progressing for the location of the Boundary avenue along George's run outside the Park line, at a sufficient distance to place it on more elevated ground out of reach of the freshets that frequently flood the valley, and to make it more convenient of approach from the high ground on the west.

A proposition having been made by the Reading Railroad Company for an exchange of land, along the line of their road north of the Columbia bridge, a survey has been instituted for determining the manner in which it could be done with the greatest mutual advantage. The lines ascertained have been staked on the ground and drawn upon a plan for reference in the negotiation.

Another survey in this vicinity carefully notes the

buildings and other obstructions at Simpson's mill, including the Water Reservoirs; and levels were taken for the preparation of a map that will be needed in fixing the proper termination of the northwest boundary line.

Plans and surveys of properties to be paid for, have been made from time to time as required by the Committeee on Land Purchases and Damages, whose meetings it has been the duty of Mr. Smedley to attend. His attendance has also been sometimes required at the sessions of juries, and his assistance given in procuring testimony for the Park Solicitor.

The plans for properties have generally been drawn to a scale of one inch to two hundred feet, but in certain cases they have been made as required on a larger scale, some as large as one inch to fifty feet. From these, reduced plans were drawn for the preparation of the engraved property map.

In connection with the question of approaches to the Park, plans have been made to exhibit the houses on Thirty-fourth, Thirty-fifth, and Thirty-sixth streets, from the Pennsylvania Railroad to the Blockley Almshouse, with surface-levels; and also on Fortieth street from Lancaster avenue to Girard avenue, for the purpose of ascertaining the damages that would ensue from widening any of them as Park approaches.

Properties outside the Park limits have been plotted as far east as Twenty-third street from Callowhill to Coates street, and to Twenty-fifth street between Coates and Dauphin streets.

On the west side of the river similar plottings have

been made of all the properties in the Twenty-fourth ward, north of the Pennsylvania railroad.

The whole collection comprises seven hundred and seventy-seven properties and five hundred and fifty names recorded on the east, and ninety-eight properties and eighty-three names on the west of the Schuylkill. Many of the data for correct descriptions of these tracts, have been obtained from the records of the District Survevor's offices.

The topographical work has been carried on at all intervals of time that could be spared from these numerous engagements, and has been extended by levels and contours taken around George's Hill, and the Simpson Mill tract, and in the section lying between the West Philadelphia Water Works and Girard avenue.

The work of construction on Elm avenue was part of the duty of Mr. Smedley's corps, including the taking of levels for drainage, and for the specifications for letting to contractors, and the supervision and regulation of the work while under contract.

The work of laying out and constructing the Provisional Drives and adjacent Walks was confided to Herman Schwarzmann, a Junior Assistant Engineer, whose energy and skill in fulfilling the duties of the position have justified the confidence reposed in him. After devoting a few weeks to surveys upon the most difficult parts of the line, lying between the entrance at Girard avenue and the Sweet Briar estate, he broke ground, as has already been stated, in the latter part of April, and as soon as the work on the Drive was well under way, he commenced laying out the Foot walks, which were pushed forward with the same rapidity as was the Drive. While this work was progressing, the plane-table surveys were kept in operation, under the direction of Mr. Schwarzmann, with new instruments, in which very marked improvements had been introduced by him. The records of his work, carefully kept at first by himself, and subsequently by an office clerk, exhibit its variety and extent. The distribution of the time of the Engineers under his orders, and of his own, is as follows:

On construction of Drives and Walks, three hundred and sixty days.

Construction of, and plans of Bridges, and other structures, thirty-five days.

Plans of proposed work, not executed, thirty days.

Trigonometrical surveys, seventy-five days.

Plane-table work in field, eighty-five days.

Plotting surveys in Sweet Brier office, one hundred and twenty-five days.

The results of eighty-five days field work, with planetable, are given below:

Thirty-seven plane-table sheets, covering eight hundred and fifty acres, lying partly outside of the Park, have been commenced, and the survey upon four hundred and twenty-five acres is completed. It embraces the work of locating upon the maps sixty-one miles of contour lines, four miles of Drives, nearly four miles of public Roads, four and a-half miles of Walks, one mile of Railroad, thirteen hundred feet of River shore, two miles of small streams, sixteen Water Springs and Fountains, fifty-eight Buildings, twelve Culverts, thirteen Bridges, thirty-two Bench Marks, one hundred and forty Silt Basins, twenty-nine hundred and thirty-six Trees, and eighty-nine Plane-table Stations. Making an aggregate of over seventy-five miles of definite lines, and the positions of nearly thirty-three hundred objects accurately mapped.

