DOCUMER OF BETMATE & APPORTIONMENT, DIVISION OF FRANCHISES

Rec'd JAN 22 1908

OF THE SS INED TO

ERG S

# BOARD OF COMMISSIONERS

OF THE

# Department of Public Parks

#### FOR THE

### YEAR ENDING APRIL 30th, 1879.

NEW YORK : Evening Post Steam Presses, 208 Broadway, corner Fulton Street.

1879.

## DOCUMENT No. 80.

# BOARD

#### OF THE

# Department of Public Parks.

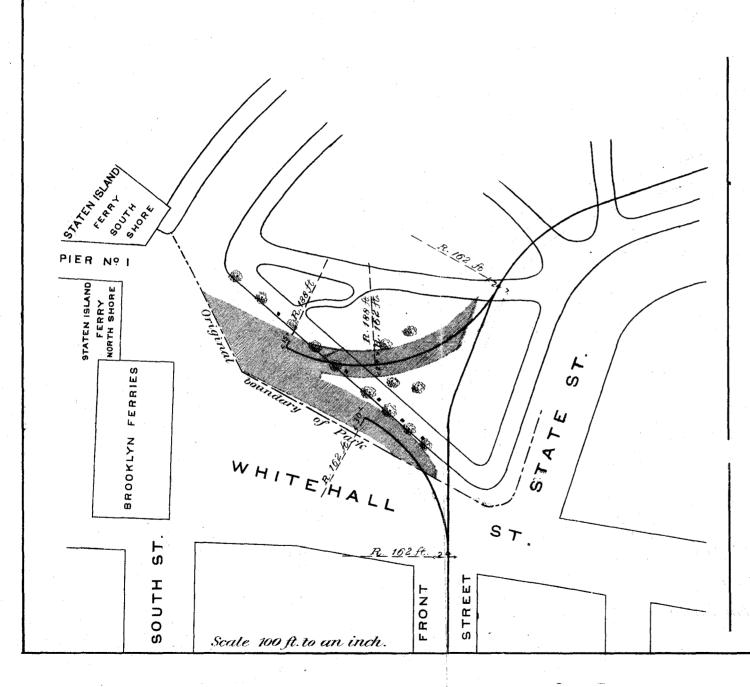
JULY 3rd, 1878.

AGREEMENT, granting the New York Elevated Railroad Company an extension of the revocable right of way across the Battery Park.

Ordered printed as a document of the Board.

WM. IRWIN,

Secretary D. P. P.



I hereby certify that this is the Map showing the extended lines upon which the New York Elevated Rail Road Company is permitted to construct and operate its Road over the Battery Park as authorized by the Board of Commissioners of the Department of Public Parks at their Meeting held July 17#1878, and as mentioned in the license of July 3#1878 granted to said Company. The solid blue lines show the outside lines of the rails.

"signed,, Jas. F. Wenman. President, Department of Public Parks.

In Board July 17<sup>th</sup>1878. Ordered to be certified and filed. "signed,, W<sup>m</sup>Irwin. Secretary Departmentof Public Parks.

## **This Memorandum of an Agreement** by and between the MAYOR, ALDERMEN AND COMMONALTY of the City of New York, party of the first part, herein represented and acting by the Department of Public Parks (which is hereinafter designated as the Department), and THE NEW YORK ELEVATED RAILROAD COMPANY (hereinafter designated as the Company), party of the second part :

Witnesseth, Whereas, by an agreement made on the 10th day of February, 1876, by and between the parties hereto, a revocable right of way and license was granted to the said Company by the said Department over the Battery, in the City of New York.

Therefore, in consideration of the premises, it is hereby further covenanted, stipulated and agreed as follows :

1. That the right of way and license aforesaid is hereby extended over, through and across the Battery and Whitehall street, along and upon a route indicated by the part colored ed upon a map authenticated by the signature of the President of the said Department and the signature of the said Company, and this day filed in the office of said Department, a copy of which is hereto annexed; and such right of way and license is hereby granted by the said Department to the said Company, its successors and assigns, with all the rights, privileges and powers contained in the agreement aforesaid in respect to the grant therein made, and subject also to all the terms, provisions and agreements therein contained, with the same effect as if this extension had been contained and granted in said agreement.

2. The said Company may, along the lines of the main route between the points of intersection with the extended route hereby granted, construct and support on the level of the upper portion of its superstructure, and at least ten feet above the surface of the ground, platforms and shelters for the accommodation of passengers, and may alter and use the existing stairway for approach thereto, to be made in all respects to the satisfaction of the Department as is provided in respect to the other constructions of the said railroad contained in the aforesaid agreement.

3. And it is further covenanted, stipulated and agreed by the said Company that they will not take down or cut any tree without the express permission of the Department, and that they will forthwith cause all their iron and woodwork and structures upon the Battery to be painted, the sidewalks disturbed by them to be relaid, the grounds disturbed by them to be graded and planted, and vines to be planted and trained around the piers and arches in such color, style, manner and materials as the Department shall direct, under its superintendence and to its satisfaction.

And also, that the said Company, as soon as the platform is erected and stairway altered, as hereby authorized, and open to the public use, will, within thirty days thereafter, wholly remove the present platform and station now over the Battery sidewalk and Whitehall street.

In witness whereof the said Department have caused this agreement to be signed by their President under a resolution of the Board of Commissioners of said Department, and the said Company have caused this agreement to be signed by their President, and their corporate seal to be hereto affixed on the third day of July, in the year one thousand eight hundred and seventy-eight.

(Signed)

JAS. F. WENMAN.

President Dept. of Public Parks.

Signed by JAS. F. WENMAN, President ) of the Dept. of Public Parks, in presence of, the word "revocable," being first interlined on the first page, WM. IRWIN,

(Signed)

Attest,

### THE NEW YORK ELEVATED RAILBOAD

COMPANY, by

CYRUS W. FIELD.

President.

Seal of the New York Elevated Railroad Co.

J. A. COWING, Secretary.

STATE OF NEW YORK, City and County of New York, ss.:

Before me, this 17th day of July, 1878, personally came Cyrus W. Field, to me personally known, and known to be the President of the New York Elevated Railroad Company, one of the parties to the foregoing instrument, who, being duly sworn, did depose and say, that he was the President of the said Company; that the seal affixed to this instrument was the seal of the said Company; that he affixed the said seal thereto by their authority, and that he also executed this instrument by the like authority,

> (Signed) S. B. CHITTENDEN, JR.,

> > Notary Public, Kings County. Certificate filed in N. Y. Co.

SEAL.

### DOCUMENT No. 81.

## BOARD

OF THE

# Department of Public Parks.

NOVEMBER 27, 1878.

Report of Commissioner Samuel Conover upon charges preferred by Commissioner Smith E. Lane, against Mr. John F. Dawson, Superintendent of Parks, and the testimony taken in relation to said charges.

Ordered printed as a document of the Board.

Wm. Irwin,

Secretary D. P. P.

## NEW YORK, November 20, 1878.

## To the Board of Commissioners of the Department of Public Parks :

Gentlemen,—Pursuant to resolution of Board bearing date November 6, 1878, I have taken testimony in matter of charges preferred by Hon. Smith E. Lane, Commissioner of Parks, against John F. Dawson, Superintendent of Parks, as follows, to wit:

"Whereas, Commissioner Lane charges that John F. Dawson, Superintendent of "Parks, took one of the horses of the Department on Saturday morning, the 5th "October, 1878, and went to the races at Jerome Park, and did not return him-"self, or bring the horse to the stables in Central Park, until Sunday, the 6th Oc-"tober, 1878, at 12.20 P M., in violation of his duty and the rules of the Depart-"ment;

"And whereas, Said Commissioner Lane charges that on the 12th day of Oc-"tober, 1878, the said John F. Dawson grossly insulted him by shaking his first "in his face and using insulting language to him;

"And whereas, Said Commissioner Lane charges that the said John F. Dawson "constantly and willfully neglects his duties as Superintendent of Parks;

"Resolved, That the Superintendent of Parks be notified to appear before this "Board at its next meeting to answer said charges, and that if he be found guilty "thereof it is proposed to remove him from his position."

As will be observed by reference to them, the charges are of a serious character, which, if true, would injuriously involve Mr. Dawson, as an officer in this Department; in consequence, I have given great care to the matter;

1st. That justice be dealt out to the party against whom charges had been preferred.

2d. That justification, if possible, should be shown for making the charges on the part of Mr. Lane.

It will doubtless occur to this Board, as it did to the undersigned, that it is a duty of peculiar delicacy to sit in judgment, so to speak, for when an associate is so directly concerned, especially when to determine in a certain way reflects censure upon him—but the labor is imposed and was unsought. I carefully weighed all the testimony presented by the complainant and the accused, gave the utmost latitude to the prosecution, and find :

That the several charges against John F. Dawson are without any foundation whatever, each and every specification being disproved, not only by witnesses of the defense, but also by witnesses of the prosecution; that the only issue regarding which there was a serious discrepancy in the testimony was, as to whether Superintendent Dawson insulted Commissioner Lane by shaking his fists in the face and using insulting language to him, and as to this difference, in view of the fact that Commissioner Lane, according to the testimony, has entertained hostile feelings towards the Superintendent, that other charges were disproved, I deemed it my duty to ignore the testimony of both parties, and rely upon that given by a disinterested witness whose statement completely vindicates the Superintendent.

It is a subject of regret that charges so thoughtlessly made should occasion injury to the accused, even temporarily, and it makes my duty the more imperative to declare with emphasis that they are wholly without justification, and further, that Superintendent John F. Dawson is entitled to the confidence of the Board.

All of which is respectfully submitted.

#### SAMUEL CONOVER,

Comm'r.

Resolution Adopted November, 27th, 1878.

*Resolved*, That said report be accepted and adopted; that the charges against the Superintendent of l'arks be dismissed, and that the report and testimony be printed as a document of the Board. TESTIMONY TAKEN BEFORE COMMISSIONER CONOVER, ON THE 11TH DAY OF NOVEMBER, 1878, AT 36 UNION SQUARE, N. Y., IN THE MATTER OF THE CHARGES PREFERRED BY COMMISSIONER LANE AGAINST THE SUPERINTENDENT OF PARKS, JOHN F. DAWSON.

Commissioner LANE appeared in his own behalf, Mr. JOHN F. DAWSON, with his counsel, Mr. Henry D. Purroy, for the defense.

The Secretary read the charges preferred against Mr. Dawson.

Commissioner Lane then proceeded to read a statement.

Mr. Purroy objected to said statement being accepted as testimony, because it contained matter not within Commissioner Lane's own knowledge.

Commissioner Conover allowed said statement to be read, not as evidence, but as an explanatory statement, and in the nature of a complaint.

The following is the statement :

First.—That on the morning of the 5th day of October, 1878, John F. Dawson, Superintendent of Parks, took from the stables, in Central Park, a horse and wagon belonging to said Department, and did not return said horse and wagon to said stables until noon of the following day, in violation of the rules of the Department. That said Dawson absented himself from the service of the Department on said 5th day of October, 1878. That said Dawson returned said horse to the stables in a lame condition.

Second.—That on the morning of the 12th of October, 1878, Smith E. Lane, a Commissioner, met John F. Dawson, Superintendent of Parks, at the office of the Department, 36 Union Square, and asked said Dawson to provide a horse and wagon for said Lane at three o'clock on that day, at Central Park, that said Lane could proceed to Riverside Avenue to inspect the work then going on. That said Dawson, in a menacing and grossly insulting manner, placed his closed hand in said Lane's face and shaking it at him, said, in a boisterous and insulting manner, "I shall take no orders from you, sir; I shan't obey you, sir."

Third.—That said John F. Dawson neglects the duties of his office. That during the last summer he spent much of his time in the company of his friends, during business hours, at the Mount St. Vincent building in the Central Park, when his official duties required all of his attention elsewhere.

Mr. Purroy moved that an adjournment be granted to enable Mr. Dawson to make his answer to the new charges of neglect of his duty, of which he had no notice.

Commissioner Lane was heard contra on the ground that the charges were not new, but only making specific the charges submitted to this Board.

Commissioner Conover declined to grant an adjournment, and ruled that he would proceed with the taking of testimony upon the charges submitted by the Board, and none other.

Commissioner Lane then called as a witness, JOHN MEEHAN, who testified as follows :

I am foreman of the stables in Central Park for two years last May; I recollect Mr. John F. Dawson, Superintendent of Parks, taking a horse and wagon from the stables, but do not remember the date; I think it was on a Saturday; I think the horse and wagon was returned the next morning; I do not remember the hour.

I did not tell you (Commissioner Lane) it was half-past twelve o'clock on Sunday.

I did not remark the condition of the horse. I don't think I was in when the horse was brought in. I saw the horse that day; he was kind of stiff. On Monday his shoe was taken off, and he was easier and better then.

He was kept quiet that day. I thought there might be something the matter with his hoof, that was the reason I took off his shoe; a nail or something. He did not walk lame; when he came in he was stiff a little.

Q. Do you mean when Mr. Dawson brought him in?

A. I cannot say that; he was a little stiff when he came in, and I took him in the next day, Monday, to the shop to see what it was, and had his shoe removed; it was after Mr. Dawson brought back the horse that he was a little stiff.

Q. What was the matter with the horse?

A. I think there was something wrong with him before he came here.

Commissioner Lane moved to strike out the last answer.

Answer allowed.

The horse recovered; he is better now than he has been since he came into the stable.

You (Commissioner Lane) sent up for a horse on Sunday; I think it was in the forenoon; I came down to you at the Arsenal; you had ordered the horse Mr. Dawson had taken out the day before; I told you that horse was a little stiff, and not very fresh, and that I had brought you the black horse in place.

#### Cross-examined by Mr. PURROY :

The morning that the horse was delivered at the stables he seemed to be saving his foot; he did not use it as free as the other; I looked at the horse, and think he was stiff.

I could not tell what the condition of the horse was on the day it was delivered, as I did not examine it closely.

I don't know where Mr. Dawson drove the horse to ; I don't know who came for the horse that day.

I see the Superintendent of Parks every day, about 8 o'clock A. M. He is usually at the stables two or three times a day.

COMMISSIONER LANE then testified in his own behalf :

On the morning of 12th of October, 1878, I met J. F. Dawson, Superintendent of Parks, at the foot of the stairs, at the entrance to building 36 Union Square, and said to him, "I wish you to have horse and wagon for me at the Arsenal building, at 3 o'clock that day, that I was going to Riverside Avenue to inspect the work."

Mr. Dawson, in a menacing and grossly insulting manner, placed his closed fist in my face, and shaking it at me, said, in a boisterous and insulting manner, "I shall take no orders from you, sir;" "I shan't obey you, sir." During the summer of 1878 Mr. Dawson spent much of his time in the company of his friends, during business hours, at Mount St. Vincent building, in Central Park, when his official *Cuties* required all of his attention elsewhere.

### CENTRAL PARK.

1. The leaves on many of the lawns, mostly near the drives, are not raked up; and in other places the leaves are piled up and remain so for days, and the wind is blowing the same around the Park.

2. Rustic seats and arbors are out of repair, and should be repaired with plank and boards, if no rustic timber can be bought. It was done last spring in this manner, and should be done at once.

3. Tar walks around the Arsenal building are out of repair and full of holes; the same can be repaired, as gravel and tar enough are left near the Museum of Art building to do it with.

4. The slope along and near the Reservoir and East Drive should be graded and filled up with earth and trimmed up, particularly around the trees.

5. Wire fences in centre divisions and around the large lake are broken down, and have been in that condition for many months.

6. There are gullies washed into the drives which can be repaired with small quantities of gravel. They should be repaired immediately after each rain storm. They have been neglected during all of the last summer.

7. On the 3d day of July, 1878, the Board ordered an iron Croton pipe to be laid into the Park from the main on Fifth Avenue at Sixtieth Street. Permission was granted by the Department of Public Works to make the proper connection and the pipe was purchased. The Board and the Treasurer hurried up the matter, that the pipe might be laid across the Fifth Avenue before the completion of the new McAdam pavement on Fifth Avenue, that the Department might be saved expense in relaying the pavement after the laying of the pipe. Nothing has been done in laying of the pipe, and the said Fifth Avenue pavement has been completed.

8. The borders of the lawns and grass-plots along the drives and around the Mall, and the southerly approach from the Mall to the Casino, have not been cut and trimmed for several months in many places, particularly in the second and third divisions. The grass has been allowed to grow over the edges, and gives it a very unsightly appearance.

9. The road gutters on the West Drive, from Eighty-third Street to Ninety-sixth Street, have not been cleaned, and are filled up with dirt.

10. In many places the benches have been broken by visitors, and allowed to remain there for several months without being remove l to the repair-shop and repaired, or others substituted in their places.

11. On the 19th day of June, 1874, the Board ordered a drinking fountain to be erected in the rear of the Mount St. Vincent building and near the Green-House. The site was selected and the drinking-fountain purchased, but the same has not been erected.

12. The metal gutters around the upper basin of the Stebbins fountain, near the Terrace, have been broken for many months, so that the water does not flow out of the corner spouts as originally built. This gives the fountain a very unsightly appearance.

Commissioner Lane then called as a witness Mr. J. MUNCK-WITZ, who testified as follows :

The men are raking leaves here and there through the Park. The leaves should be taken up when they are raked up.

I have not been in the Park every day, on account of my being at Tompkins Square so much lately. 1 do not know of my own knowledge how long the leaves are let remain in piles. I have seen piles of leaves. When I was Superintendent I had them removed at once after they had been raked up. It is the foreman's duty to have them removed to the yard. I don't know whether any leaves were blown about from piles so as to necessitate there being regathered. I have seen the carts in the first division and in the upper division gathering leaves.

The leaves have not been gathered all over the Park. At some places I have seen them ungathered, on some lawns near the drives on the west side. In the second and third divisions, on the west side, I have noticed them not to be gathered. Mr. Hodges is the foreman of the second division; Mr. Meehan is foreman of the third division. I can not say the extent I have seen; I have seen some of the carts gathering them off. The rustic seats and arbors have been out of repair for a number of years. There has not been any rustic timber on hand for the last two or three years. They have, therefore, been repaired with plank. I don't know whether any such repairs have been made during the last summer. All the rustic work on the Park is in a very poor condition.

The tar walks around the Arsenal building are full of holes. Several weeks ago there was tar and gravel at the Museum of Art building suitable for repairing the walks.

The slopes at the Reservoir, east drive, are washed down each winter and spring. There should be some mould placed round the roots of the trees by the gardeners. This should be done at any time whenever the men and time can be spared. There are gullies and roots exposed now.