The Belmont Branch Drive was also laid out and staked by plane-table work, giving it the exact lines and contours designated on the studied plan so as to make it fit properly into the system of future drives in this vicinity that has been proposed by the Committee on Plans. This Branch Drive has been graded to a width of forty feet, and constructed in the character of a permanent Park Drive.

The earthwork for sloping borders and lawns outside of the line has amounted to more than twice as much as the actual grading of the road, although this has included a cutting of ten feet and filling about sixteen feet in depth.

From the Plane-table sheets a connected plan has been drawn on a scale of one inch to two hundred feet, on which all the located work is exhibited, and from this has been prepared a small map, on a scale of one inch to five hundred feet to accompany this report. Many other drawings of surveys and for structures have been executed at the Sweet Brier office. Among them were two plans for a Restaurant on George's Hill, one of which was worked out in all the details for the contractor, and was adopted by the Commissioners; three plans of shelters for Park Guard, from which the buildings have been constructed. A series of plans for fitting up Belmont Mansion as a Restaurant, and several others for bridges and landings and cottages.

49

It gives me great pleasure to bear testimony to the ability and earnest zeal manifested by the three officers who have had the charge of these various works; and that they express much satisfaction with the conduct of their assistants, all of whom have shown a marked degree of interest in the work that has been assigned to them.

The Head Gardener, William T. Harding, entered upon duty on the first day of June. After directing his attention for several days to a general exploration of the Park Grounds, he took charge of the force of under gardeners and laborers engaged in clearing up numerous unsightly spots within view from the roads and walks then approaching completion. One of the points to be observed in this process was to take care that growing specimens should be preserved of every species of plant, both of cultivated kinds and of those growing without cultivation. No general planting of trees has been attempted, but a few hundred trees mostly evergreens have been planted where especially needed for shade or screening near the drives and walks.

The seeding and finishing of lawns and much of the farm work has been done under his directions. He has also been engaged in preparing a systematic catalogue of all trees and other plants, including herbaceous and cryptogamic, found growing within the Park limits.

4

The list he has presented contains three hundred and twenty-one Genera and six hundred and fifty-five species.

The manuscript will be placed in the Park Library, and when further explorations shall enable him to pronounce it complete and to designate the special localities of the rare species, it can be printed for public use.

A record has been kept of the visitors coming upon Lansdowne Drive by the entrance at Girard avenue Bridge. Their numbers during the five months ending November 30th, have been:—Pedestrians, 86,250; equestrians, 5,120; vehicles, 55,396. Allowing three persons to each vehicle, gives an aggregate number of 257,558 visitors coming through this entrance. Adding to these the visitors on the school holiday, estimated at 50,000, will make the entire number 307,558.

In conclusion I would beg leave to congratulate the Board of Commissioners upon the very general appreciation of the beauty of the grounds that is manifested by the throngs who frequent the avenues opened for their use.

Respectfully submitted by

JOHN C. CRESSON,

Chief Engineer.

FAIRMOUNT PARK, December 11, 1869.

# FAIRMOUNT PARK, Office of Chief Engineer, Philadelphia, January, 1870.

## Hon. MORTON McMICHAEL, President of Fairmount Park Commission.

SIR: - Under the law as it stood previous to the present session of the Legislature, requiring the Annual Report of the Park Commissioners to be made in the month of December, it was my duty to submit a report to the Commission early in that month. The statement of work accomplished was therefore limited to transactions ending on the 30th of November last. As the period of the annual report has since been postponed a month, by a recent law, I have the honor to submit a brief supplemental report in compliance with your suggestion, embracing the work done in the month of December, and thus completing the calendar year.

The grading of Sedgely Lrive, which was incomplete at the date of my former report, has since been finished, and the stone sub-pavement has been laid down upon the greater part of the line, and partially covered with a course of hand-broken MacAdam stone.

Upon the Belmont drive similar progress has been made, so that both these improvements may be opened for public use in a short time.

Additional surveys have been made upon the line of

51

the heavy rock cut for the river drive, from which accurate measurements and computations have been derived, showing in detail the plans, specifications and estimates of cost for a drive fifty feet in width, located above the level of the highest known floods of the river.

The survey for the drive in the picturesque valley of Roberts' Hollow, has been carried on whenever the weather permitted, and the other surveys for plane-table delineation and levelling for contours, have been in like manner prosecuted with all practicable diligence.

The planc-table work of the month has covered, in whole or part, twenty-two sheets, representing five hundred acres of surface, the new work on which comprises seven thousand one hundred and five lineal feet of roads, six hundred feet of walks, four thousand seven hundred and twenty-five feet of railroads, one thousand and tenfeet of river shore, sixteen thousand nine hundred and ten feet of fences, one thousand five hundred and seventyfive feet of stone walls, three thousand four hundred and ten feet of brooks, one hundred and fifty-eight thousand four hundred feet of contours, forty-seven buildings, seven bridges, ten culverts and drains, and seven hundred and ninety trees.

The whole number of these sheets, on which more or less work has been done during the year, is forty-one, containing about eight hundred acres of land and seventy acres of water surface.

Very respectfully,

JNO. C. CRESSON, Chief Engineer.

# APPENDIX No. 2,

On the 24th of June, 1869, the Lansdowne Drive was opened from Girard avenue to George's Hill. A large concourse of persons, including the Judges of the Courts, the Councils, and City officials, accompanied the Commissioners. The following account of the proceedings on the occasion is taken from the journals of the day:

When the party arrived at George's Hill they were saluted by the Park Guard, a fine body of men, in neat gray uniforms, while a section of the Keystone Battery, under Sergeant John McClintock, fired a salute.

The visitors all alighted, and a very excellent band of music in attendance, under the general direction of Dr. William P. Cunnington and the direct leadership of Professor Theobald Hermann, performed some pleasing selections.

After enjoying, for a brief period, the beauties of the surrounding scenery, the visitors gathered, at the request of Gustavus Remak, Esq., around a flag-pole erected in the centre of the "Concourse."

Theodore Cuyler, Esq., then made a few remarks, stating that a large American flag would be raised on George's Hill by Major-General Meade and Mayor Fox, after which Eli K. Price, Esq., would present to Mr. Jesse George (the liberal donor to the Park Commission of the extensive grounds immediately adjoining George's Hill, eighty-three acres in extent, and valued at one hundred thousand dollars,) a handsomely bound volume, containing beautifully engrossed copies of all the deeds connected with the transfer of the property.

The programme as announced by Mr. Cuyler was then carried out. The flag was raised to the top of the pole by General Meade and Mayor Fox, each one pleasantly accusing the other of inability to perform the work while pulling away at the halyards. When the flag reached the summit of the flag-staff it was unfurled to the breeze amid the cheers of the assembled crowd, the salvos of artillery fired by the Keystone Battery, who were stationed on the ridge of ground near by, and the strains of the band, who performed "The Star Spangled Banner," "Rally Round the Flag, Boys," "Yankee Doodle," &c.

When the excitement had subsided, Mr. Eli K. Price advanced to the centre of the crowd, and addressed Mr. Jesse George as follows:

The Fairmount Park Commissioners have confided to the Committee on Land Purchases the pleasing duty of presenting you and your sister this book.

It contains your letter generously offering this hill to the City of Philadelphia, for the health and enjoyment of the people forever. It contains the grateful thanks of the Councils of the City, and of the Fairmount Park Commissioners, in behalf of the citizens, with their promise to care for and beautify this scene, and that it shall always bear the name of "George's Hill." In it are also copied your deeds to the City of Philadelphia, reserving an annual sum while you live, equal only to the interest of a reasonable valuation of the estate, together with the approval of the Judges of the Court, who have revised and confirmed all the purchases made by the Fairmount Park Commissioners.

We all now again, here on the summit of George's Hill, in view of its magnificent prospects, repeat our thanks for this noble contribution to the large possessions of Philadelphia, and a most commanding part of the Fairmount Park. From this crowning spot citizens of our City and State, and visitors from all States and countries, will look down upon our beloved City and over the surrounding country, and, looking northeastward, will see the sylvan scenery of the Park extending for miles, but still with vision bounded by waters, hills and trees within its limits. But no one will ever stand where we stand, and behold what we behold, without a thrill of pleasure; and the millions who shall here throng through all time will all owe their joy to you, and bless your names.