The wire fences, near the lake on the west side, are broken at some places. I have seen some of the fences broken at places during the summer, and then they have been repaired again. The drives have been out of repair for some time on account of not having gravel enough. There are gullies and cuts washed in the roads which ought to be repaired. The west drive especially is worn in parts. In some places I noticed that the gullies were repaired; this was especially in the upper, McGovern's division. In the third division, Meehan's, there were some very heavy gullies, which I spoke about to him, and were not repaired when we had gravel. After I spoke to Meehan about them they were repaired. This was during this season.

(Commissioner Lane referred to and read a resolution of the Board of July 3, 1878, directing the Superintendent of Parks to lay a 4-inch pipe to supply water from Croton main at southeast corner of Central Park.)

The contractor for the work on Fifth Avenue and Fifty-ninth Street would not allow the pipe from the Croton main to be laid to the Park until his work was accepted by the Department of Public Works. I do not know whether his work has been accepted.

Commissioner Lane then referred to and read a communication from the Commissioner of Public Works, dated July 9th, 1878, as follows:

> DEPARTMENT OF PUBLIC WORKS, NEW YORK, July 9th, 1878.

## JAMES F. WENMAN, Esq.,

President Park Commissioners :

DEAR SIR—While many of the residents upon the higher grounds of the city complain during the warm weather of their inability to draw water in the upper stories of their dwellings, it seems hard to have to increase their difficulties.

I suppose you really need an increase of water in the lower part of the Park, and to help you we will permit you to connect with the 12-inch main on Fifth avenue, by a 4-inch pipe.

In making the connection, please let your agent apply here and our men will assist: and in laying the pipe across the avenue you will have to arrange as to the pavement with Mr. Byron, who has a contract for the putting it down, and is now at work on the same.

Very respectfully yours,

ALLEN CAMPBELL, Commissioner of Public Works.

I applied to the contractor for permission, and I was informed by his foreman that he would not give permission until the work was accepted.

- The pipe has not been laid yet.

The portion of the pavement on Fifth Avenue, from Fiftyninth to Sixty-fourth Street, is completed.

The pipe was purchased about three months ago.

Some of the borders have not been cut and some have been cut on the Central Park. On the second and third divisions— Hodge's and Meehan's—I have noticed that some of the borders have not been cut. I have not noticed that they have not been cut at any other places.

Where the borders are not cut or trimmed along the drives or grass plots, the effect upon the appearance of the Park is, that it would not leave a nice, clean appearance.

It is a part of the duty of the foreman and Superintendent of Parks to look after these matters. If there are men and help enough, the grass plots should be kept trimmed up.

I have not noticed any broken benches in the Park during last Summer. I have not noticed any this Fall.

(Commissioner Lane then referred to and read a resolution of the Board of June 19, 1878, directing a drinking-fountain to be erected near Mount St. Vincent, Central Park.)

The fountain has been purchased. I have not been at the place for the last five or six weeks. It was not erected then. For the last year I have observed the fountain at the terrace to be out of repair. It was only fixed up temporarily about two years ago with zinc in place of bronze. It is out of repair now, and has been so for a year.

Cross-examined by Mr. PURROY :

I was Superintendent of Parks for about three years, and I know the duies of a Superintendent of Parks.

Q. In your opinion, has Mr. J. F. Dawson's management been neglectful?

Commissioner Lane objected.

Commissioner Conover sustained the objection on the ground that he is only designated to take testimony, and the opinion of Mr. Munckwitz tends to a decision.

Q. From your knowledge, has the funds of the Department of Public Parks been sufficient to maintain the parks up to their proper standard during the last five or six months.

Commissioner Lane objected.

Question allowed.

A. No, sir; the funds have not been sufficient. In my opinion, a great many of the defects in the Park which I have enumerated have been caused by a want of sufficient funds and men.

Q. Do you know of one case in which Mr. Dawson, having at his disposal sufficient funds and men, has neglected his duties?

(Commissioner Lane objects; Commissioner Conover sustains objection,)

The grass has grown this season more luxuriantly than during any year for many years past.

I verbaily reported to the President during the Summer that the parks were in a good condition for the money and men allowed.

I have never complained of Mr. Dawson's neglect of duty. If I found Dawson injuring the Park by his management, I would feel it to be my duty to report the same to some one of the Commissioners, but I have not felt it my duty to make any such report.

Generally, Mr. Dawson has done all in his power to keep the parks in good order. There are some details which I would have treated differently.

*Re-examined* by Commissioner LANE :

Q. Have you ever, in response to any questions I have put to you regarding the management of the parks, given me any details?

A. No.

Q. When I say details, I refer to the management of the details of the works in the various parks under Superintendent Dawson?

A. Commissioner Lane has asked me several times in regard to the condition of the parks and their management?

Commissioner Lane rests.

Mr. JOHN F. DAWSON then testified in his own behalf:

On the morning of October 4, 1878, I came to the stables at 7:30 A. M.

Mr. Meehan said, there is a new horse here; I told him to hook him up; in driving to the Arsenal the horse went lame; I sent a man back with him to the stables; had another horse put to the wagon to go to Tompkins Square. The next afternoon, October 5, 1878, I told my man to hook the same horse up, and I would give him a further trial; he brought him to Mount St. Vincent, where I was eating my dinner; when I came out he said, "This horse is too lame to drive." As it was getting late, I drove him to my stables in One Hundred and Twenty-fifth street, and left him there, taking a horse of my own to Jerome Park. The park horse was not again hooked up until Sunday, when I drove him to the park stables, and told Foreman Meeha to have his shoe removed, which he did.

I have never been furnished with any rules of the Department; I don't know of any rule to prevent me from taking the horse to my own stable.

Mr. Purroy presented an affidavit and letter of Mr. J. A. Going, Veterinary Surgeon, on the condition of the horse.

Commissioner Lane objected to the affidavit and letter, on the ground that Mr. Going should be produced.

Commissioner Conover allowed the affidavit and letter to be read, as follows:

"NEW YORK, Oct. 31, 1878.

"DEAR SIR,—I have carefully examined the horse, and come to the conclusion "he is lame in the shoulder, and I believe it is of old standing.

"Respectfully yours,

"J. A. GOING.

" JAS. A. GOING.

Dawson, Esq., "Sup't D. P. Parks."

NEW YORK, Oct. 31, 1878.

"I hereby certify I have this day, by request of Mr. Dawson, examined sorrel "horse with the following marks, viz.: White star in fore read; measuring

"hands, 15 inches; years old, said to belong to Dept. of Pub. Parks.

" In my opinion, unsound.

" Remarks, lame in shoulder.

"Sworn to before me, this )

" 31st Oct., 1878,

"HENRY D. PUBROY,

" Notary Public,

"N. Y Co.

I have had a long experience in the management and treatment of horses, for nearly all my life. The horse was lame before I drove him forty rods. He has a chronic lameness.

On the morning of the 12th of October, 1878, I was leaving 36 Union Square after seeing the President. On getting to the outer door Commissioner Lane was coming in. I passed him without speaking. He turned round as the door shut and called me. He said. "I want a horse to day at 3 o'clock." I said, "What horse—is it the one I lamed—or that you said I lamed?" He said, "No; one of the black team that was bought for the Commissioners." I said, "That team is to work on a truck, and that if he wanted a horse to drive, to apply to the President as the executive officer of the Board, as I had received instructions to obey no orders unless those given by the Board, or the President." I likewise said, "As you have called me back. I would like to know why you said in the Board, at its last meeting, that you saw me drunk at Jerome Park?" I told him that his position as Commissioner prevented me from calling him to account for it. He tried to prevaricate.

Commissioner Lane objected on the ground that he should state what was said.

Objection not allowed.

He said, "You took Van Valkenburgh up to the races." I said, "That is not so; I went to the races alone and came home alone." And also said, "Be careful how you use my name in your club, as I have friends there, or outside of your official capacity as Commissioner."

The statement that I shook my fist under his nose or elsewhere is unqualifiedly false.

I did not use any insulting language to him.

No one was present at this interview so far as I know. It occurred between the two doors, the outer one was open, the inner one shut

Invariably I direct the foreman to collect the leaves and cart them away as soon as possible, especially those nearest the drives. The leaves have been raked up and carted away as promptly as the force under my command would allow. There is no money to repair the rustic works. I have kept the arbors and seats in repair as well as the tunds and force would allow.

The little tar and gravel at the Art Museum belong to the construction fund at that building, and I have no right to use it for maintenance purposes. I am now using it for the walks around the Museum.

I have kept the walks around the Arsenal, and the walks generally, in as good order as the funds and force under me would allow. The slopes at the reservoir, East Drive, have been a great trouble to the Department since it was made; I have not, as yet, been able to take my force from other duties to attend to this; the other duties were more pressing. I don't know of any wire fences being broken for a number of weeks; I am over the Park mostly every day, from three to four times.

I repair the fences whenever I know they are broken, and can get the wire. The gullies have not been repaired for want of gravel; I made requisition, in writing, for gravel, more than a month ago, and have not got it yet.

On two occasions I sent men to open the trench, and lay the pipes from Fitth Avenue to the Park, and I was stopped by the contractor and the Engineer of the Department of Public Works. The work has not been accepted from the contractor; I have inquired about fifty times, at the request of the President, to know when I could lay it.

I think there are no borders on the roads or drives that have not been trimmed at least three times since I was Superintendent of Parks. I have done this work as well and as often as the tunds and men under my control would allow.

The gutters on West Drive, from Eighty-third to Ninetysixth street, were cleaned, to my own knowledge, last week. This work has been done as well as the means and force would allow.

I don't think any benches have been allowed to remain in a broken condition, as my orders are to have them at once removed.

I have consulted the President about the fountain at Mount St. Vincent, and he agreed with me that it was better not to cut up the slope at Mount St. Vincent until the busy season was over, and also, the plumbers were so busy at other work which was absolutely necessary that I could not spare them.

There is no money to repair the fountain at the Terrace.

I think I have done all I can to keep the parks in good order so far as the funds and force will permit.

(Mr. Purroy read section 2, article III, of the By-laws, and Mr. Dawson stated that his answer to Commissioner Lane, as to the horse, was founded on that section. The following is the section :

SEC. 2. No committee, officer, or member of this Department, or person employed by this Board, shall make any purchases, give any order, incur any liability, or exercise any authority over or in relation to the parks, officers or employees, other than foremen, mechanics, and laborers, unless in pursuance of power delegated by order of the Board, or by the act by which it is organized.

#### Cross-examined by Commissioner LANE :

Commissioner Lane tried to prevaricate by trying to dodge the question of his having charged me in the Board with being drunk.

Q. Did you or did you not put your clenched fist under my face, and in an insulting manner say to me, "I shall take no orders from you, sir," and "I shall not obey you, sir?"

A. I most assuredly did not shake my fist in your face, but I told you I could take no orders from you.

Q. Give the names of the persons at the Union Club to whom you say I have spoken about you.

A. I refuse to give their names.

Counsel for Mr. Dawson hereupon informed Commissioner Lane that he would subsequently produce a witness who, if he desired it, would give him the names of the members of the Union Club referred to by Mr. Dawson.

Q. Why did yon not make requisition for the material to repair the walks at the Arsenal.

A. I frequently spoke to the President about them, and he told me they would have to remain as they were on account of the want of funds.

Mr. Purroy then called COMMISSIONER WENMAN, President of the Department, as a witness on behalf of the defense, who testified as follows:

I am President of the Department of Public Parks. During the last five or six months the Department has been almost bankrupt. Mr. Dawson has had conversations with me almost daily, wanting more men and material, especially gravel. I have always told him he must get along as best he could, to do such work as was absolutely necessary, and not to make requisition for a dollar more than he could get along with. It is Mr. Munckwitz' duty to keep a watch on the parks and their management. He has reported to me that the parks were never in better condition than under Mr. Dawson, taking into consideration the number of men at his disposal. I also have supervised the management of the parks. It has been performed to my entire satisfaction. I consider that the laborers have given more work for their pay than any other body of laborers ever on the public works of the city. This, I think, is owing to Mr. Dawson's supervision. I have never known Mr. Dawson to be guilty of rude conduct. I knew him only for a short time before his appointment. It is known to the Commissioners that the Department has not had sufficient funds to keep the parks in order.

WILLIAM VAN VALKENBURGH, called as a witness for the defence, testified :

Commissioner Lane told me that Mr. Dawson was away at Jerome Park races with one of the horses, and got drunk lamed the horse, and that he would have to pay \$300 for it, and he would see that he did.

(Witness here offered to give names of the member of the Union Club, referred to by Mr. Dawson, if Mr. Lane desired it. Mr. Lane decided not to take advantage of the offer.)

## JAMES FARRELL, called as a witness for the defence, testified :

I am a laborer in the Park Department. On the 12th of October, 1878, I saw Mr. Dawson and Commissioner Lane talking inside the door on the stoop of 36 Union Square. I was on the street at the curbstone. I was standing at the horse. I saw them during the whole of their conversation. I did not see either of them use their hands or clench their fists during the time. I would have seen it had it taken place. I was standing at the horse's head waiting for Mr. Dawson.

#### Cross-examined by Commissioner LANE:

Mr. Dawson was standing with his left side to me. Commissioner Lane was standing partly facing me. To the best of my opinion neither Mr. Dawson or Commissioner Lane could have raised their fists without my seeing them. I don't recollect whether it was before or after twelve o'clock. I had no watch. I brought Mr. Dawson down in the morning and remained for him.

I have not had any conversation with Mr. Dawson about this matter.

#### Mr. JOHN F. DAWSON recalled, testified :

I very rarely get to the stables in the Park later than 7:30 to 7:45 o'clock, A. M., and seldom leave the Arsenal until 4:30 to 5 o'clock, P. M.

For nearly ten weeks I have had masons and others at work at Mount St. Vincent, and that has been the cause of my being there during business hours; I have to attend to other work besides the care of the Central Park.

Mr. THOMAS HODGES, called as a witness for the defense, testified :

I am foreman on the second division of the Central Park; I have had the borders trimmed at least twice this season; I have used the force under my care to the best of my ability.

#### Mr. HENRY D. PURROY testified for the defense, as follows :

The appointment of Mr. Dawson as Superintendent of Public Parks was recommended by a number of prominent gentlemen in New York. I joined them in their recommendation. Among them were S. F. Knapp, J. L. Mott, A. B. Tappen, John Kelly, and many others.

Mr. Dawson was appointed by the vote of Commissioner Lane among the other Commissioners. Commissioner Lane had been very obliging in entertaining all requests that I made, including the appointment of Mr. Dawson.

Shortly after Mr. Dawson's employment, Commissioner Lane sent for me and informed me that there was a bitter fight going on in the Department between him and President Wenman, and that at each meeting of the Board he generally got the best of the President by his superior knowledge of parliamentary law, and his cool and calm manner, but that, nevertheless, it was a hard contest. He then complained to me that Mr. Dawson refused to take sides with him against the President. He said he had joined hands with Mr. Van Valkenburgh, one of his worst enemies, and he urged me to use my influence with Mr. Dawson to get him (Mr. Dawson), to join him in his fight on Mr. Wenman. We had several conversations on this subject, all to the same effect. I said that Mr. Dawson was greatly indebted to him for his appointment, but my advice would be for him to stand neutral in the fight between him and the President. He urged upon the fact that he was the only Commissioner in the Board who was true to the political interests of the party to which he and I belonged, and, therefore, the necessity of my strengthening him in the matter.

About a week after he told me that Mr. Dawson was doing all in his power to injure him in the Department, having selected some men to be dismissed who were his (Commissioner Lane's) men.

I went to Mr. Dawson and advised him not to act against Mr. Lane.

Commissioner Lane again spoke to me cn the way to the State Convention about Mr. Dawson, in the presence of two gentlemen, complaining of Mr. Dawson's hostility to his political interests in the Board. I said I thought he misjudged Mr. Dawson, and, after advising with some other parties, I advised Mr. Dawson to continue to take no part in Mr. Lane's or Wenman's personal quarrels. Shortly after that I was informed by Commissioner Wetmore that Commissioner Lane had asserted that Mr. Dawson was grossly intoxicated. I met Commissioner Lane afterwards, and asked him if he had made these assertions. He at first did not like to meet the question, but at length admitted that he had, and complained again about Mr. Dawson using his influence against him.

Mr. Dawson told me that he had learned these facts from the President of the Board. It was a few days after this that the interview took place at the door of 36 Union Square between Commissioner Lane and Mr. Dawson.

## Commissioner LANE then testified in his own behalf, as follows:

If any one told Mr. H. D. Purroy that I said that Mr. Dawson was drunk he was in error, as what I did say was that I was told that Mr. Dawson was drunk.

I never told Mr. Van Valkenburg that Mr. Dawson would have to pay \$300 for the horse.

#### DOCUMENT No. 82.

## BOARD

#### OF THE

# Department of Public Parks.

DECEMBER 18, 1878.

Correspondence between the Commissioners of the Department of Public Parks and the Commission of Civil Engineers, appointed to examine the work of the construction of Riverside Avenue.

Ordered printed as a document of the Board.

WM. IRWIN, Secretary D. P. P.

## DEPARTMENT OF PUBLIC PARES, 36 Union Square.

#### NEW YORK, December 7, 1878.

## WILLIAM IRWIN, Esq.,

Secretary Department Public Parks:

Sir,—The Commissioners in the matter of Riverside Avenue Contract have received the accompanying note from Smith E. Lane, Esq., Treasurer of the Department of Public Parks.

In accordance with the request contained in that note, this Commission has appointed 3 P. M. of Monday, December 9th, for Mr. Lane to appear before them.

Will you please also notify the Commissioners of the Department of this appointment, in order that they may be represented, should they deem fit.

Respectfully,

#### JOHN BOGART,

Secretary of Commission.

DEPARTMENT OF PUBLIC PARKS, 36 Union Square,

#### NEW YORK, 7th December, 1878.

### Messrs. JOHN BOGART, WILLIAM E. WORTHEN and CHARLES H. HASWELL,

Commission in the matter of the Riverside Drive:

Gentlemen,—I desire to submit, orally and in writing, my views in regard to the matters submitted for your consideration, together with some documentary matter, and respectfully suggest that you assign a time for the hearing and submission, and that my associate Commissioners be invited to be present, and requested to submit their views.

Respectfully yours,

S. E. LANE.

Treasurer D. P. P.

#### DEPARTMENT OF PUBLIC PARKS, 36 Union Square, December 9th, 1878.

#### JOHN BOGART, Esq.,

## Secretary Commission to examine Riverside Avenue Improvement :

Dear Sir,—The Secretary of this Department has handed me yours of the 7th inst., enclosing a copy of a communication from Commissioner Lane, requesting that your Commission would appoint a time to hear his views, and those of the other Commissioners in relation to the subject you are appointed to examine.

It is the opinion of all the Commissioners of this Department, except Mr. Lane, that your Commission should not be in any manner influenced in your determination of the questions submitted to you by the views of any particular Commissioner, but solely by the condition of the work and by the specifications, contract, maps, plans and papers relating to the work, all of which will be furnished you on request to the Secretary of this Department.

Under any other conditions, the report of your Commission would be liable to be impeached as not impartial.

On behalf of my associate Commissioners, Messrs. Wetmore and Conover, and also on my own behalf, I decline to influence your judgment in any way by the expression of our views, and I trust you will yourselves take the same course in regard to Commissioner Lane.

I remain, yours, respectfully,

JAS. F. WENMAN, Pres't Dep't Public Parks

### DOCUMENT No. 83.

## BOARD

#### OF THE

# Department of Public Parks.

DECEMBER 18, 1878.

Memorial of Mr. Lewis G. Morris and others, in relation to the construction of a Suspension Bridge over Harlem river.

Ordered printed as a document of the Board.

WM. IRWIN, Secretary D. P. P.

### To the Honorable JAMES F. WENMAN,

#### President of the Department of Public Parks:

The undersigned, owners or occupants of property in the City of New York, east of the Harlem River, and on Manhattan Island above One Hundred and Fifty-fifth street, represent to the Honorable, the Commissioners of the Department of Public Parks, the great importance of a suspension bridge across the Harlem River, about half a mile north of the High Bridge, and respectfully submit certain considerations that indicate that its completion is an immediate public necessity.

As is well known, the area of that portion of the City east and north of the Harlem River and Spuyten Duyvil Creek is but little less than that of the old City. This river and creek divide the old from the new portion of the City, and must be crossed to get from one to the other. The distance that the City lies on both sides of these waters, from Randall's Island to the North River, is nearly 77,000 feet, or about  $14\frac{58}{100}$  miles.

The population of the new portion is about 40,000, and through it is a continued stream of travel to the territory lying to the east and north.

The bridges that now cross the river and creek are seven in number, within a distance of about six and a-half miles. They are :

1st. The Third Avenue Bridge, having a draw, and adapted for crossing of vehicles and foot travel.

2d. The Railroad Bridge at the Fourth Avenue, only usable by the steam cars, also having a draw.

3d. The Central or MacCombs Dam Bridge, having a draw, at the terminus of a short street diverging from Eighth Avenue.

4th. The "High Bridge," for carrying the Croton Aqueduct, and also accommodating foot passengers.

5th. The Farmers' Bridge, two and a-half miles north of High Bridge, for foot and vehicle travel.

6th. Kings Bridge, for foot and vehicle passage.

7th. Railroad Bridge across the Spuyten Duyvil Creek at its opening to the North River, and having a draw.

Of these seven bridges, all of which are shown on the map appended to this memorial, and prepared to illustrate this important subject, four only admit the passage of vehicles.

The distance from the Third Avenue Bridge to the Central Bridge is about 7,800 feet, or about one and a-half miles.

The distance from the Central Bridge to the Farmers' Bridge is about 18,400 feet, or about three and one-half miles, so that, if, as is not unfrequently the case, the Central Bridge is underdergoing repairs, the population located midway between the Third Avenue Bridge and Farmers' Bridge on one side of the river, obliged to go to a point similarly situated on the other side, with vehicles, cannot do so without traveling a distance of nearly five miles; a person desiring to pass in a vehicle directly across the river from the Juvenile Asylum, not an eighth of a mile in distance, must travel nearly five miles to accomplish it.

Six of these seven bridges are but a few feet above the surface of the water, they accommodate that class of travel and traffic that is in the lower levels of the land. The High Bridge only, is so far elevated as to admit of convenient passage between the high lands on each side. These high lands begin just above Manhattanville, and extend up to Fort George and Tubby Hook, occupying for the greater portion of this distance pretty much the whole width of the island except Harlem flats. They are about two miles in breadth, with an area of 1,000 acres, having a general elevation above the river of over 200 feet.

There is also on the east side of the river a range of high lands beginning at Cromwell's Creek, and extending for several miles up the shores of the Harlem River, and extending to the Bronx River and up to and beyond the line of the newly added territory, including Woodlawn Cemetery, and comprehending nearly one-third of this territory. The elevation of these high lands is somewhat less than that of those on the island, and a very large area would be accommodated by this bridge.

At a distance 1,700 feet north of the High Bridge, the shores on both sides of the river are very precipitous and rocky. Their adaptation to facilitate crossing from one shore to the other by means of an elevated bridge was pointed out nearly ten years ago, accommodating the levels of the adjacent lands, and at the same time allowing of the free navigation of these waters without the necessity of any draw. The site of this suspension bridge has been actually determined and located. The ground for the approaches has been taken and paid for by the City, and property owners of the vicinity have been assessed the sum of \$37,751.78 to pay for it, most of whom have paid, those who have not, their lands are encumbered with an assessment, and the interest running upon it. It is, therefore, their right that the construction of this bridge should proceed without delay.

In the new laying out of the territory east of the Harlem through ways of general access to the suspension bridge have been provided for, and form an important part of the system; it is a converging point for several main roads; it is not only for the population and business of this especial elevated plateau, present and future, that this bridge is to accommodate, but the already populous communities surrounding them. To delay the building of the bridge is to retard the development of a large area that has been laid out with especial reference to it, and would seriously inconvenience the present populated neighborhood.

For twenty years the need for crossings for wheel traffic has been deeply felt, but the then different jurisdictions on each side gave rise to endless questions as to the relative portions of the expense that each should bear, and nothing was done.

The territory now belongs to one jurisdiction—the City of New York. The Legislature nearly eight years ago directed that this bridge should be built, and provided the means for building it, and the authority charged with the duty of executing the order of the Legislature is the Department of Public Parks. By the Act of May 11, 1869, (chap. 826), it was made the duty of the original Board of Commissioners of the Central Park to survey the lower and westerly part of Westchester County, and, among other things, to provide plans for streets and avenues, for sewers and drainage, for the supply of water, for the improvement of the Harlem River and Spuyten Duyvil Creek, and plans for the location of all bridges, tunnels, and other means of transit across or under said river and creek.

The authority under this act expired on the first day of January, 1871. The work was entered into and pushed by the Commissioners with energy.

The original Board of Central Park Commissioners, however, went out of office by the Charter of 1870. In the year 1871 (Chapter 534), a further act was passed, continuing in the Department of Public Parks these powers of the Act of 1869, and widening and extending them. In this act is found the following passages:

"The said Board of Commissioners, on behalf of the City " of New York, and the Chairman of the Board of Supervisors "of Westchester County, and the Supervisor of the town " which shall include the Westchester County end of any such "tunnel, bridge, or other means of transit, or a majority of " them, on behalf of the County of Westchester, shall have " full power and authority to build and construct, by contract " or otherwise, as they shall deem most expedient, any and all " bridges, and other means of transit across or under Harlem "River or Spuyten Duyvil Creek, which may be planned or. " located as aforesaid, and may forthwith commence the build-"ing or construction of a suspension bridge, north of the " bridge known as the "High Bridge," but not more than half " a mile therefrom; and also the bridge or tunnel that may be "planned or located near or at the northerly end of the "Seventh Avenue, in the City of New York, provided, however, "that not more than two of such bridges, or one bridge and "one tunnel, or other means of transit, shall be in the course " or process of being built or constructed at the same time."

By the amended Annexation Act of 1874 (Chapter 329), the Commissioners of the Department of Public Parks have the power to devise plans to locate, construct and maintain all bridges and tunnels they may lay out. By section 16, of the same act, it is provided as follow:

"All provisions of law now in force inconsistent with this "act, and of laws imposing upon the County of Westchester " or the towns of Morrisiania, West Farms and Kingsbridge, "liabilities for the construction and maintenance of tunnels " under or bridges over the Harlem River, are hereby repealed, "and the provisions of Chapter 534 of the Laws of 1871, for " the construction and maintenance of bridges over and tun-" nels under the Harlem River, at the joint cost and expense " of the City and County of New York and of the County of "Westchester, and certain towns therein named, shall be con-" strued as applying hereafter solely to the City and County of " New York, and to the territory hereby annexed thereto, and " the provisions contained in said chapter 534, for the raising of "moneys for the construction of said bridges and tunnels, or " any of them, over or under the Harlem River, by the issue of "the bonds of such of the said counties, or otherwise, as in " said chapter provided, shall hereafter be confined to the City " and County of New York, as the same shall be enlarged by "the territory hereby annexed, and the planning and con-"struction of said tunnels and bridges shall be continued for " account of said enlarged City of New York, and with its "means, as in said chapter 534 provided, the same as though " the County of Westchester had not been mentioned in said " chapter in connection with said bridges and tunnels."

It will be seen from the above that the bridge is, and has long been, a recognized public necessity; that legislation is full and adequate to authorize, indeed, to use the words of the statute, to require its construction "forthwith," and that the method of raising the necessary means is also indicated by the law.

It is well known that measures are in progress for the improvement of these waters by the Government of the United States, to render them, in accordance with the plans of that accomplished engineer, Gen. John Newton, useful to the commerce of the whole country, and that this improvement will be of great advantage in cheapening the cost of carrying the products of the west to the east; to this City and Brooklyn, and to Europe.

No consideration of this subject that omits in its inception a full provision for the movement of commerce on the river, as well as that of travel and traffic across it, will be deemed at all adequate or satisfactory, but this one suspension bridge is a feature connected with the whole undertaking of improving the river, against which no valid objection can be urged.

Nature has fortunately formed the shores, on both sides, to admit of a bridge of height sufficient to allow of the passage of vessels without the necessity of a draw, and of a height that conveniently accommodates the large plateaus of elevated land on each side that are rapidly being populated.

The unprecedentedly low price of iron, and the very moderate prices of labor, indicate this as a most favorable time for proceeding with this structure; probably so advantageous a time will not recur in a generation.

Your memorialists respectfully request your honorable body to take the necessary measures to have this bridge completed.

Dated May 17, 1878.

L. G. MORRIS, GUSTAV SCHWAB, FRANKLIN EDSON, N. P. BAILEY, HUGH N. CAMP, WM. G. ACKERMAN, JOSEPH H. GODWIN, JOSEPH J. POTTER, C. L. CAMMANN, O. CAMMANN'S ESTATE, Pr. C. L. CAMMANN, MORRIS WILKINS, LEONARD W. JEROME, JOHN HUNTER, W. R. TRAVERS.

# DOCUMENT No. 84.

# BOARD

#### OF THE

# Department of Public Parks.

DECEMBER 18, 1878.

Contract or agreement with the Metropolitan Museum of Art for the occupation by it of the Museum of Art Building in Central Park, New York City.

Ordered printed as a document of the Board.

WM. IRWIN, Secretary D. P. P. THIS AGREEMENT, made and concluded on the 24th day of December, in the year one thousand eight hundred and seventy-eight, between the DEPARTMENT OF PUBLIC PARKS OF THE CITY OF NEW YORK, the party of the first part, and THE METROPOLITAN MUSEUM OF ART, party of the second part, WITNESSETH :

Whereas, By an Act of the Legislature of the State of New York, passed April twenty-second, eighteen hundred and seventy-six, entitled "An Act in relation to the powers and duties " of the Board of Commissioners of the Department of Pub-"lic Parks, in connection with the American Museum of " Natural History and the Metropolitan Museum of Art," the said party of the first part is authorized and directed to enter into a contract with the said party of the second part for the occupation by it of the buildings erected, or to be erected, on that portion of the Central Park, in the City of New York, east of the old receiving reservoir, and bounded on the west by the drive, on the east by the Fifth Avenue, on the south by a continuation of Eightieth Street, and on the north by a continuation of Eighty-fifth Street, and for transferring thereto, and establishing and maintaining therein, its Museum, library and collections, and carrying out the objects and purposes of said party of the second part:

And whereas, A building contemplated by said Act has now been erected, and nearly completed and equipped, in a manner suitable for the purposes of said Museum, as provided in the first section of the Act of June third, eighteen hundred and seventy-eight, known as Chapter 385 of the Laws of 1878, for the purpose of establishing and maintaining therein the said Museum, as provided by the said last-named act, and by the Act of April 5th, eighteen hundred and seventy-one, known as Chapter 290 of the Laws of 1871;

3

And whereas, It is desired, as well by the said party of the first part as by the said party of the second part, that, immediately upon the completion and equipment of said building, the said party of the second part should be established therein, and should transfer thereto its Museum, library and collections, and carry out the objects and purposes of the said party of the second part;

Now, therefore, It is agreed by and between the said parties as follows, viz.:

First.—That the said party of the first part has granted and demised and let, and doth by these presents grant, demise and let, unto the said party of the second part, the said buildings and the appurtenances thereunto belonging, to have and to hold the same as long as the said party of the second part shall continue to carry out the objects and purposes defined in its charter, or such other objects and purposes as by any future amendment of said charter may be authorized, and shall faithfully keep, perform and observe the covenants and conditions herein contained on its part to be kept, performed and observed, or until the said building shall be surrendered by the said party of  $v_{-}e$  second part, as hereinafter provided.

Secondly.—That neither the party of the first part, its successor or successors, nor the Mayor, Aldermen and Commonalty of the City of New York, shall be in any manner chargeable or liable for the preservation of the said building, or the property of the party of the second part which may be placed therein, against fire, or for any damage or injury that may be caused by fire to the said property; but it is agreed that, damages as aforesaid excepted, the said party of the first part will keep said building, from time to time, in repair.

Thirdly.—That, as soon after the completion and equipment of said building as practicable, the said party of the second part shall transfer to and place and arrange in said building its Museum, library and collections, or such portion thereof as can be properly displayed to the public therein, and shall have and enjoy the exclusive use of the whole of said building, subject to the provisions herein contained and the rules and regulations herein prescribed, during the continuance of the term hereby granted, or until a surrender thereof, as herein provided.

Fourthly.—That the exhibition halls of said building shall, on Wednesday, Thursday, Friday and Saturday of each week, and on all legal or public holidays, except Sundays, be kept open and accessible to the public, free of charge, from ten o'clock A. M. until half an hour before sunset, under such rules and regulations as the party of the second part shall, from time to time, prescribe; but on the remaining days of the week the same shall be only open for exhibition to such persons and upon such terms as the said party of the second part shall, from time to time, direct. But all professors and teachers of the public schools of the City of New York, or other institutions of learning in said city in which instruction is given free of charge, shall be admitted to all the advantages afforded by the said party of the second part, through its Museum, library, apparatus and collections, or otherwise, for study, research and investigation, free of any charge therefor, and to the same extent and on the same terms and conditions as any other persons are admitted to such advantages, as aforesaid.

Fifthly.—That the Museum, library and collections, and all other property of the said party of the second part which shall or may be placed in said building, shall continue to be and remain absolutely the property of said party of the second part; and neither the said party of the first part, nor the said the Mayor, Aldermen and Commonalty shall, by reason of said property being placed in said building, or continuing therein, have any right, title, property or interest therein; nor shall the said party of the second part, by reason of its occupation and use of said building under this agreement, acquire, or 1 odeemed to have any right, title, property or interest in said building, except so far as expressly granted by this agreement. Sixthly.—That the said party of the second part shall, on or before the first day of May in every year during the continuance of this agreement, submit to the said party of the first part, its successor or successors, a detailed printed report of the operations and transactions of the said party of the second part, and all its receipts and payments, for the year ending with the thirty-first day of December next preceding.

Seventhly.—That the said party of the first part shall have, at all times access to every part of said building for general visitation and supervision, and also for the purpose of the performance of the duties devolved upon it by the Laws of the State of New York, or of the City of New York. That the police powers and supervision of said party of the first part shall extend in, through and about said building. That the said party of the second part may appoint, direct, control and remove all persons employed within said building, and in and about the care of said building, and the Museum, library and collections therein contained.

Eighthly.—That the said party of the second part may, at any time after the expiration of three, and before the expiration of nine months from the date of the service of a notice in writing to said party of the first part, its successor or successors, or to the Mayor of the City of New York, of its intention so to do. quit and surrender the said premises, and remove all its property therefrom ; and upon and after such notice, the said party of the second part shall and will, at the expiration of the said nine months, quietly and peaceably yield up and surrender unto the said party of the first part, and its successors, all and singular the aforesaid demised premises. And it is expressly understood and agreed by and between the parties hereto, that if the said party of the second part shall omit to do, perform, fulfill or keep any or either of the covenants, articles, clauses and agreements, matters and things herein contained, which on its part are to be done, performed, fulfilled or kept according to the true intent and meaning of these presents, then and from thenceforth this grant and demise shall be utterly null and void. And in such case it shall and may be lawful for

said Department to serve or cause to be served on the said party of the second part a notice in writing, declaring that the said grant hereinbefore made has become utterly null and void, and thereupon the said party of the first part, its successor or successors (six months' time being first given to the said party of the second part to remove its property therefrom), may reenter and shall again have, repossess and enjoy the premises before mentioned the same as in their first and former estate, and in like manner as though these presents had never been made, without let or hindrance of the said party of the second part, anything herein contained to the contrary notwithstanding.

Ninthly.—And it is further expressly understood and agreed by and between the parties hereto, that this agreement may be wholly cancelled and annulled, or from time to time altered or modified, as may be agreed in writing between the said parties or their successors, anything herein contained to the contrary in anywise notwithstanding.

In witness whereof, the party of the first part hath caused this agreement to be executed by their President and Secretary, pursuant to a resolution of the Board of Commissioners of said Department adopted at a meeting held on the 18th day of December, in the year of our Lord one thousand eight hundred and seventy-eight, and the said party of the second part hath caused the same to be executed by their President and their official seal affixed hereto, pursuant to resolution of the Trustees of the Metropolitan Museum of Art, adopted at a meeting held on the 23d day of December, in the year of our Lord one thousand eight hundred and seventy-eight.

In presence of D. PORTER LORD.

JAS. F. WENMAN, President Department of Public Parks of the City of New York. WM. IRWIN, Secretary Department of Public Parks of the City of New York. JOHN TAYLOR JOHNSTON, President Metropolitan Museum of Art.

Seal of the Metropolitan Museum of Art. STATE OF NEW YORK, City and County of New York. ss.:

On this twenty-fourth day of December in the year 1878, before me came James F. Wenman, President of the Department of Public Parks of the City of New York, and William Irwin, Secretary of the said Department of Public Parks, with both of whom I am personally acquainted, and both of whom being by me duly sworn, said: That they reside in the City and County of New York, that the said James F. Wenman, is the President, and the said William Irwin is the Secretary of the said Department of Public Parks, and that they signed their names to the foregoing agreement by order of the "Board of Commissioners" of the said Department of Public Parks.