We pray that you may, through all of a calm and peaceful life, enjoy great satisfaction and solace in contemplating the good you have done, and that also in a "better country" you may both be permitted a retrospect of that never-ceasing good, and thence derive a higher happiness with the benediction there pronounced upon the good who have served well on earth their fellowbeings.

Mr. George, on behalf of himself and sister, replied as follows:

We are glad to have the opportunity, gentlemen of the Fairmount Park Commission and of the City government, to welcome you to this place, which we have entrusted to your keeping. The selection of this point in the new Park as the first to be brought to public notice, and the display of so much energy in making it accessible in so short a time, are highly gratifying to us.

During a long life we and a few others have had the privilege of enjoying the prospect from this hill. Such a formation is nature's gift, a feast which can be enjoyed by the poor as well as the affluent, and by thousands as well as the few, and we are rejoiced at these evidences of your determination to carry out our wishes, that it shall be appropriated for the health and enjoyment of the whole population of this great City.

We can recollect the time when scarcely any houses had been built west of Independence Hall. Now, the City is at our very doors, several miles distant. In those days we crossed the Schuylkill on floating bridges, at Market street and Fairmount, and when the old Permanent bridge was built, we furnished a great part of the lumber from the forest which covered the whole slope between here and the river. Every thing about us was then in quite a primitive condition; the dam across the Schuylkill at Fairmount had not been built, and it was our custom to breakfast on the finest shad, fresh from the fisheries in the river opposite to us. Our neighbors were few, and among them the noted Judge Peters was a visitor who frequently entertained us with anecdotes of the men and times of the Revolution. He would always take a seat by the old-fashioned chimney corner in the kitchen, in preference to the parlor, in memory of our forefathers, with whom he used there to hold friendly chats.

Great have been the changes which we have witnessed; we cannot realize what will be the surroundings in a like period of time in the future; our time here is rapidly drawing to a close. We rejoice that it has been in our power to give this into your hands, and we say to you, hasten forward in your good work that we may enjoy it with you and the people.

We thank you for this book of records which you have prepared in such handsome style. We shall highly prize them and preserve them as an evidence of your good feeling towards us.

The band then played "Auld Lang Syne," when seats in the carriages were again resumed, and the entire party driven to the old country-seat of Judge Peters, Belmont Cottage, and near the site of the old inclined plane.

Mr. Theodore Cuyler then made a few remarks, during which he pictured the scenes that the Park, when finished, would present, and stated that what the company present had seen need not be further described by him. He alluded to the fact that all the Park improvements that were completed west of the Schuylkill were the work of two months' time, and money was much wanted to complete projected improvements. He urged City Councils to make such appropriations as they might deem proper to complete the Park improvements, and assured them that the money would be well used. The Park pleads its own cause, and while it would take a generation to entirely complete it, each day would add to its beauty and attractiveness if means could be secured to carry on the work.

The party reached the City early in the evening delighted with the trip and exultant over the new beauties disclosed to them by the Park Commissioners.

# APPENDIX No. 3.

## RECEIPTS AND EXPENDITURES.

## $\mathbf{R} \mathbf{E} \mathbf{C} \mathbf{E} \mathbf{I} \mathbf{P} \mathbf{T} \mathbf{S} - \mathbf{1} \mathbf{8} \mathbf{6} \mathbf{9}.$

1. Rents License fees	\$4,118 525	
Pasture, &c Sale of old materials	740 1,397	30
Paid to the City Treasurer, to be credited to the "Fund for Park purposes"	\$6,772	10
2. For sale of buildings (paid to the City Treasurer, to be credited to the Sinking Fund for the redemption of the Park Loan)	1,319	25

Total receipts...... \$8,091 35

## EXPENDITURES.

#### LAND PURCHASES.

Appropriation by Ordinance approved January 27th, 1869, out of the proceeds of the Loan of Four Million dollars authorized by an Ordinance, approved the 26th day of December, 1868, entitled "An Ordinance to create a loan for the further extension of Fairmount Park and the improvement thereof."