W. C. BESSON, (73) Notary Public, N. Y. Co.

STATE OF NEW YORK, City and County of New York, ss.:

On this twenty-fourth day of December in the year 1878, before me came John Taylor Johnston, the President of the Metropolitan Musuem of Art, with whom I am personally acquainted, who being by me duly sworn, said: That he resides in the City and County of New York, that he is the President of the "Metropolitan Museum of Art," and that he knows the corporate seal of said museum, that the seal affixed to the foregoing agreement is such corporate seal, that it affixed thereto by order of the "Board of Trustees" of said Metropolitan Musuem of Art, and that he signed his name thereto by the like order.

> W. C. BESSON, SEAL: (73) Notary Public, N. Y. Co.

Recorded in the office of the Register of the City and County of New York, in Liber 1479 of Cons., page 22, on the 24th day of December, A. D. 1878, at 2 o'clock and 30 minutes P. M., and examined.

Witness my hand and official seal.

SEAL.

FREDERICK W. LOEW,

Register.

# DOCUMENT No. 85.

# BOARD

#### OF THE

# Department of Public Parks.

JANUARY 15, 1879.

Report of Messrs. Charles H. Haswell, Wm. E. Worthen and John Bogart, Civil Engineers, who were appointed to examine the condition of the work on Riverside Avenue Improvement and Construction, and report in what respect it is done in accordance with the contract, and in what respect it is not so done, together with the testimony taken by them and the minutes of their meetings.

Also statement of Mr. Thomas Franklin, Superintending Engineer of Riverside Avenue Improvement and Construction, in reply to said report.

Ordered printed as a document of the Board.

WM. IRWIN, Secretary D. P. P.

# INDEX.

		Page.
Report of Me	essrs. Haswell, Worthen and Bogart	. 5
Organization	Meeting	15
Testimony of	S. E. Lane	15
	W. Irwin	23
	Thomas Franklin	-58-64
Minutes of S	ession	39
Testimony of	C. O'Grady	61
	P. H. Norton	62
Minutes of S	ession	68
	0. Sibeth	
	C. Clark	
•• ••	J. C. Aldrich	69
** **	Thomas Loomis	83
" "	James Callaghan	. 88
Statement of Mr. Thomas Franklin		91
	J. B. Bacon	
Certificate of	Messrs, Julius Adams and W. J. McAlpine.	107

# REPORT

# OF MESSRS. CHARLES H. HASWELL, WM. E. WORTHEN AND JOHN BOGART.

The Commission of Civil Engineers appointed in accordance with a resolution of the Department of Public Parks of 20th ultimo, to examine the work done under a contract between the Department of Public Parks and Messrs. Decker and Quintard, contractors, for the improvement and construction of Riverside Avenue, herewith report:

That it has examined the materials furnished and work done upon the Riverside Avenue as thoroughly as was practicable in the time at its disposal, and without material injury by tearing down portions of the mechanical work.

It has been furnished with copies of the contract and with the original drawings, maps, plans, profiles, &c., which were exhibited at the letting, and are referred to in the contract.

It has received from the Superintending Engineer of the work, Mr. Thomas Franklin, and his assistants, detailed information in reference to it.

It has examined the former engineers and other persons cognizant of the work during its progress.

In making a report upon the subject, it has been thought best to follow the order of the contract and specifications and to consider each item in that order.

The resolution under which the Commission acts ask for a statement of "the present condition of the work, and in what "respects it is done in accordance with the contract, and in "what respect it is not so done."

The opinion of the Commission is herewith given upon each of the various items of work.

1st. The preliminary clause and the sections (A) and (1) of the contract describe the area embraced in it as being the avenue known as Riverside Avenue, in the City of New York, as laid out under the second Section, Chapter 850 of the Laws of 1873, and shown upon a certain map, filed February 23d, 1875.

This Commission finds that certain work has been done outside of the limits of the avenue above described, namely, excavation of material from the Riverside Park, which material has been brought therefrom and used in the filling of the avenue.

The amount of this material is estimated at 25,500 cubic yards. It has been included in the monthly estimates of work done as excavation of earth. In the opinion of this Commission, this amount should have been paid for only as embankment under this contract.

2d. Most of the trees have been cut down within the lines of the avenue and upon the slopes and areas inclosed between the drive lines, which areas are designed to be grass-surfaced.

The Superintending Engineer states that none have been cut which he has directed to be saved.

3d. DISPOSITION OF TOP SOIL.—A large portion of the top soil seems to have been disposed of already in some manner, although very few of the slopes are properly finished. Section 4 of the specifications makes special provision for the preservation of this top soil for the future use upon the slopes, and this should be done to preserve their park-like character. Section 83 also provides that space for trees and planting shall be filled to the established grades with good soil.

That which has been done, however, the Superintending Engineer states has been in accordance with his directions.

4th. EXCAVATION OF EARTH.—The largest part of the earth to be excavated has been removed and estimated, but the slopes have not been shaped, and, as this extra shaping of slopes will be more expensive to the contractors than the previous earth excavation, the approximate estimate should have been made with reference to this point.

5th. EXCAVATION OF ROCK.—Nearly all of this has been finished.

6th. EMBANKMENT.—This has been at many points, as stated by the Superintending Engineer, made of "large stones"; at the points where this was in progress when examined by the Commission, proper attention was not being given to that clause of the contract (sec. 7) providing for filling the interstices of stone with earth; at several other points the upper surfaces have settled; water has carried with it, at some places, the surface filling into the lower parts of the embankments, forming holes, and into these the edging, gutter and walk areas have settled.

The larger part of the embankment is made. The Commission reports that its present condition is such that before further proceeding to the construction of the walks, drives, etc., upon it, special measures should be taken to prevent their future subsidence, which will certainly occur unless this precaution is taken.

7th. DRY WALL.—The total of dry wall now estimated as done and to be done is much less than that of the original estimate. This is due to changes in exterior lines, and the substitution, in places, of earth and rock slope for retaining walls, by the direction of the present Superintending Engineer. Of this total, almost the entire amount is composed of retaining walls, and their foundation walls, and they substantially in dimensions and character comply with the terms of the contract, and the faces are even better than shown in the original drawings exhibited by the Department at the time of the letting.

8th. PARAPET WALL.—The totals of parapet wall estimated and to be estimated would also have been less than the original, but by the direction of the present Superintending Engineer, one foot has been added to its height, making it 2 feet 6 inches instead of 1 foot 6 inches, as first designed and exhibited on the original drawings. By the terms of the contract—

"It may be one or two courses in its height, if of one course "the stone must be of full dimensions of the parapet in each "direction, no centre vertical joints being allowed. If of two "courses in height, one of the courses to be of the full width " of the wall, and the other may have a centre vertical joint, " this joint not to exceed one inch in thickness, neither of the " courses to be less than seven inches in height. To be laid " full in cement, with well pointed joints, joints not to exceed "  $\frac{1}{2}$  of one inch."

None of this work is built of a single course of stone. There are generally two courses, and in some cases three. No course fell below 7 inches in height. When in two courses neither of them are of the full width of the wall, both are almost invariably stretchers with very few headers, and the centre vertical joints much exceed the limit of one inch in thickness. We have measured some of 6 inches, and no care has been taken to keep this joint in any way uniform. At the ends the stones are usually slack, and the face joints have but little depth. The vertical joints are filled in with spawls with the interstices imperfectly filled with cement. In its character this wall is so different from that expressed by the contract that the Commission considers it a direct and entire violation of it.

9th. COPING.—The coping is good and complies substantially with the contract, except that "the chisel drafts of not less "than one-half inch long the top and bottom of each stone on "the inside face" have been omitted except for lengths about 1,000 feet. The total length, like that of the dry masonry, is less than that of the original estimate, and for the same reason.

10th. RUBBLE MASONRY LAID IN CEMENT complies substantially with the contract. Most of it coped the dry retaining wall, and its face is of the same character. Under the same heading is included the masonry of the abutments of the bridge at Eighty-sixth street; the face in this masonry is superior to that under which it is classed, and much better than called for by the contract.

11th. STONE FILLED IN REAR OF WALL.—This has in cases not been done where in the judgment of this Commission it would have been proper to relieve the wall from embankment thrust. The Superintending Engineer, however, states that it has not been directed to be done by him, and the contract only requires it to be done if so directed. This omission is not, therefore, a violation of the contract.

12th. CONCRETE.—This cannot be examined, as it is far below the surface. The Superintending Engineer states that it is in accordance with the contract.

13th. DRAINAGE.—(a) In refilling over the drain pipes laid, the Superintending Engineer states, that there may have been some deviations in the manner of ramming the filling; but the contract expressly provides that "the filling shall be by layers "in no case exceeding nine inches in thickness, and that the "earth or sand shall be faithfully rammed as the work pro-"gresses, in no case the number of men backfilling being "more than twice the number of those ramming."

As no ramming has been done on recent work, this Commission is of opinion that in that respect it is not in accordance with the specifications.

(b.) QUALITY OF PIPE.—No pipe was being laid during the examination of the work by this Commission; that which had been previously laid was covered, and its examination was consequently omitted.

14th. BRICK MASONRY.-This was also nearly all covered.

15th. CEMENT.—None was being used at the times of the examination of the work. The tests as stated by the Superintending Engineer are not such as are usual on public works.

16th. PAVEMENT OF WHEELWAY OR DRIVE.—(a) The contract provides for "the road beds to be shaped to the lines and "grades directed, and then, wherever directed, rolled with roll-"ers weighing not less than two tons, sufficiently to compact "the material to the satisfaction of the Engineer."

A large amount of road bed has been prepared, and upon a large portion of it stone has been placed. No roller has been used at any place.

This Commission, in reporting "the condition of the work," reports that the road bed has not been in any case rolled, although it is in some places upon high embankments, and in others in cuts, through earth of such a character as would, in its opinion, be better compacted and fitted for road construction by rolling.

The Superintending Engineer states that he has not directed that the road bed should be rolled at any point. As the contract provides that it should be rolled wherever directed, and as it has not been directed anywhere, this Commission reports that in this respect the work is not done in violation of the contract.

(b.) FOUNDATION STONE.—The provisions of the contract, as to the next point in road construction, are that the "stone for "foundation is to be sound and durable quarry stone from seven "to ten inches in depth, not to exceed fifteen inches in length, " and generally from three to eight inches in width."

"These stones are to be deposited upon the roadway, and "evenly adjusted, so as to form a pavement in which the "stones are well and compactly brought together to the "satisfaction of the Engineer."

A large amount of stone has been placed upon the road bed. They are generally sound, but there are among them many of an inferior quality, which ought to be separated and used only for general embankment. The size of the stones approximates that mentioned in the contract. They have been deposited upon the roadway and have been somewhat adjusted, but care has not been taken to keep the depth of the stones from seven to ten inches, nor has the limit of fifteen inches for length been observed.

It is the opinion of this Commission that in its present condition a pavement is not formed in which the stones are well and compactly brought together; but the Superintending Engineer states that they are to his satisfaction, and in this respect that is the measure of compliance with the specifications.

(c.) The contract provides that "upon the top of these "stones are to be spread finer rubble and quarry chips suffi-"cient to fill and smooth over the interstices of the surface, "but care must be taken not to fill up the cavities of the lower "portion of the rubble bottom, which must have a cellular "character to facilitate drainage." "With this material is to be intermixed a quantity of gravel-"ly earth or hard pan to the extent that shall be directed, and "the whole, being moistened by sprinkling, is to be rolled with "rollers of a weight that shall be directed. The rolling shall "be thorough, and continued so as to close all interstices of the "surface of the rubble foundation."

Some finer rubble and quarry chips have been placed on top of the stones, and over a large area of roadway gravel and sand have been placed, but no rolling done at all. The present condition of the work shows that care has not been taken to prevent the filling of the cavities of the lower portion of the bottom, nor to preserve its cellular character. In fact, the intermixture of the gravelly earth or hard pan, the moistening by sprinkling and the rolling, are provided for in the specifications as one operation, are mentioned together, without separation, and to secure what the specification calls for, the gravelly earth or hard pan should be sprinkled and rolled when put on. Then, by the compacting result of rolling there would be, as specified, a closure of the interstices of the surface of the rubble foundation.

The result of what has been done is that the gravelly material has been filtered down through and between the bottom stones, and, in the opinion of this Commission, the present roadway is in no wise in accordance with the specifications.

No gravel has been delivered on the work.

17th. PAVEMENT OF RIDE.—Considerable road-bed has been prepared for the Ride, but in no place rolled, and the remarks heretofore made as to bed for Drive are alike applicable in this case.

Some material has been placed upon this road-bed, but it has in no part been rolled, and is therefore unfinished.

18th. PAVEMENT OF WALKS.—A large amount of walk surface has been brought to sub-grade, but none of it rolled; over considerable portions of it quarry stone have been filled in.

As the larger part of these walk surfaces are over embankments close to the wall, and therefore specially liable to settlement, and as the surfaces have in some cases already settled, this Commission reports that the omission of rolling the subgrade in such places is, in its opinion, injudicious; but the Superintending Engineer states that he has not directed it, and in this respect the Commission reports that the work is not in violation of the contract.

19th. GUTTERS.—Some two miles in length of gutters have been laid. This commission reports that the present condition of these gutters is unfinished in nearly every detail. They are not rammed to a firm bed, and their surface does not yet conform to any regular lines or curves, and, to conform to the specifications, must be relaid.

20th. GRANITE CURB.—None has been used.

21st. GRANITE CURB ANGLE STONES.—Sec. 53 of the contract provides that "at the end of tree plots, and at such other "points as shall be directed, the granite curb will be provided "and set in special lengths, with joints cut to the angles shown "on plan, and with faces dressed as directed."

The drawings exhibited at the letting include plans for such granite curb angle stone. None have been delivered or set, and in their stead have been substituted curved blue stone curbing. The Superintending Engineer states that it escaped his attention that granite was required in these cases, and that he directed the blue stone to be set. This has been estimated at the price for circular corners. The substitution of blue stone for granite was not warranted by the specifications.

22d. BLUE STONE CURB.—Over 8,000 lineal feet of blue stone curb have been put in place, and more have been delivered. This curb is generally of the specified thickness and depth. Many stones, however, have not fair end joints, as specified, but are slack from the bottom to within a few inches of the Quite a number of stones are cracked through. top. The joints, in many cases, are much wider than the 3 inch specified. A large portion of the curb has been set in such a way that it is already out of line, both horizontally and vertically. The backing up does not seem to be, in many cases, free from clay or loam, nor does it appear to have been well rammed, as specified. This, therefore, is not finished in accordance with specifications, but will require resetting and relining before it should be finally accepted or fully estimated.

Very many of the curb stones are in lengths of less than three feet, but the Superintending Engineer states that these in many instances are, in accordance with his directions, special lengths which can be ordered under the contract.

23d. BLUE STONE EDGINGS.—More than 19,000 lineal feet of this material is delivered and put in place. The end joints in many instances are not squared and dressed from top to bottom in accordance with the contract, but are slack for part of the height. As in the case of the curb, very much of the edging has been set in such a way that it is now out of line, both horizontally and vertically. The backing is often not free from clay or loam, nor has it been rammed as specified. This, therefore, is not finished in accordance with specifications. It will require resetting and relining before it should be finally accepted or fully estimated.

24th. FLAGGING.—Over 20,000 square feet of flagging have been delivered and laid in place. Much of this flagging shows a fair upper surface. A number of pieces were observed less than the specified thickness of two and one-half inches. Quite a number of pieces were cracked through. The Commission, during its examinations, saw flagging actually being laid in loam, and in some other places, where the flagging was already laid, the material at the sides of and which seemed to run under the flagging was not free from clay or loam. At other parts of the work the natural material was gravel or gravelly earth, conforming with the specifications, which require the flagging " to " be bedded in four inches of clean, gritty earth or coal ashes, " free from clay or loam."

The Commission therefore reports that the flagging which is already laid is not in all respects and at all points finished in compliance with the specifications, but will require careful reinspection, the rejection and removal of part, and the relaying of part, before it will be fully finished in accordance with the contract.

25th. CROSS-WALKS.—But a small amount of these have been laid, and they are substantially in conformity with the contract.

26th. TRESTLE WORK.—This is well constructed, framed, and of good material.

In view of the elements herewith submitted, we further report:

That, from the above details, it appears that the contractors for the improvement and construction of Riverside Avenue have complied with the requirements of the contract in the dimensions of some of the material and in the character of the work thereon, yet they have materially failed in other details and requirements; that the present Superintending Engineer has received such material and permitted such work to be performed, and constructively approved of such by embracing them in his monthly estimates of material and work, and certifying to their correctness. That the boundary of the avenue, the dimensions, location and arrangement of walks, grass surfaces, &c., have been altered from the original design as submitted to and approved of by your Department; that alterations in the dimensions of material and character of work have been made and permitted by the present Superintending Engineer, wholly arbitrary on his part, being not only without the sanction of, but without even the knowledge of, your Department.

That, as far as it was practicable to verify the monthly estimates that have been certified to by the previous and present Superintending Engineers, without incurring a very considerable cost and an objectionable delay in this report, and assuming such materials and work to have been accepted by your Department, inasmuch as with the exception of the last monthly estimate they have been paid for, it is apparent that the sum of the quantities is not in excess.

Finally, that the supervision of the reception of the materials and of the execution of the work in its progress in their very general character has not only been in disregard of the original design upon which the contract was based, and of its specifications, but it has been in nowise calculated to meet the just expectations of those who are to bear a moiety of its cost, and of the public at large.

Respectfully submitted.

CHAS. H. HASWELL. WM. E. WORTEN. JOHN BOGART.

NEW YORK, December 26th, 1878.

# MINUTES OF THE MEETINGS OF MESSRS. CHARLES H. HASWELL, WM. E. WORTHEN AND JOHN BOGART, AND THE TESTIMONY TAKEN BY THEM.

## NEW YORK, Dec. 7th, 1878.

The Commission of Engineers, in the matter of the contract for the Riverside Drive, and consisting of Messrs. Charles H. Haswell, William E. Worthen and John Bogart, met at the Department of Public Parks, New York, this day, at 1 P. M. Present, the whole Commission.

On motion, Mr. Charles H. Haswell was requested to act as Chairman, and Mr. John Bogart as Secretary.

It was determined that the services of a stenographer would be required, and Mr. Haswell was empowered to procure one.

A letter was received from Smith E. Lane, Treasurer of the Department of Parks, requesting an appointment with the Committee for the purpose of submitting his views. In accordance with that request, Monday, December 9th, 1878, at 3 P. M., was appointed as the time for such hearing, and a letter was sent to Mr. Lane, notifying him of that fact.

A letter was also sent to the Secretary of the Department cf Public Parks, enclosing a copy of the letter of Mr. Lane, and requesting the Secretary to notify the Commissioners of the Department of the time of hearing Mr. Lane, so that they might be represented, if they deemed fit.

### December 9th, 1878.

The Commissioners met, pursuant to adjournment, at three o'clock, in the office of the Department of Public Parks, 36 Union Square.

A communication was received from the President of the Department of Public Parks, but no action was taken upon it.

# SMITH E. LANE.

Mr. SMITH E. LANE, Treasurer of the Department of Public Parks, appeared before the Commission. Mr. Haswell: It is proper, Mr. Lane, that you should confine yourself exclusively to your documentary matter, and exclusively to the merits of your position, without any reference to any personal matter between you and your associates in any way.

Mr. Lane: I did intend to say a few words in relation to my associates. Of course, they would have been of a nature perfectly courteous to the Commission and to my associates. But I did not intend to say anything in regard to that matter without a suggestion from you, gentlemen. Therefore, in what I have to say, I will confine myself entirely to the matter in hand. In regard to the matter of the Riverside contract, the course I have pursued is one I would pursue in any personal matter which could come before me as a lawyer. I have no feeling against anybody connected with the work, but I have taken up this matter just as dispassionately as a lawyer would, and I think my associates should look at it in the same way. Lawyers come into court and argue and fight, but after the court has adjourned they are good friends, and afterwards meet on good terms. When I entered upon the discharge of my duties in January, 1878, I called upon the Comptroller, to take from him any suggestion as to the course I should pursue, and he said to me that so far as the affairs of the department were concerned I was to use my own judgment. My last communication is probably before you. The Comptroller said my action met with his approval. He said I could take no other course; and the Mayor made the same statement to me.

#### By Mr. Bogart:

Q. Do you consider that communication to pertain to you personally, or as Treasurer of the Department?

A. As a Commissioner of the Department; it is on file in the Comptroller's office; I will come to that in a moment, gentlemen, and show you that it is a record of the department. There will be three copies of it left with you. I propose to begin at the commencement, and give a history of this case. When I came into the department, in January, 1878, work had practically ceased; very few men were engaged. Soon afterwards a certificate of approximate estimate came in from Mr. Aldrich, which made the amount due the contractors, less Soon afterthirty per cent. reserved, a very small sum. wards my associates, on the 13th of March, 1878, removed Mr. Aldrich, notice having been given him before that to appear and show canse why he should not be removed. T opposed the removal, because I thought Mr. Aldrich had been a fur and honest man; nothing had been presented to me to show that he had not discharged his duties properly. A little later Mr. Franklin had been appointed in his place. I had never met Mr. Franklin, but understood then that he was not a member of the Society of Civil Engineers, and had no rank in the profession. I offered a resolution asking for information in regard to Mr. Franklin ; my associates differed from me, however; it was voted down, and Mr. Franklin was appointed. Soon afterwards, on the 20th day of March, an estimate for the sum of \$6,673.34 was handed in with the certificate of Mr. Franklin. Not being satisfied with Mr. Franklin's certificate for the reason that the bill was so much larger than that submitted by Mr. Aldrich, as Chairman of the Auditing Committee I refused to audit the bill, and also opposed the motion to transmit it to the Finance Department for payment. The next bill put in was April 10th, \$2,020.22; another was May 8th, \$9,141.14; June 5th, \$17,007,01; July 3d there was one for \$15,000.79; and the others were August 7th, \$18,114.41; September 4th, \$20,135.34; October 2d, \$18,170.09; in every one of these cases I explained my negative vote in the Board, very much as I have explained it to you gentlemen here. Then, on the 30th day of October, another approximate estimate came in for \$15,125.09; I wished to bring matters to a crisis, and so wrote the following certificate upon the auditing sheet, after it had been audited by my associate, Mr. Conover, who was the other member of the Auditing Committee:

"I refuse to audit the foregoing estimate of Decker & Quin-"tard, for the reason that my personal examination of the work "satisfies me that it has not been performed according to the "contract, and that the certificate of the engineer, Mr. Franklin, "that it has been so performed, is incorrect."

My associates approved the bill, and sent it to the Finance Department for payment; in all these cases I voted "No." Previous to that, on the 15th day of October, 1878, I had made at least twenty examinations of the work in person, not from diagrams or from drawings, but by walking over the whole ground from Seventy-second street to One Hundred and Thirtieth street, and making myself fully acquainted with all the details of the work, just as any lawyer with a contract before him goes and looks at the work; it is his duty; I was then very much dissatisfied with the character of the work, and on the fifth of October, a communication having been transmitted to the Comptroller by Mr. Eidlitz, and brought before the Board in a communication from the Comptroller, I offered the following resolutions :

"Whereas, the irregularities and defects in the execution of "the work under the Riverside contract have long been known "to the Commissioners, and to other persons, and are now "forced upon the attention of the Board by the letter of the "Comptroller, inclosing the letter and specifications of Mr. "Eidlitz;

"And whereas the questions presented affect severely the "integrity of the officers of the department, as well as the "public interest:

"Resolved, That, for the purpose of a thorough investiga-"tion, an examination be had, by the full Board, and that the "Comptroller, Mr. Eidlitz, and the engineers of the Depart-"ment, the contractors and their engineers and all other per-"sons interested be invited to be present.

"Resolved, That a special meeting of the Board for this "purpose be held the 11th of October instant, at half-past "nine o'clock A. M."

These were voted down by my associates. When the last estimate that I refused to sign, went to the Finance Department, on the same day I transmitted to the Comptroller a protest, and also a copy of the same protest to the Mayor; a copy of it is annexed to my statement here; then the Comptroller sent a letter, addressed to me as Treasurer of the Department, after my refusal to audit and to vote for the transmission of the estimate to the Department of Finance, and in it he says: "I will thank you to point out wherein your associates are in "error, and in what particulars the specifications have not been "complied with." Accordingly on the 15th of November, I transmitted to the Comptroller a communication, together with drawings and exhibits.

Now, that is the history of the case. The papers, which are probably before you in this investigation, allow me to suggest. will be first the contract and specifications; then there is a report made by the Engineer of the Comptroller, Mr. Bacon, the report of Engineer Franklin, which is printed in our minutes. The report of Engineer Franklin was made in this way; when the communication from the Comptroller, including the communication of Mr. Eidlitz to him, came to hand, the Board, by resolution, referred the subject to Mr. Franklin, Superintending Engineer of the Department, for report upon it; he made a report which is printed in our minutes in the month of November. I only speak from official records, entirely from the documentary evidence on file in this Department, and in the possession of the Comptroller. The next is a copy of this communication, which is on file, and therefore is a public record. I did not wish to trouble the Comptroller too much in my communication, so I referred only to two points, and they are as to the execution of the work on the parapet wall, and the pavement of the Drive; then I made drawings, so that everybody might have ocular demonstration of the manner in which the work was done.

By Mr. Worthen :

Q. Do you mean to say the whole of the work is substantially like these drawings (referring to drawings attached to letter of Mr. Lane to Comptroller)?

A. I will come to them in a moment, if you please. I want, however, to call your attention particularly to other work outside the parapet wall and curb; the contract calls for stone edging, and the tree-plots at the corners where the streets pass through were to be of truncated form, and the stones were to be seven inches in width; as they are set they are not truncated, but set with blue stone edgings at right angles to the sides; then, again, the street corners should be in one stone, but they are set in two stones; the most important matter of all, I think, which was a subject that I could not investigate, for the reason that it is covered up, and of which I could not get much information, is the sewerage and drainage, said to be defective, and I believe that a great deal of it that is laid down will not drain at all.

By Mr. Haswell :

Q. Who told you so?

A. Mr. Eidlitz, who resides on his property at Riverside Drive.

By Mr. Bogart :

Q. The architect?

A. Yes, sir; he has been inspecting this work every day; it has been said that I was in collusion with Mr. Eidlitz in this matter; I did not know him until four weeks after I wrote my communication to the Comptroller; I went up to his house afterwards to get some information; my examination of all this work has been personal. You asked me to speak of the parapet wall and the pavement of the Drive, did you not?

By Mr. Worthen :

Q. I want to know whether this is the universal character of the work; we shall tear down a portion of the wall; now, if it is so all the way through, we can tear down anywhere, you know?

A. I have got a witness—a mason—who worked on that wall; he will show you in fifty places where the contract has not been complied with. I have his name here, Martin Callaghan, 535 West Fifty-ninth street. I want Mr. Eidlitz called as a witness. Two weeks ago I saw thirty feet of the top of that wall without coping, and it was finished the day before, because I took sticks and dug out little quarry chips in the middle, and I dug down a foot; then, let me add, the contract calls for two courses of stones in the parapet wall.

Mr. Worthen: It says it may be of two courses.

Mr. Lane: Then, if it is done with two courses, the stones are to be crossed with boxed stones to go through. I found there is no such thing as stones running through. I only want to make you see that I looked into this matter, and am not talking from what one man says, or what another man says. Those measurements were all made by me on the ground. I don't propose to instruct you, gentlemen, because you stand high in your profession. Now I come to a matter which is very important in connection with this whole contract. Mr. Haswell asked Mr. Bogart the other day in my presence, whether there might not be a departure from the work as laid down in the contract, as long as it was for the interest of the work and the interest of the Department that there should be changes. Now, before the parapet wall was commenced, and before the pavement of the Drive was touched, the then President of the Department, Mr. William R. Martin, with a view of entirely settling all those questions, although he is a lawyer, and to put it on record so that it would cover the Department and its employés, wrote to the Corporation Counsel a letter, which is on file in this Department, and which I suppose you have read.

Mr. Haswell: We are not here, Mr. Lane, to judge of what the Department of Public Parks has done.

Mr. Lane: No, but the Department of Public Parks has not given any authority for the change in the height of the parapet wall. You will find the fact that this wall is one foot higher than the contract calls for; but I thought it was proper to call your attention to it, because Mr. Haswell has spoken of it, and the Corporation Counsel says that even where it is for the benefit of the City, the contractors have no right to make any changes in the contract.

Mr. Haswell: That is between the Corporation Counsel and the Department of Public Parks. We have uothing to do with it.

Mr. Lane: I want you to find the fact that that wall is one foot higher than the contract calls for. After the contract has been accepted and has been entered upon, no changes can be made by the Department. The specifications can only be modified or changed by subsequent action, and there has been no subsequent action.

Mr. Bogart: The contract says in the very first section of specifications (page 5) that the work shall be done and labor and materials are to be put in place as hereinafter more particularly described, all in accordance with the plans, profiles and drawings prepared by the Department of Public Parks. Whether that refers to plans previous to the drawings which were accepted at the time, or whether it may not also include plans made by this Department or by its officers; in other words, whether the original drawings formed part of the original specifications, is a question.

Mr. Lane : No authority has ever been given by the Department since the beginning of the work on the parapet wall authorizing any change in its height. That matter of the parapet wall and its height is a very important one in connection with this opinion of the Corporation Counsel, and that is the only question of law that I have to present to you. Mv facts are all embodied in my letter to the Comptroller, and I know that you gentlemen, eminent in your profession, bring to your task a long experience, and will look into these matters and will do what is right. I am perfectly satisfied that the matter should be submitted to you. I wish in addition to those named that you would examine Mr. James C. Aldrich. I claim that the part of the work he did was good and in accordance with the contract, and I wish that your attention might be called to some of his work. Mr. Aldrich has gone over that Naturally as he was the one who first constructed it. work. and carefully, he would be able to point ont a great many irregularities.

By Mr. Haswell:

Q. You are Treasurer of the Department?

A. Yes.

Q. Where are the copies of the estimates filed, with you directly, or with a clerk?

A. The Secretary is custodian of the records.

Q. Do you recollect whether any estimates have been given in for the roadways?

A. The approximate estimates cover every class of work.

Q: I want to know whether the roadway has been specified in the estimates?

A. Yes, sir; I can show you the estimates (referring to them). On the 30th day of September, 1878, in their approximate estimate, 9,600 square yards of pavement is stated by Mr. Franklin as completed, and yet in the report which I called your attention to he said that none of the pavement of the Drive was completed, and none of the rolling. The contract calls for five rollings, and yet he certifies for a certain number of yards, and the Department had no right to pay for anything except completed work. My associates certified to the Comptroller for work which had not been performed, and the City had to pay \$2,880 for it.

## WILLIAM IRWIN.

MR. WILLIAM IRWIN, Secretary of the Department, was called and questioned concerning the manner in which the estimates were kept and recorded.

By Mr. Bogart :

Q. These bills (the monthly estimates of the work) are submitted by the Superintending Engineer?

A. Yes, sir.

Q. Are the items verified by the Department, and, if so, in what manner?

A. The items, so far as the quantities are concerned, are based upon the Superintending Engineer's certificate; there is no other supervision for the amount of work done; it is my duty to examine the estimates and ascertain that the prices charged are correct, and that the estimates are made up in conformity with the contract, and I have so to certify.

Q. Mr. Franklin's report is final and exhaustive as to the quality and quantity of work done, and upon his certificate the bills are audited and payment made?

A. Yes, sir, if found to be reported in accordance with the terms of the contract.

Q. The original drawings which were exhibited at the time of the letting, and which were a part of the specifications at that time, where are they now?

A. They are in the office of Mr. Franklin, the Superintending Engineer, at Riverside Park.

## TUESDAY, December 10th, 1878.

The Commission met at 1 o'clock P. M., pursuant to adjournment, all the members being present.

### THOMAS FRANKLIN.

MR. FRANKLIN was in attendance, and was examined, as follows, by Mr. Charles H. Haswell:

Q. What is your position in connection with the construction of Riverside avenue?

A. I am Superintending Engineer of the Riverside improvement.

Q. When were you appointed?

A. On the 13th of March last.

Q. (Showing copy.) Will you look at that contract and specifications, and state whether they are those under which Riverside avenue is being constructed?

A. Yes, sir, they are.

Q. Can you furnish the original drawings and plans referred to in that contract?

A. I don't know that I can. Not any more than the original plans; the original drawings I don't think I have in the office; the mechanical drawings by which the work was let you mean?

Q. Yes, sir.

A. No, sir; I have not got them.

Q. Under which drawings then are you supervising and directing the work?

A. Some that I found there, and which had been made under Mr. Aldrich's direction, and some that I made myself; I have the original plan of the improvements of the avenue.

(Plan in question sent for, and inspected by the Commission.)

Q. What other drawing have you in your possession to guide you in your work?

A. Well, I have drawings of the wall, the retaining wall, the road bottoming, plan of the basins, and showing the manner in which the sewers and pipes lay.

Q. Do your drawings include those of the tree-plots?

A. Yes, sir.

Q. When can you furnish them?

A. I can furnish them to-morrow morning.

Q. Very good.

A. You want everything we have got, do you, down here tomorrow morning?

Q. Yes, sir.

(After some discussion, the Commission decided to postpone the inspection of the drawings until it should visit the office of Mr. Franklin, on the grounds.)

Q. What is the character, and what is the extent of the supervision, of the work in its progress?

A. Well, it is my duty to overlook the work, and see that it is properly constructed, and I am authorized to have an inspector besides, and an assistant engineer.

Q. Do you delegate the matter of supervising the work?

A. When any work is being constructed, I go along, and if it is not properly done, I have it taken up and done over, and I point out what I want done over, and so on, the same as engineers do.

Q. You alone do not supervise the work in its entire progress?

A. I have an inspector.

Q. When estimates of work performed are asked for by the contractor, what is your method of procedure to determine the volume or extent of the work?

A. We take the necessary levels and measurements to determine the amount and quantity.

Q. By whom are these measurements made?

A. Chiefly by Mr. O'Grady, the assistant engineer,

Q. Do you confide in him fully, to the extent of giving your certificate for materials furnished and work performed?

A. Yes, sir; as to correctness of quantities obtained by levels and measurements.

Q. What is the character and extent of your supervision of the materials furnished, their compliance with the specifications in all their details, both in accuracy of measurement and correctness of location in construction? A. Well, I examine the materials furnished, and see whether it will answer, and pass upon it.

Q. Describe a little more fully how you examine this material; I refer to measurements?

A. Measures for estimates, you mean?

Q. No, measurements of the stone, the diameters of pipe, and so forth.

A. We get pipe of one foot and eight inches diameter; I have never measured it myself to see whether it is just one foot, or just eight inches.

Q. My question was as to the accuracy of measurements.

A. I would reject anything that was not of the proper dimensions.

Q. You assume, then, that pipes and cut stones, and so forth, delivered there, are in accordance with the specifications?

A. No; I can't say that I assume that exactly; I see that they are; for although I have never specially made measurements of the size of the pipe, we order a twelve-inch pipe, and it is delivered on the ground; I give very accurate instructions as to the inspection of the pipe and all that.

Q. You satisfy yourself that they are of the proper dimensions before you accept them?

A. Oh, yes, although I can't say, as I told you before, that I actually measured the twelve-inch pipe.

Q. Is there any cast-iron pipe?

A. No, we don't use those at all.

Q. Have you ever seen or made a summary of the materials furnished and the work performed ?

A. Oh, yes.

Q. (Showing paper) Is that alike to it, or a copy of it?

A. I wrote that myself.

Q. (By Mr. Bogart) That is it then?

A. Yes, sir.

### Mr. Haswell, resuming :

Q. When a detail of work was incomplete, and like the parapet wall in its present condition, in what manner did you estimate materials and work?

A. By actual measurement.

Q. When such work was incomplete as a whole, or in part, how did you determine the amount to be allowed; for instance, a sewer-trench opened and partly constructed, but not filled in?

A. In that case, for an approximate estimate, I allowed them for all the pipe that was laid.

Q. Did you allow them for the pipe before the sewer was completed?

A. I allowed for the pipe that was returned to me as being laid, as my assistant measured it, at fifty-five cents per lineal foot.

Q. Is any portion of the road-bed of this Drive completed ? A. None.

Q. Have you certified to the construction of the road-bed, or the Drive, or any part of it?

A. Yes, I have.

Q. If the road-beds, then, are not complete, upon what basis have you certified to their construction?

A. There was a great deal more of road bottom laid than that for which I made an estimate, and I wanted to get an approximate estimate according to the value of the work done, so I estimated for a very small portion of the amount of the road that was actually to be done.

Q. And you allowed a full price for a portion of it?

A. Yes, sir; my reason was in order to pay them something towards the work done, according to its value.

Q, Have the contractors in their employ any one who has any surveillance over your measurements and computation?

A. They have not.

Q. The contractors confide their interests in these points wholly to you?

A. So far as I know.

Q. Your allowance, then, of thirty cents per square yard upon 9,600 square yards of the road-bed was predicated on the view that you have just stated?

A. Yes; it was an approximate estimate for work that they had actually done; as we estimate other work that is incomplete; there was a very large quantity of it, and we estimated it at 9,600 yards.

Q. As complete?

A. I estimated it as complete, for the purpose of getting a partial estimate of the whole thing.

Q. If the entire work had been complete at the period of your last estimate of materials furnished and work performed, would it have been a compliance with the specifications of the contract?