57

Item 1. "For the payment of and property so taken or to Additional appropriation, app 1869 Additional appropriation, app ber 5th, 1869	\$2,000,000 1,000,000 500,000	00	
Total appropriations for L	and Purchases and Damages.	\$3,500,000	00
LAND PURCHASES.	Expenditures.		
Amount paid for land	\$3,125,441 16		
Recording deeds and decrees of Court, searches, &c,	1,638 83 \$3,127,079 98		
LAND DAMAGES.			
Amount paid for awards by jury Recording deeds and decrees	<b>\$</b> 81,139 40		
of Court	50 50 81,189 90		
Total expenditures for La	and Purchases and Damages	3,208,269	88
Balance, December 31	- 1st, 1869	\$291,730	12

#### PERMANENT IMPROVEMENTS.

Appropriation out of the proceeds of the Park Loan by Ordinance approved January 27th, 1869.

Item '2. "For the laying out, construction, and improve- ment" of said Park for public use	\$200,000 0	)0
for Permanent Improvements, by an Ordinance approved September 27th, 1869 A further appropriation out of the proceeds of said Loan	100,000 0	)0
for Permanent Improvements by an Ordinance approved November 5th, 1869		)0
Total appropriation for Permanent Improvements	\$500,000 0	)0

## Expenditures.

#### BUILDINGS.

10

Repairing	\$3,601 36
Repairing Park offices	1,788 15
Removing	6,242 64
Propagating House	949 30
Lodge at Egglesfield	881 58
Lodge at George's Hill	417 84
Lodge at Lansdowne Drive	$373 \ 25$
Music-stand (old Park)	885 69
Horse-shelter (Park office)	$419 \ 50$
Water-closets.	2,405 92

Amount carried forward ...... \$17,965 23 \$500,000 00

Amount brought forward Bridges.	······	\$17,968	5 23	\$500,000	00
Materials.	\$3,044 86				
Labor	2,945 47	- 5,990	33		
DREDGING	•••••	349	81		
DRAINAGE.					
Tile-Labor.   \$384   33     "Materials.   6,021   91	\$6,406 24				
Culvert—Labor 5,034 37 "Materials 6,759 80					
Tile—At Edgely   3,648 36     Culvert—At Edgely   1,628 20	11,794 17				
	5,276 56	23,476	97		
DRIVES.		20,110			
Beimont, Sedgely, Lansdowne, and Connections at Thirty-fifth and Forty-first streets.					
Grading	67,338 67				
"Coneourses Finishing	1,840 00 712 56				
Surfacing-Labor \$4,296-32	112 00				
" Materials 7,340 00	11 000 00				
Ballasting—Labor	11,636 32				
Altering					
Repairing	1,521 06				
Grading-Girard avenue 686 39 Surfaeing-Girard avenue. 1,484 10	-,				
Surfaeing-Girard avenue. 1,484 10	9.100.40				
Grading-Sedgely 5,353 71	2,170 49				
Ballasting " 169 84					
Tile drainage "					
Guivert 1 1 1 031 29	6,281 30				
Grading-Elm avenue	4,153 37				
-		104,164	17		
FOUNTAINS AND HYDRANTS		790	11		
Hedges	•••••	39	75		
LAKES AND ORNAMENTAL WATERS		404	<b>24</b>		
LAWNS.					
Grading	\$12,502 68				
Finishing	222 75				
Repairing	54 99	12,780	42		
Amount carried forward		\$165,961	03	\$500,000 (	;0

Amount brought forward	\$165,961	03	\$500,000	00
LIVE STOCK.				
Animals—Cost of	1,933	82		
MACHINERY.	1,000	0.0		
Steam dredger, scows, steam road roller, steam				
stone breaker, &c	22,490	55		
MATERIALS.	2,825	72		
MISCELLANEOUS.				
Incidentals   1,523   81     Flag-poles   330   04	1,853	85		
NURSERIES.	1,000	00		
Trees, &c 574 65				
Labor				
	1,316	85		
UFFICE EXPENSES. (PARK OFFICE.)				
Salaries				
Stationery, &c 1,404 59 Furniture, &c 1,581 19				
	4,739	02		
PARK SEATS	3,263	50		
PLANTING AND SEEDING.				
Labor 2,631 17   Trees 1,000 05   Grass seed, &c 1,609 90   Flowers 60 80   Fertilizers 1,573 69				
	6,875	61		
Police.				
Wages of extra guard and watchmen, signs, &c	9, 509	85		
SALARIES.				
Chief Engineer (four-fifths,) gardener, &c	4,211	20		
QUARRY (Belmont)	2,862	21		
SURVEYS.				
Land Purchases				
Amount carried forward\$13,762 20	\$227,342	71	\$500,000	00