A. In regard to the quantities do you mean? Yes; they are estimated nearly in full.

Q. You are sure, then, that the estimates are not in excess at this time?

A. Yes, sir.

Q. Are the requirements of the specifications in the construction of the parapet wall fully met in the dimensions of the stone, and in the manner of laying and bedding it, in reference to the transverse binding of the structure and in the filling of the inter-spaces?

A. There is a deviation from the letter of the contract, inasmuch as there are two courses; one of them is required to be of one stone; that has not in all cases been strictly complied with.

Q. Why not?

A. The contractor did not obey orders; he was told to comply with the specifications, but did not do so; that work is not accepted yet.

Q. Did this direction include the entire parapet wall?

A. No, sir.

Q. Have you allowed him for that work?

A. Not all of it.

Q. Have you allowed him for any of this work that is in dispute?

A. I have allowed him an approximate estimate on it.

Q. I understand you, then, that the contractor has constructed the parapet wall in violation—part of it, that is—in violation or in opposition to the specifications and your directions?

A. Yes, sir.

Q, Have you reported that to the Department?

A. No, sir; not officially.

Q. How long since this work was performed?

A. Well, I should say it extended over a period of four months; I can't tell exactly.

Q. Since this violation of the specifications?

A. I should think it might be four months.

Q. Under whose direction did you allow the parapet wall to be raised in excess of the dimensions in the specifications and original drawings?

A. I thought I had a right to do that under the specifications regulating the dimensions of the wall, and I did so because I thought it would be better and safer.

Q. The height of that wall as determined by the department was given in the drawings, was it not?

A. I never heard that it was; I heard to the contrary, but I did not know of my own knowledge. I want to call your attention to the paragraph "B" under the heading "Improvements of Riverside Avenue" on page 4 of the contract. It reads:--

"To prevent disputes and litigations, it is further agreed by "and between the parties to this contract, that the Engineer "appointed by the said Department to superintend said work "shall in all cases determine the amount or the quantity of "the several kinds of work which are to be paid for under "this contract; and he shall determine all questions in rela-"tion to lines, levels and dimensions of work."

There is also something on paragraph "Q," page 30:

"And it is hereby further agreed that the said De-"partment of Public Parks shall have power from time to "time to alter or determine any modifications in the lines, "grades or dimensions of any part or parts of the work in-"cluded in this agreement, and that the said party of the "second part shall do and perform the work in accordance "therewith."

### By Mr. Worthen:

Q. Then you undertook the responsibility of increasing the dimensions.

A. I took the responsibility of raising the wall, because I thought I had a right to do so.

By Mr. Haswell:

Q. Had you any drawing of that wall in section given you? A. I had, as furnished by my predecessor.

By Mr. Bogart:

Q. You have raised it a foot?

A. Yes, sir.

Q. Are we to understand that you have never seen a drawing of the retaining wall and the parapet wall in sections?

A. I have seen a drawing of the parapet wall, in connection with the retaining wall.

Q. What was the height required of the parapet wall in the drawing that you saw ?

A. The height of the parapet wall was eighteen inches below the coping.

Mr. Haswell, resuming:

Q. And you increased the height?

A. Yes, sir.

Q. On your own authority?

A. On the authority which I claim was given me by the specifications.

Q. We understand, then, that you did see drawings of the retaining and parapet wall in sections?

A. Yes, sir.

Q. In whose possession were those drawings when you saw them?

A. They had been in the possession of my predecessor, Mr. Aldrich.

Q. And were transmitted to you?

A. Yes, sir.

Q. And you held them to be the authority for your procedure?

A. Yes, sir.

Q. In the stone filling or backing of the retaining wall, to what extent have the interstices or voids been filled so as to guard against a gradual and remote subsidence of the Drive when completed?

A. In reference to the retaining wall now?

Q. Yes, sir.

Q. You don't understand the question; in the stone filling or backing-

A. Ob, behind the wall!

Q. Yes; to what extent have the inter-spaces or voids been filled so as to guard against the gradual or remote subsidence of the Drive when completed?

A. The filling has been deposited behind the wall.

Q. What measures have you taken to guard against subsidence?

A. I have carefully overlooked the filling behind the wall.

Q. Did you take especial measures to have the void filled?

A. In some cases.

By Mr. Worthen :

Q. What is the foundation?

A. Large stone.

Mr. Haswell, resuming :

Q. Are the depth of the foundation and the width of the retaining wall, as required by the drawings, rigidly maintained in its structure?

A. In the depth of the foundation and the width of the retaining wall, did you say?

Q. Yes, sir.

A. Yes, sir.

Q. Rigidly maintained in its construction according to the specifications?

A. I can't say that that is so exactly, because my predecessor allowed them to build the back of the wall on a slope.

Q. I refer to your acts; never mind your predecessor?

A. Then let me have your question again, sir.

**Q.** (Question repeated.)

A. Substantially maintained.

Q. You say "substantially;" are we to understand by that that in some portions it is of less dimensions than that required by the drawings?

A. No, sir; not at all; I thought you had reference to the

manner of the construction; it is the full dimensions required by the drawings.

Q. Is it in its construction rigidly in conformity with the specifications.

A. In its construction it is in conformity with the spirit of the specifications.

Q. With the specifications?

A. With the specifications; I thought I had answered that question.

Q. No.

A. You asked me whether it was in conformity with the specifications, and I answered it is.

Q. Are the requirements of the specifications in the construction of this wall fully met in the dimensions of the stone, in the manner of laying and bedding them, in reference to the transverse binding of the structure and in the fillings of the inter-spaces?

A. Yes, sir.

Q. Inasmuch as a very large portion, if not all, of the transverse culverts and drains have been laid and are now so deepset that it would involve a general uncovering of them at a very considerable cost, we submit to you, as the officer to whom the interests of the department, in this matter, have been solely confided, if this work has been wholly constructed in a strict conformance, both in materials and work, with the requirements of the drawings and specifications?

A. That work has been constructed well and in accordance with the specifications.

By Mr. Worthen:

Q. In strict conformance?

A. Well, there may have been some deviation, possibly the matter of ramming sometimes; but in that case the material was thrown down from a neight, so that the result was the same.

Mr. Haswell, resuming :

Q. What number and grade of assistants have you to aid in the strict examination of the materials and work in the progress of construction? A. I have one whose especial duty it is to assist me in that way.

By Mr. Bogart :

Q. What is his name?

A. Mr. Patrick H. Norton.

Q. Have you only one?

A. Only one inspector; I have, first, an assistant engineer, Cornelius O'Grady; then I have a transit man who does duty as draughtsman, Mr. Hufenagel; I have also a leveler, Mr. F. S. Odell, who works with the transit and the level; there is a rodman, Mr. W. D. Pierce, whose chief duty is in my office.

Q. These are all office people that you are talking of now?

A. Not necessarily; the rodman I mentioned does duty in the office, but also goes into the field occasionally; then I have six chainmen and an axeman; these are all, with the exception of Mr. Norton, whom I have previously named.

Mr. Haswell, resuming:

Q. How many of these are exclusively employed in the supervision of the work in its progress?

A. They are all employed in that way; that is the reason they are there.

By Mr. Worthen :

Q. How many have a right to give orders?

A. Five of them have a right to do so.

Q. They answer as a sort of inspectors?

A. Yes, sir.

Q. Had the cut stone designated at street corners been set in a manner different from that required by the drawings?

A. Yes, sir.

Q. How then are the curb stone corners set?

A. The cut stone pieces are in some places in one piece, and in same places more than one.

Q. Do the drawings admit of that variation?

A. Well, now, I want to see the draughtsman about that, if you will allow me to consult him.

[Mr. Franklin left the room, but returned in a minute and continued his answer.]

The drawing calls for one piece, but I don't understand that the specifications do.

Mr. Haswell, resuming :

Q. If the drawings call for one piece, under what authority have you permitted two to be laid in some places?

A. On the authority of the specifications.

Q. Will you designate in the specifications where you derive your authority !

A. Paragraph 57, page 20.

Q. In the stone filling behind the retaining wall, and in the embankments, did you require the void to be filled in any manner as required by the specifications?

A. Didn't I answer that question before? I answered it substantially some time ago.

Q. Partially you did. I now want an answer specific to this question. In the stone filling behind the retaining wall, and in the formation of the embankment, did you require the voids to be filled in any manner as required by the specifications?

A. They have been so filled in part.

w. What test of the dry cement furnished, and of the cement mortar, as to its proportionate constituents, have you made?

A. We examined it from time to time as to its being properly set.

Q. What examination did you give the dry cement?

A. We didn't give any examination to the dry cement; we mixed it, and tested it in that way.

### By Mr. Worthen :

Q. Did you make the test in block?

A. No, sir.

Q. The only test you made was after the mortar was mixed? A. Yes, sir.

Mr. Haswell, resuming :

Q. Was the road-bed rolled prior to the laying of the foundation stones upon it?

A. [Interrupting.] No, sir.

Q. [Continuing.] As required by the specifications, paragraph "A," section 45. A. I claim that the contract does not require it, except as directed by the engineer.

Q. Have any of the road-beds been finished up to their subgrades?

A. Yes, sir.

By Mr. Bogart :

Q. You mean by sub-grades, before any stones have been put on it at all?

A. I understand by "sub-grade" the bottom of the stone.

By Mr. Worthen :

Q. Do you say that you have got no gravel on at all yet?

A. None at all.

Q. The two layers of stone are not on yet?

A. Not in all cases.

Mr. Haswell, resuming :

Q. In the upper portion of the Drive, it appears that there is some stone filling interspaced with sand; is that intended as a part of the construction of the road-bed?

A. Yes, sir.

By Mr. Bogart:

Q. Has any work been done above the foundation stones?

A. Some quarry chips have been placed on top.

Q. To what depth at any point have you allowed the filling to go on top of that foundation?

A. About two inches.

Q. Has not more than two inches been put on?

A. It is in some cases more than two inches, but it was against orders, and it has been taken off again.

Q. Some of it has been put on ; that you consider has been in compliance with orders—that has not exceeded two inches?

A. Yes, sir.

Q. When that material has been placed on top of the foundation stones, in accordance with your directions, then the foundation has been put in all right; that is the way I understand it?

A. Yes, sir.

# By Mr. Haswell, resuming :

Q. What are the requirements and specifications as to the construction of the road gutters, and are their upper surfaces in accordance with these requirements?

Mr. Bogart: As described in section 51, page 19 of the contract: "Where so required gutters, shall be laid of quarry "stones, gneiss trap or granite. These stones are to be from "eight to twelve inches deep, from three to five inches wide, "and not less than eight inches long. They are to be roughly "shaped, sufficiently to fit compactly together. They are to be "bedded upon a well rammed layer of gravel, sand, fine quarry "chips or coal ashes, not less than one foot in depth. They are "to be laid by hand truly and evenly, and rammed to a firm bed, "so that their surface shall conform to the lines and curves "directed. All interstices are to be filled with fine stone chips, "sand or gravel."

A. They have chiefly been done so; I want it understood gentlemen, that the work has not all been accepted; it is subject to modification.

### Mr. Haswell, resuming:

Q. Do you then understand the surface to the gutter-stones is to be smoothed after they had been set?

A. There is nothing said about smoothing off, sir.

Q. Don't the specifications require the upper surface to be smooth, be fair, that is?

A. There is nothing said about it.

Q. Will not the upper surfaces in their present condition interfere with their purposes as a gutter?

A. Yes, sir; but the gutters are not yet finished.

Q. Have the ends of the tree plots been curbed in compliance with the drawings and specifications?

A. I made a change in some of the ends of the tree plots, and they have been curbed in accordance with my orders.

### By Mr. Bogart :

Q. Section 35 of the specification reads thus : "At the end "of tree plots and such other points as shall be directed, the "granite curb will be provided and set in special lengths, with "joints cut to the angles shown on plan, and with faces dressed " as directed, except as to the lengths, the angles at joints, and " the face dressings ; these special angle-stones are to conform " to the specifications herein made for granite curb."

A. They have been done according to the drawings, as I said.

Q. At the ends of the tree plots?

A. I did not know what the question referred to at first; you mean those little angular ends at tree plots?

#### Mr. Haswell, resuming :

Q. I will ask the question again. Have the ends of the tree plots been curved in compliance with the drawings and specifications?

A. They have been in compliance with the drawings I furnished.

Q. Do the drawings and specifications call for blue-stone curb at the ends of the tree plots ?

A. No.

Q. If they do not, then how is it they have been set in accordance with the drawings and specifications as you have just declared?

A. Well, it escaped my attention at this time that there was a granite curb required; that is the reason I answered in that way. My answer was right at first in accordance with the drawings; I said that.

Q. We understand you then, that the drawings called for blue stone curbs, set at right angles to the plane of the tree plots?

A. My drawing called for blue stone curbs set in semi circular form; in part that is, for some of them.

Q. If they did so, why is it that some are laid at right angles to the tree plots, and the rest in circular form ?

A. Some of them are laid semi-circularly and some are not.

Q. Why have you allowed the deviation?

A. The plan called for it; the original plan called for part of them to have square ends and part not. By Mr. Bogart :

Q. Where is that plan now?

A. I think Mr. Hufnagle will have it.

Mr. Haswell, resuming :

Q. An observation of the work shows that the edging around the tree plots has been set so much in advance of the roadbed that it has to be supported in position by an embankment; do you consider such setting to have sufficient stability to withstand the winter frost?

A. I do not; they will have to do that over again.

Q. Will not such curbing require to be reset before the work will be accepted as completed ?

A. It will.

Q. Have you not certified to such setting having been performed and allowed the full price for it?

A. Yes, in the nature of an approximate estimate.

Q. Have you not certified as to such setting having been performed and allowed the full price for it?

A. I have.

Q. If you have any statement to make, strictly in connection with your duties, and not elicited by questions submitted to you, you are at liberty to make them, either now, or at any subsequent period of our meetings.

A. About what I said a few minutes ago, that I don't consider the work completed at all or accepted, it is subject to modifications; I don't understand the work as accepted, and never did.

#### Mr. Worthen:

Q. Is the work considered finished in your estimation, now; for instance to which Mr. Haswell referred, do you measure the whole piece of curbing—blue stone curbing, for instance —and allow them for all?

A. I gave the contractor an approximate estimate.

Q. If you have estimated in full for work done, upon what security do you depend for the completion of the work?

A. I have not estimated in full.

Q. Now, Mr. Franklin, I wish you to submit to this board, either here or at your office on the grounds, every drawing that you have received from the Department in connection with the prosecution of this work.

A. Yes, sir.

[The Commission then adjourned, to meet on Thursday morning, December 12th, 1878, at the house of Mr. Haswell, 162 W. Forty-fifth street, to proceed then to the scene of the work in dispute].

## THURSDAY, December 12, 1878.

The Commission met pursuant to adjournment, at nine o'clock, at the house of Mr. Haswell, and proceeded to Riverside avenue. The day was spent in overlooking the plans in Mr. Franklin's office, and in carefully examining the wall, roadways, and other parts of the improvement from Seventysecond street to the northern terminus of the Drive.

### FRIDAY, December 13, 1878.

The Commissioners met, at three o'clock P. M., at the Department of Public Parks building.

All the members were present.

Mr. Franklin was in attendance, with two of his assistants. The Commission examined a number of plans which he submitted to them, and marked some for identification.

Mr. Haswell then questioned Mr. Franklin, as follows :

Q. Why is it that the retaining wall in the vicinity of One Hundred and Twenty-eighth street and One Hundred and Thirtieth street is being filled with loam or loose earth?

A. It is about all the material we have got there to back it up with, and I thought that the wall was strong enough to sustain it.

Q. Do you think that this wall, backed so, would retain

stability under the stress of the load, aided by a severe frost?

A. Yes, sir; I think the wall is strong enough: it is very well built.

Q. We understand you, then, that you did not consider it necessary to back the wall with loose stone, as provided for in the specifications?

A. That is provided for in the specifications where directed? Q. Yes, sir.

A. No, sir; I did not consider it necessary in that case.

Q. Have the sewer trenches been excavated as fully as required by the specifications?

A. That has been the intention always.

Q. Do you know whether they have been?

A. So far as I know, they have been.

Q. Do you consider that the stones furnished for the gutters of the roadways, and the manner in which they are laid, are in conformity with the specifications?

A. Not entirely so; some of the gutter must be taken up.

Q. Would not all of it have to be taken up under a strict construction of the specifications?

A. No; I think not.

Q. Well, why do you think not?

A. From observation.

Q. Is there any portion of it laid with a smooth upper surface ?

A. No, sir.

Q. Have the stones at any portion of the gutters, as laid, been squared or been tooled in any way, as required by the specifications?

A. Yes, sir.

Q. Do you recollect the locality where such work has been done?

A. Not the precise locality, sir.

Q. If, then, it was done in one particular part, why was it not done in the whole?

A. On account of the neglect of the contractor.

Q. Have you given in an estimate, then, for those gutters as laid?

A. Only an approximate estimate.

Q. And which included a portion of that not laid in accordance with the specifications; did it not?

41

A. The estimate for the gutter is approximate.

Q. In that approximate estimate did you include any portion of that which you considered was to be laid in accordance with the specifications?

A. All that I have to say is that I made an approximate estimate of the gutter.

Q. You will please explain, then, what we are to understand by an approximate estimate?

A. An approximate estimate is one which has not been obtained by exact measurements—does not pretend to be exact; the gutters have not been fully estimated.

Q. In making the approximate estimate, then, did you rely altogether upon the lineal or superficial measurement of the gutter; or did you include in that the character of the material and the work?

A. I relied upon the superficial measurement of the gutter.

Q. And not upon the character of the work?

A. No, sir; I relied upon the superficial measurement of the gutter.

Q. And the character of the work?

A. No, sir.

Q. The coping of the parapet wall has a chisel draft upon it as required by the specification, in some small portion of its length; why is it that the greater proportion of this wall has no chisel draft?

A. The contractor has not complied with the specifications in that particular.

Q. Why then did you permit him to proceed with it?

A. The work has not been accepted.

Q. Have you not included some of the work in your estimates-

A. (Interrupting.) Yes, sir.

Q. Of work done; if that has not been done, how do you propose to meet the requirement of the specifications?

A. It can be done by having a draft put on.

Q. Do you propose to have it done?

A.<sub>3</sub>Yes, sir.

Q. Will not the putting it on as determined—the coping being in position—disturb the joints ?

A. Yes; but it will have to be taken off to be put on—the . coping should be removed.

Q. It appears then that in order to comply with the specifications of the contract in this particular, a very large proportion of the coping will have to be removed, drafted and reset.

A. Yes, sir; a large proportion of it.

Q. Why is it that the stones at the ends of the tree-plots differ from the specifications in material and form?

A. Because I thought it would be better and more economical to make the change.

Q. Why is it that the face of the retaining wall in the matter of projections has been permitted to vary so widely from the requirements of the specifications in having a greater projection than three inches?

A. That was on account of the contractor to carry out specifications.

Q. Have you not estimated for such work in your bills to the Department?

A. I estimated for such work.

Q. In full?

Q. Nearly in full.

Q. Have you not accepted the retaining wall so far as it is progressed with?

A. Not fully.

Q. How is it that, contrary to the strict requirements of the specifications, a considerable portion of the flagging is less than two and one-half inches thick, and that some of it is being laid in loam instead of clear gritty earth, or clear coal ashes?

A. I don't know that any of it that is laid is less than two and one-half inches, and where it has been laid in loam merely, instead of in gritty earth, it is contrary to specifications.

Q. Then why is it done?

A. I don't say that it has been done; if it is being done in that way it is contrary to the specifications.

Q. I hold that it has been done and is being done—from my observations of yesterday.

A. If it is being done, it is contrary to the specifications.

Q. Why is it then, that the work is allowed to progress in opposition to the specifications?

A. It is not allowed; they will have to take it up.

Q. I ask why it is allowed to be progressed with —why work that is in opposition to the specification should be permitted to be entered upon, let alone executed?

A. If it is not in accordance with the specifications it should be taken up.

Q. Is it in accordance with a proper system of surveillance on the part of you and your assistants?

A. I leave that to the judgment of the Commissioners.

Q. Have you any record of the points in which the contractors have, in your opinion, been deficient in the character of the materials furnished and work performed?

A. I have no written record, but I can point out wherein they are deficient.

Q. Will you do so?

A. They have been deficient in the construction of the parapet wall.

Q. Anything else?

A. That is all I am prepared to state now, although there are other matters in which they have not complied with the specifications.

By Mr. Bogart :

Q. Yon said the chisel draft was deficient?

A. Yes, sir.

Q. Now read the contract where it begins :

"For improving the avenue known as Riverside avenue, in "the City of New York, as laid out under the second section "of chapter eight hundred and fifty of the Laws of 1873, and "shown upon a map thereof, filed under the provisions of said "section, on the twenty-third day of February, 1875, by the "construction of the roadway, curb and gutter and sidewalk "which have been or may be adopted by the Department of "Parks."

It goes on and says, "This agreement made," and so forth, and then comes sectionA. "Witnesseth, that the said party of the second part has "agreed, and by these presents doth agree, with the said parties "of the first part, for the consideration hereinafter mentioned "and contained, and under the penalty expressed in a bond "bearing even date with these presents and hereunto annexed, "to furnish, at his own proper cost and expense, all the neces-"sary materials and labor for improving Riverside avenue, be-"tween Seventy-second and One Hundred and Thirtieth streets, "in the City of New York," and so forth, covering, as I understandit, a certain avenue, which avenue is shown upon this map (exhibiting map), and of which you consider this to be a map?

A. Yes, sir.

Q. And the red lines on this map show the westerly boundary of that avenue?

A. Yes, sir.

Q. Has any work been done which you have included as being done under this contract outside of the line?

A. Yes, sir; some.

Q. Of what nature was that work?

A. Excavation.

Q. Outside of the avenue proper, was that?

A. On the west side.

Q. In what is known as Riverside Park?

A. Yes, sir.

Q. That park is under the control of the Department of Parks?

A. Yes, sir.

Q. What was done with the material you excavated from there?

A. It was put into embankment.

Q. Was it all earth, or part earth and part rock?

A. All earth except boulders.

Q. Was that amount included in the regular estimates from time to time ?

A. Yes, sir.

Q. As excavation, and treated in the same way as the other excavation in reference to this allowance for embankment and so forth?

A. Yes. sir.

Q. The amount of material excavated outside of the line of the avenue was quite large?

A. Yes, sir.

Q. The third section of specifications speaks of the clearing of trees "except such as said Department directs to be saved;" do you know of any original plans which showed that special trees were to be saved?

A. I do not.

Q. How many trees have been cut down by the contractor during your superintendence of the work?

A. Quite a number.

Q. They have not been cut down without your permission? A. No, sir.

Q. The next section is in regard to the excavation and disposition of the top soil; has any of that top soil been excavtaed and placed in piles?

A. Not since I came there, except a very small portion.

Q. Did you find top soil piled there?

A. Yes, sir.

Q. Has that been excavated and placed on the slopes?

A. Some of it has.

Q. And has been paid for here as second excavation?

A. Yes, sir.

Q. The next section speaks of conforming to required grades and so forth; now, is there shown on the original maps special grades for those portions of the avenue included between side drive and main drive, etc.?

A. No, sir.

Q. I see an item here relating to boulders and detached rock to be classed as earth excavation, 'except where they measure one-half cubic yard or more each; has care been taken to give them full measurement of all boulders over onehalf cubic yard?

A. Yes, sir.

Q. And not to give them anything under?

A. Yes, sir.

Q. The price for excavation of earth will include the excavation, shaping, "slopes, removal, and final deposit, in accord-"ance with the specifications, of all the material herein deA. I have not estimated anything that has not been finally deposited.

Q. The same question in regard to not giving the price for the excavation of rock until its final disposition, in accordance with these specifications?

A. No; I don't know about that.

Q. The specifications, section six, provide that "the price for excavation of rock will include the excavation, removal, and final disposition of the material, in accordance with these specifications;" did you pay for any rock that was not finally disposed of?

A. Rock has not been estimated unless it was finally disposed of.

Q. "No rock filling will be allowed within three feet of the finished grades;" have you allowed any rock filling within three feet of the finished grade?

A. I have not.

Q. Are you aware that any has been put in within three feet of the finished grades?

A. I am not.

Q. Are you sure that none has been put in within three feet?

A. I am not.

Q. Have you taken care—see the next line—that no rock filling has been laid in such parts of the embankments as would interfere with trenches or pits to be afterwards excavated, or with provisions for the roots of trees?

A. Yes, sir.

Q. Have you taken care that in embankments made chiefly of stone so much earth should be deposited as was sufficient to fill the interstices thereof?

A. It has been done in part.

Q. Now, I ask whether you have made the filling behind the walls in layers; what were your directions in regard to that?

A. I thought it a good enough job to put loose stone behind the wall.

Q. You have carefully measured the embankments in accordance with this next clause, and made the allowances in accordance with the measurements?

A. Yes, sir.

Q. In the two plans shown us by you to-day, the original plan for parapet wall was eighteen inches high; will you state when and why the change was made?

A. The change was made because I thought it safer and better to add a foot to the height of the wall, and the change was made before any parapet wall was laid?

By Mr. Worthen :

Q. Safer in what respect?

A. Children walking around the wall would get on top too easy if it was so low; that is one consideration with me; a lower wall is more dangerous than a higher one, is it not?

By Mr. Bogart:

Q. Had you ever been informed by the Department of Parks, or its officers, that there had been a decision by the Corporation Counsel saying that the change could not be made?

A. I was not so informed; if I had been, I would not have made the change.

Q. Do you remember whether the coping stones have been fully three and a half feet in length?

A. In special places I ordered them to be fully three feet in case of a curved wall.

Q. But otherwise?

A. Otherwise, so far as I know, they are; yes, a great deal more than that.

Q. The old plan shown us to-day had upon it iron pipes projecting from the wall just underneath the parapet; have any such been put in?

A. No, sir.

Q. Will, you in view of Article 19, state why they have not?

A. I did not approve of the plan—that is all I can say.

Q. The next section in regard to dry stone culverts; have any of these been built under your direction?

A. Yes; there was one near Seventy-ninth street.

?

Q. Was it carefully built according to these specifications? A. Yes sir.

Q. Please read the paragraph beginning (Section 17) "All irregularities in the bottoms of trenches," and state whether that has been thoroughly complied with?

A. Yes, sir; that has been complied with.

Q. Read section 23, and state whether that has been fully complied with?

A. Material has been carefully placed over the pipes.

Q. Have you taken care about the ramming?

A. I have.

Q. Have you kept the material free from stones to the height of at least one and one-half feet above the top of the pipes?

A. Yes, sir.

Q. Section 25 is in reference to vitrified pipe; I want to go to paragraph (d) of that, and ask whether all the pipes are well and smoothly salt-glazed, and of equal quality in every respect to the sample exhibited to the said department?

A. I don't know what samples were given to said department; but I know it was good pipe, and was carefully inspected.

Q. Did you inquire whether there were any samples here at this department to compare with?

A. No; I never inquired that.

Q. Were the pipes generally with collars, or with hubs and spigot?

A. All the twelve-inch pipes are collared.

By Mr. Worthen:

Q. How about the curved pipe (clause (i), page 11); have the requirements been complied with?

A. Yes, sir.

Q. Were there any house connections or drains?

A. No, sir.

By Mr. Bogart :

Q. Has care been taken to keep the inside of the pipe clean?

A. Yes; very great care.

### By Mr. Worthen :

Q. "Each pipe shall be subject to all tests ordered by said "department;" has there been any test?

A. Nothing but the inspection of the pipes?

By Mr. Bogart :

Q. In the construction of brick masonry (page 13, section 28), have the bricks been of the quality designated?

A. Yes, sir.

Q. Have they been laid as provided in that specification?

A. They have been laid in accordance with the specifications.

Q. Section 29 says, "All mortar is to be composed of one "part of fresh ground hydraulic cement of the best quality, "and two parts of clear sharp sand, entirely free from loam. "It is to be carefully and thoroughly mixed dry, and a suffi-"cient quantity of water is to be afterwards added to make it "of good consistency. The mortar is to be mixed in no "greater quantity than is required for the work in hand. "Any excess that may be left over at night, or that may have "been standing longer than two hours, is not to be retem-"pered and used in any way." Has that specification been complied with?

A. Yes, sir.

Q. Section 30; has all cement furnished by the contractor been inspected and tested before use?

A. It has all been subject to inspection and test; I can't say that it has all been tested.

#### By Mr. Worthen :

Q. What is your test?

A. To mix it up in the proper propertion, and see how it sets.

By Mr. Bogart :

Q. Has any been found of improper quality?

A. Yes, some has been rejected.

Q. Referring to section 31, has all the concrete that has been used been made in the manner there described?

A. So far as I know it has; it is good concrete.

7

Q. Referring to section 32, about stone masonry; have the stones always been laid on the natural bed?

A. Yes, sir.

Q. Have any piles been used?

A. No, sir; none.

Q. Page 16, section 38; in the construction of manholes, have these specifications been fully filled?

A. Yes, sir.

Q. The same question in regard to section 39 about inlet basins?

A. Yes, sir.

Q. Section 45; have the contractors in all cases shaped their roadbeds to the lines and grades directed?

A. Yes, sir.

Q. Section 45, paragraph A; have you not considered it in any case necessary to roll the road-bed?

A. No, sir.

Q. Do you think that on all these embankments the roadbeds will be sufficiently compact without rolling?

A. The embankments are mostly on the west side, where we don't have anything but the walk.

Q. There are some other embankments?

A. Yes; but that embankment has been made a long time.

Q. Paragraph b, section 45; do you consider that the stone for foundation is generally sound and durable?

A. Yes, sir.

Q. Have you kept the contractors substantially to the dimensions of the foundation stones specified in this paragraph b?

A. We have endeavored to comply with the spirit of that; we can't regulate the exact dimensions of those stones, or we would not get any of it done; but we have endeavored to comply with the spirit of the specifications.

Q. Have you insisted that the stones deposited upon the roadway should be evenly adjusted, so as to form a roadway in which the stones are brought together to your satisfaction?

A. Yes, sir.

Q. Have these stones generally been adjusted by hand?

A. They have for the most part been adjusted by hand.

Q. You think that in general they are well and compactly brought together ?

A. I think that they are.

Q. Is there a considerable portion of cobblestone in the substrata of the Drive?

51

A. There are such stones there, but they ought to be removed; it is not the intention that they should remain there; they must be thrown out.

By Mr. Haswell:

Q. You don't pretend to say that where that has been sanded over as we saw it, that anybody is going over to pick out the cobblestones?

A. Where they show on the surface.

By Mr. Bogart :

Q. Are there any cobblestones mixed with the lower strata of the pavement?

A. No; there is no cobblestone mixed in below; they are all quarry stones.

By Mr. Bogart:

Q. That is 'o say, the stone included in paragraph (b) are all quarry stones?

A. Yes, sir.

By Mr. Haswell:

Q. How is it, then, that there are so many cobblestones upon the surface?

A. They were brought out with the gravel loam that was deposited upon the stones, and should be removed.

By Mr. Bogart :

Q. Now, looking at paragraph (c) foundation surfacing; has there been spread over that foundation to a considerable extent, finer rubble and quarry chips?

A. Yes, sir.

By Mr. Worthen:

Q. In all cases?

A. No, sir; to a considerable extent you asked?

# By Mr. Bogart :

Q. In all cases, where there has been anything added to the foundation stone described in paragraph (b), has there always been finer rubble and quarry chips than the next course ?

A. There is a small portion of it where that has not been done; that I don't know either; small stones or quarry chips, I think.

Q. Has care been taken not to fill up the cavities of the lower portion of the rubber bottom, which must have a cellular character to facilitate drainage?

A. No, I don't think I cared particularly with that view, because I hardly know how to do that; if you put the quarry stones there how can you keep them from going down when you roll it; when you roll it, I take it, the stone is going down into the ground, and the ground is coming up to the stones.

By Mr. Haswell:

Q. What part of it have the quarry chips being laid on?

A. In the neighborhood of One Hundred and Fourth street; then there are other places besides.

By Mr. Worthen :

Q. Are quarry chips the rule or the exception?

A. I should think quarry chips were the rule.

By Mr. Bogart :

Q. Has there been some gravely earth or hardpan mixed with this material ?

A. The mixing has not taken place yet.

Q. Is any of it deposited there?

A. Yes, sir.

Q. Has there been any sprinkling over the Drive?

A. No, sir.

Q. Any rolling?

A. No, sir.

Q. Have you directed the contractors as to the weight of roller?

A. Not yet.

Q. The next thing is the pavement of the ride; you have some ride brought to a subgrade? A. That is the fifteen inches under finished grade; yes, sir.

Q. Is there none of it rolled ?

A. No, sir.

Q. Have you put upon that gravelling loam?

A. Yes, sir.

Q. Have you rolled it?

A. No.

Q. Has anything more been done with reference to the ride?

A. No.

Q. Has any of the pavement of the walks been brought to subgrade ?

A. Yes, sir.

Q. Has any of it being rolled?

A. No. sir.

Q. Has any quarry stone then been filled in ?

A. Yes, sir.

Q. Has care been taken in filling them in, to comply with the specifications?

A. Yes, sir.

Q. With the smallest on top ?

A. They are all pretty small.

Q. Have they been placed so as to lie well together?

A. Yes, sir.

Q. Has a layer of quarry chips been placed on their surface?

A. Not yet.

Q. Has the construction of the walks proceeded any further than you have now stated?

A. No.

Q. Has any gravel to be used for rides, roads or walks, been delivered at the work?

A. No.

Q. Have any samples of the gravels proposed to be used been submitted to yon?

A. No.

Q. Have you used any granite curb angle-stones ?

A. No, sir.

Q. In the original designs you showed us there was provision made for granite curb angle-stone--what have you substituted for it?

A. I have substituted blue-stone, making a semi-circular end.

Q. Have you in some cases, as for instance between ride and Drive, substituted for granite angle-stone blue-stone edging?

A. No, sir; because there were no granite curb angle stones to go there.

Q. Were the ends of the tree plots between ride and Drive constructed as upon the original designs?

A. Yes, sir.

Q. Both in regard to form and material?

A. Yes, sir.

Q. This blue stone curb was generally of a sound and good quality of blue stone?

A. Yes, sir.

Q. Have they been placed in lengths of not less than three feet except where you have specially ordered otherwise; did you order the special lengths where the blue stone curb is set upon a curve in the upper portion of the work, or did you simply permit them to put in such short lengths as would permit them to go around the curve ?

A. That is it; we allowed them to put in several pieces.

Q. Have all the curb and edging stones substantially been laid truly to the lines and grades given by you with joints not exceeding three-eighths of one inch?

A. Yes, sir.

Q. Have they been filled and backed up with at least one foot of sand or coal ashes?

A. The filling behind them has been substantially according to contract.

Q. Has the curb been generally of full thickness and length for the entire depth of the stone?

A. Yes, sir.

Q. And the ends truly squared and dressed?

A. Yes, sir.

Q. Blue stone edging (section 55); have they been delivered fully in accordance with these specifications—that is, all that have been delivered?

A. Generally they have.

Q. Have you rejected any?

A. Yes, sir.

Q. Have any been set that were not in accordance with the specifications ?

A. There may be a few that have escaped attention.

Q. Well, are those that are set substantially in accordance with the specifications?

A. Yes, sir.

Q. Are there are any blue stone edgings such as described in section 56?

A. No, sir.

Q. Section 57, referring to corner curb-have they, such as have been delivered at the work, been in accordance with these specifications?

A. Yes, sir.

Q. Have you changed the design for these corner curbs in various cases from one stone to two or three stones ?

A. Yes, sir.

Q. Can you give us any special reason for doing so?

A. Simply because the specifications did not require that they should be of one stone.

Q. Have the cross-walks been delivered in accordance with these specifications?

A. Yes, sir.

Q. And set in accordance with them?

A. Yes, sir.

Q. They have been well and firmly bedded on a foundation of sand and gravel ?

A. Yes, sir.

Q. Are any granite steps yet delivered?

A. No, sir.

Q. Has any foundation for those steps been put in?

A. No, sir.

Q. Referring to page 22 and section 66—have the contractors removed and taken up in all cases material furnished or work done which has not been to the satisfaction of the engineer?

A. Not in all cases.

Q. Have the contractors removed any material which was not to your satisfaction ?

A. Certainly.

Q. Have they taken up any work which was not to your satisfaction?

A. They have.

Q. Have they furnished in place of it other material which was satisfactory to you?

A. Certainly they have.

Q. Do you consider—referring to section 80—that the contractors have vigorously prosecuted this work?

A. Not always.

### By Mr. Worthen:

Q. Referring to paragraph (G) in section 87, are they paying twenty dollars a day now?

A. No; they are released from that.

By Mr. Haswell:

Q. Have the boundaries of the avenue been changed; and if so, why?

A. They have been changed, because it was thought better for some reasons to have them changed.

Q. By what authority did you make the change?

A. Where we kept within the boundary there was not any special authority required, I should say; the Park Commissioners have jurisdiction over the park ground as well as the Drive.