Amount brought forward \$13,762 20 \$227,342 7	71	\$500,000	00
Construction of Drives 2,467 25			
"Bridle-paths 16 67			
"Bridges			
Landings 130 bu		-	
"Drainage   254   24     Drafting Buildings   371   87			
"Bridges 224 60			
" Landings 97 69			
"Topography 263 00 "Concerd Plane 1 594 02			
General Fails			
"Proposed Drives.   61 82     Machinery.   39 76			
Office Records 1,852 79			
Manayunk Sewer 12 82			
Dredging			
Wages of laborers with Engineer Corps 813 03			
Eugineers' Supplies	40		
	40		
TOOLS AND IMPLEMENTS	17		
Tools, Repairing 1,115	58		
TREES AND SHRUBS	80		
	00		
WALKS.			
Grading \$5,533 10			
Surfacing			
Repairing   442 61     Cleaning   194 90			
Cleaning 194 90	32		
WALLS AND FENCES.	C IV		
Labor			
Materials 200 35	90		
	00		
WATER SUPPLY AND DISTRIBUTION 875 3	84		
WHARVES, STEAMBOAT LANDING 5,855	25		
Total expenditure for Permanent Improvement	•••	280,469	87
	_		
Balance		\$219,530	13
The bills for materials and labor for the month of December			
1869, were paid in January, 1870, and the amount added the above	to	00 00 1	<b>P</b> -9
VIAV (0)/UYU - 141-11-14 - 141-14 - 41	···-	28,804	19
Shows the balance on 31st December, 1869		\$248.334	86
, , , , , , , , , , , , , , , , , , , ,	_		

## APPROPRIATION FOR 1869.

Appropriation for the salary of Solicitor, by Ordinance approved January 27th, 1869 :			
Item 1	\$2,500 00		
Expenditure.			
Salary of Solicitor			
Appropriation for maintenance, supervision and further improvement of Park, by Ordinance approved January 27th, 1869 :			
Item 2	\$30,000 00		
Expenditures.			
OFFICE EXPENSES (Office of Commission.)			
SalariesSecretary, Clerk, Messenger, &e.\$2,931 66Stationery.376 75Printing, binding and advertising.1,071 85Furniture.473 95INSURANCE (on buildings within the Park.)	\$4,954 21 690 10		
POLICE.			
POLICE.     Salaries of Park Guard	10,380 85		
SALARIES.			
Chief Engineer (proportion of salary)1,06665Additional Counsel1,13332	2,199 07		
Repairing Buildings	513 40		
REPAIRS.			
Wages of laborers 10,461 72   Materials 140 27   Implements 104 10	10,706 09		
MAINTENANCE OF DEER (Feed)	101 68		
Miscellaneous,	558 14		
Balance merging			

.

## FUND FOR PARK PURPOSES.

Expenditures. MATERIALS (bills of 1868)	
MISCELLANEOU'S " 152 92	
POLICE (Salaries of Park Guard December, 1868) 511 88	
REPAIRS (Wages for Labor)	
REPAIRS OF TOOLS	
SALARIES (Chief Engineer) 333 34	
STATIONERY (bills of 1868) 23 00	
SURVEYS.	
Office Rent (bills of 1868)   \$233 33     Engineer's Supplies   757 32	
990 65 Music (Concerts in Park)	
PRINTING (Notices to tenants)	5
Balance	

N. B. BROWNE, Treasurer, To the Park Co	mmission, DR.
1869. January 1, To balance (Donation in	1868)
Contra.	CR.
1869. Nov. 23, By warrant No. 1, (F purchase of book-ca books for Park Libra	
" By warrant No. 2, (F purchase of books	or the

# APPENDIX No. 4.

### RESOLUTION

Adopted by the Park Commission, March 13th, 1869.

Resolved, That whenever a legacy or donation shall be given to the Fairmount Park Commissioners for an object of art or improvement in said Park, and the same shall be accepted by said Commissioners, said object or improvement shall bear the name of the testator or donor, unless otherwise directed by said donor or testator.

## RESOLUTION

Adopted by the Park Commission, August 28th, 1869.

*Resolved*, That for all donations of books, trees, plants, seeds, and flowers, the Chief Engineer be authorized to present the thanks of this Commission, and to enter the names of donors in all books presented for the use of the Park.