Q. One moment—you are under examination, not the Park Commissioners : by what authority did you change the boundaries?

A. By the authority conferred by the specifications; see paragraph 2, page 30; I am the agent of the Park Commissioners.

Q. In these changes was the avenue made narrower or wider, or both ?

A. Made narrower in nearly every case, with the exception of a short distance that we made wider.

Q. In the computation of the excavations there, did you make them from the reduced widths or from the original topographical contour?

A. From the reduced widths.

# By Mr. Worthen :

Q. Give me your detailed statement of where you made the changes?

A. From Seventy-second street on the first seventy-five feet required an embankment or wall; the natural ground from this on, for two hundred and seventy-five feet, is higher than the graded walk, so the sidewalk is made narrower for economy; for one hundred and fifty feet the width is twentyfive feet, thence in two hundred feet decreasing to twenty-five feet from forty-five feet, the latter being the original design; at the south side of Seventy-ninth street the walk was narrowed from forty-five feet in width to twenty-five feet in a distance of two hundred feet, for economy and symmetry; the walk above Eighty-first street is twenty-five feet wide, which was the original design; from Seventy-ninth street to Eighty-first street the original design was forty-five feet, but I made it twenty-five feet : between Ninetieth street and Ninety-first street the line was laid sixteen feet westward, to make a walk of fifteen feet and a planting of ten feet, instead of a walk of only nine feet; this change extends to the middle of Ninety-second street; a walk nine feet wide from One Hundred and Fourth to One Hundred and Twelfth streets was thought to be unnecessary, and it was thought it would be better if put into planting; it was thought best not to change the design between One Hundred and Twelfth street and One Hundred and Fourteenth street; from One Hundred and Twentieth to One Hundred and Twenty-second streets the exterior line was moved west for the better arrangement of walk.

By Mr. Haswell :

Q. Do we understand that these changes were arbitrary with you ?

A. They were made because I thought they were improvements or more economical—either for one reason or the other.

Q. Did you receive any authority from the Department for making them?

A. None, except what was implied.

Q. Did you receive any authority from them verbally or

otherwise authorizing you to change the boundaries of the avenue, and the dimensions or areas of the walks or tree plots?

A. No, I never got any special authority from them except what was implied—except as I was their agent.

Q. In what manner was it implied?

A. I was agent of the Park Commissioners for the time being.

Q. And inasmuch as you were appointed Superintending Engineer of the Riverside avenue, you felt yourself at liberty to alter the original plan, which had been submitted to and approved by the Department?

A. I felt myself authorized to make changes where I considered them improvements — either more economical or better.

Q. Without consultation with the Department?

A. Without consultation with the Department.

At this point the Commission adjourned, to meet Monday, December 16, at one o'clock in the same room.

MONDAY, December 16, 1878.

The Commission met pursuant to an adjournment, all the members being present.

A request from Mr. Franklin to have his counsel present at the examination was at once acceded to, and the gentleman was introduced.

Mr. Haswell resumed the examination of Mr. Franklin as follows:

Q. You have declared that the sewer trenches have been opened in compliance with the requirement of the specifications; are you prepared to declare that they have been graded to a strict inclination?

A. Yes, sir.

Q. Are you aware of a deviation from this in any one or more instances?

A. A deviation from the inclination?

Q. From a strict inclination?

A. I am not.

Q. Have not some of the sewer pipes near One Hundred and Fifth street been laid at angles to the summits?

A. Yes, between One Hundred and Fourth and One Hundred and Eighth streets there is a summit.

Q. I mean have they not been laid out of strict inclinations been laid at angles.

A. No, sir.

Q. Been laid at angles horizontally to said angles, and not vertically.

A. No.

Q. They have all strict inclinations?

A. Yes, sir.

By Mr. Worthen :

Q. In line and grade?

A. Yes, sir.

Q. I mean, have they been laid horizontally in line and vertically in strict inclination?

A. They have been laid in strict inclination vertically, and substantially so horizontally.

Q. Do you know of any instance where the interstices in the parapet wall have been filled in with other material than cement mortar and spalls?

A. I do not, except small stone.

By Mr. Worthen :

Q. Was that laid in as concrete, or as you would lay a mortar wall?

A. Like a mortar wall.

By Mr. Haswell :

Q. Then there was nothing used but cement, water and spalls?

A. I would rather have them called small stone.

By Mr. Worthen :

Q. What do you understand by spalls?

A. I should define a spall to be a small detached stone of irregular shape.

Q. Suppose it was a small rounded stone, would you call that a spall?

A. Not if it was a natural stone.

By Mr. Haswell:

Q. Do you know of any instance where the insterstices in in the parapet wall have been filled with other material than cement, mortar and spalls ?

A. I answer no.

Q. Are not some of the stones in the parapet wall deficient in required dimensions, and, in part, such as are known as slabs, with the voids between them filled in with spalls?

A. I don't know of such places as those.

Q. If such slabs have not been received by you and set in this wall, how is it that we saw, on the occasion of our late visit, stone of such character in progress of delivery?

A. The orders were not to use these stones.

Q. When was the order given not to use such stone?

A. The orders have been given repeatedly, not only lately, but a good while ago.

Q. Why is it that we saw them in progress of delivery there?

A. If they were delivered there it was contrary to orders.

Q. It appears, then, that notwithstanding you have given such orders, that such material is being delivered ?

A. Why, if you saw it, of course.

By Mr. Worthen :

Q. About the inspection; how are your stones inspected; have you men enough to inspect every stone?

A. No; there is not force enough to inspect every stone.

Q. When a stone is discarded what do you do with it?

A. In some cases we have it broken up.

Q. But generally?

A. Generally they put it one side to use it for some other purpose, as they see fit.

Q. How do you make up your monthly estimates ?

A. I make my monthly estimates from the quantities as measured by my assistants and given to me; in making up the estimates for road bottoming there was a large quantity of stone deposited, of which I allowed a very small portion at full prices in order to make an approximate estimate for the value of the work done, and that produced the same result as if I had put a smaller price for the whole quantity done.

Q. There has been some graveling done?

A. No; there has been no graveling done.

#### CORNELIUS O'GRADY.

MR. CORNELIUS O'GRADY, assistant to Mr. Franklin, was then introduced and questioned as follows :

Q. What length of Drive has been covered with a stone foundation.

A. I can't tell you without bringing my notes.

Q. As near as you can?

A. I suppose about from fifty to fifty-five thousand square yards; there must be that much laid now.

By Mr. Worthen:

Q. Didn't you act in any way as inspector?

A. No, sir.

Q. If you saw any poor work, did you have authority to have it taken out ?

A. In the first place, I went there with very little knowledge of the road; there were no stakes on the ground, or anything of the kind; I had to lay out a new base line; that took a good deal of time; then the estimates came on, and the field work took about two weeks of every month.

### By Mr. Franklin :

Q. Still you were authorized to remove any bad work that you saw going on ?

A. I didn't look at the work at all, I must tell you, Mr. Franklin, but I suppose I could have done that.

By Mr. Worthen :

Q. In making approximate estimates, how closely did you measure?

A. I only took the measurements about every fifty feet, and then averaged; I endeavered in the measurements outside to keep on the safe side.

## PATRICK H. NORTON.

PATRICK H. NORTON, the inspector of the work, was examined as follows:

By Mr. Haswell:

Q. In excavating sewer trenches have they been graded to a strict inclination?

A. What do you mean?

Q. Whether they are run straight from point to point, instead of having knobs in them ?

A. They were graded from stake to stake, on a straight line, and if there were knobs, the knobs would be down so deep that there would be no knobs on top; the grade and line were always preserved.

Q. Have not some of the sewer pipes near One Hundred and Fifth street been laid at angles with the summits?

A. We have always laid the line on the bottom, before we laid the pipe, and graded up to that line.

### By Mr. Worthen :

Q. And then laid your pipe ?

A. Yes, sir.

Q. Did you run that bottom ?

A. Well, it was walked on.

Q. Tramped with your feet?

A. Yes, sir.

By Mr. Haswell:

Q. Did your duties include the supervision of the construction of the parapet wall?

A. Yes, sir.

Q. Do you know of any instance where the interstices in that wall have been filled in with other material than cement, mortar and spalls?

A. No, sir.

Q. Are not some of the facing stone of the parapet wall deficient in the dimensions required by the specifications, and are they not of that character known as slabs?

A. Whenever I caught a small stone I threw it out; in a great many cases we used to have to trim the backs of the stones to get them up together.

Q. If you were in the habit of rejecting such stones, how is it that on the occasion of our late visit, we saw the contractor delivering such stone?

A. I could not see them delivering it; every stone that ever I found of that dimensions I had thrown out of the wall.

By Mr. Worthen :

Q. Now, what was your smallest end joint?

A. The end joints in some cases were not quite so wide as they were in the centre of the stone, but they were pitched off, you know.

Q. How much did you require for your end joints, where the stones came together?

A. I always came as near as possible; if I could get them within an inch, so much the better; I never let the stone be slack, if I could help it; I wanted to keep them back to back, if I could.

Q. How much of this wall was laid without your seeing it? A. I could not say that; I am going up and down the wall all the time.

Q. They are laying wall in how many places at once?

A. About four different places at a time.

Q. And you had the whole of that inspection to look after? A. Yes, sir.

Q. You had anchors; how often did you put in anchors?

A. On every stone in the eighteen inch course that I saw; I always left orders about that—that if I should come along and find a stone without an anchor in it, it should be pulled down.

Q. How big were they?

A. About one quarter of an inch by one-half an inch.

Q. Were they painted ?

A. No, sir.

Q. How deep did they go into the stones?

A. Between an inch and three quarters of an inch.

Q. There are some places where there are three courses, what did you do about anchors there?

A. Well, there is a throughstone wherever there are three courses.

Q. Which is that throughstone?

A. It is the centre stone.

Q. You have been inspector from the commencement of the work?

A. There were two for a while.

Q. When was that?

A. I think it was the summer before last—the summer of last year.

By Mr. Franklin:

Q. What did you intend to say about the thickness of the parapet wall; where there are two stones instead of one?

A. I say, there was nothing less than seven inches went there, and the biggest part of them that came up, the backs had to be dressed to get them in.

## MR. FRANKLIN RECALLED.

## By Mr. Haswell:

Q. It appears that some wrought iron anchors have been set into the first course of the parapet wall; inasmuch as the specifications do not call for this expenditure on the part of the contractor, why is it that you require it of him?

A. I did not require it.

Q. Who did?

A. It was done without his being specially required to do it.

Q. Who did it?

A. The contractor.

Q. Were not these anchors put in because of the insufficiency of the wall from want of depth of the stones, and the manner in which they were backed, and in opposition to the specifications?

A. They were allowed because they were an improvement to the wall.

Q. Do you consider then that they were necessary to the stability of the wall?

A. I consider that they were a very great improvement to the wall.

Q. Would this have been necessary if the drawings and

specifications of this wall, in materials and work, had been rigidly adhered to?

A. They would not have been necessary.

By Mr. Bogart:

Q. This iron was wrought iron?

A. Yes, sir.

Q. Was it included in the estimates?

A. No, the contractor was not allowed anything for it.

Q. And you do not intend to allow anything?

A. No, sir.

By Mr. Worthen:

Q. The drawings furnished by Mr. Hufnagel to the contractors shows these irons?

A. That was not intended for the contractors ; it was merely showing what had been done?

Q. It was a record of what had been done then, and in no sense a direction to the contractor?

A. Precisely.

Q. Is the timber in the trestle work of the bridge called Georgia pine well seasoned and free from imperfections ?

A. Yes, sir.

Q. Were there any cast iron sockets?

A. No, sir.

Q. Were the posts mortised into the girders?

A. Yes, sir.

Q. "The braces and girders to be secured with strong wrought iron bolts and straps;" was that done?

A. Yes, sir.

By Mr. Worthen :

Q. Where are the straps?

A. There are no straps.

The plan was shown Mr. Franklin, and he stated that it was that of Mr. Aldrich, and was carried out in all respects!

Q. "The cross-beams to be laid on girders and spiked to the same with spikes of suitable size;" was that done?

A. Yes, sir.

9

Q. Did the floor "consist of two thicknesses of best quality of Georgia pine plank, the first layer to be three inches thick, the second layer two inches thick, well spiked to the beams?"

A. Yes, sir.

Q. Was the railing on either side of each trestle work constructed of a frame work, as shown in detail drawings properly secured to beams with angle irons?

A. That has been done; it is not done yet, but the material has been delivered; the work is there now, ready to put up.

Q. "The entire framing of the above specified trestle-work to be done in the best workmanlike manner; all mortices to be cut true and square, and to be tightly fitted;" was that done?

A. It is a very good job, indeed.

Q. "Whenever the posts or braces came into contact with any masonry, or lent on or against the same, requisite footings must be cut into said masonry by the contractor, as directed;" has that been done?

A. Yes, sir.

Q. "The style of framing, number of posts, beams, &c., all to be done and furnished in accordance with drawings, and the entire structure to put up and fastened together with all necessary bolts, straps, spikes, &c., in the most thorough and workmanlike manner, as directed by said department;" was that done?

A. Yes, sir.

(Mr. Aldrich's plan of circular blue-stone curbs shown Mr. Franklin.)

Q. Were these laid thus, or have you made some modifications?

A. Some have been laid in that way, and some have not.

Q. Have you a modification of those here; have you made any drawings for these—the way they have been laid—or have you merely given directions?

A. Merely given directions.

Mr. Aldrich's plan of combination basins shown, and Mr. Franklin stated that he had changed the design. A few were built like the plan, Mr. Bogart wrote the following letters, which were approved by the Commission and mailed :

# NEW YORK, December 16, 1878.

# LEOPOLD EIDLITZ, Esq. :

Dear Sir,—The Commission of Civil Engineers, appointed to examine into the matter of construction of Riverside Drive, would be glad to have you meet them at the Department of Public Parks, 36 Union Square, East, on Wednesday afternoon, December 18, at 2 P. M.

Please let me know if you can be present.

Very truly yours,

JOHN BOGART, Secretary of Commission.

NEW YORK, December 16, 1878.

# SMITH E. LANE, Esq.,

Treasurer D. P. P.:

Dear Sir,—Will you please ask Mr. Callahan, the mason, to meet the Commission of Engineers on the matter of Riverside Avenue, at this office, on Wednesday next, at 2 P. M.

Yours truly,

JOHN BOGART, Secretary of Commission.

NEW YORK, December 11, 1878.

JAMES C. ALDRICH, Esq. :

Dear Sir,—The Commission of Civil Engineers, appointed to examine the matter of Riverside Avenue, request you to meet them at the office of the Department of Public Parks on Wednesday, December 18, 1878, at 2 P. M.

Very truly yours,

JOHN BOGART, Secretary of Commission.

The Commission adjourned until Tuesday, December 17, 1878, at 1 P. M.

#### December 17, 1878.

The Commission met at 1 o'clock, pursuant to adjournment, all the members being present.

Mr. Franklin, with his counsel, Mr. Embree, were in attendance, and the entire session of the Commission was devoted to the revision of Mr. Franklin's testimony, by himself—a transcript of the stengrapher's minutes being supplied him for that purpose.

At 5:30 o'clock the Commission adjourned, to meet on Wednesday, December 18th, at 2 o'clock P. M.

### DECEMBER 18th, 1878.

The Commission met pursuant to adjournment at 2 p. m. Present,—Messrs. Worthen & Bogart.

#### OTTO SIBETH.

MR. OTTO SIBETH, Chief Draughtsman of the Department of Public Parks, was introduced and examined as follows :

By Mr. Bogart :

Q. (Showing plans.) Can you identify these plans, marked now by you and fourteen in number, as those that were exhibited by the Department at the letting of the contract for improving the Riverside Avenue?

A. Yes, sir.

Q. Were there any others?

A. Not that I know of.

### CYRUS CLARK.

MR. CYRUS CLARK was questioned as follows :

Q. Where do you reside, sir?

A. At Ninetieth street and Riverside avenue.

Q. On the line of the avenue?

A. Yes, sir.

Q. Have you resided there most of the time that work has been in progress?

A. Yes, sir.

Q. Have you observed the progress of the work, more or less, in detail?

A. Yes, sir; but I would not consider myself competent to judge of it—to say whether it has been done in accordance with the contract or not; we have a bridge, I think, that has been unnecessarily delayed; it was to have been finished on the first of June, 1878, and was finally finished on the first of October.

By Mr. Worthen :

Q. Is it finished yet?

A. Finished; I mean so far as crossing over is concerned; there are some iron rails there that are delivered, but not yet put up; there were only five men at work on it during the whole summer.

Q. When was it begun?

A. Early in the spring, and was finished the first of October; the most I have to complain of is the unnecessary delay.

Q, What has been the effect of the delay?

A. The effect has been upon the poperty-holders, that there is two or three hundred thousand dollars a year of line taxation; they would like to see it finished so that the property could be developed.

Q. When did they take the contract for the bridge?

A. Two or three years ago, now.

Q. Did they commence promptly after the letting?

A. Yes, sir.

Q. How was the progress of the work during the first summer?

A. It was slow.

Q. It had been slow all winter?

A. Yes, sir; there is a piece of rock between Ninety-second and Ninety-fifth streets that they have been on work at now for a year and a half building that little roadway, and they have not got it finished yet; I claim that that should have been done the first winter; instead of that, they did not do anything at it, my recollection is, until spring.

### JAMES C. ALDRICH.

MR. JAMES C. ALDRICH called and examined :

By Mr. Bogart :

Q. What position did you hold in the Park Department the last one? A. I was Superintending Engineer of the Riverside avenue improvement.

Q. (Showing copy.) Is this a blank or form of contract under which the work was taken, of which you had charge on Riverside avenue, with the map which is marked number fourteen; do you recognize it as the general plan or profile of Riverside avenue exhibited at the letting?

A. Yes, sir.

Q. The red line marked upon that plan designates the western boundary of Riverside avenue?

A. Yes, the western boundary of this contract.

Q. Were you in charge when any work was done under this contract, outside of that line?

A. Not materially; there was one or two cases in which they were across the line, where they were excavating contrary to orders; they would occasionally plow a little across the line, or something of that kind.

Q. Did you include any of that work, which was done outside the line, in your estimates?

A. I did not.

### By Mr. Worthen:

Q. Why did you not?

A. Because it was outside the line; there may be one exception to this; I don't know whether that comes directly outside or inside; that was for draining the hill beyond One Hundred and Twenty-seventh street—a temporary drain.

Q. That you might have included in your estimate?

A. Yes, sir.

Q. Why did you not include the other, suppose they had excavated outside?

A. Because I considered that outside the contract work.

### By Mr. Bogart:

Q. How much excavation work was done under your charge?

A. That I can't remember.

Q. What is the date of your last estimate?

A. It was about eight months ago; I think it was the February estimate.

Q. In superintending the work on Riverside avenue, under this contract with Decker and Quintard, what did you consider the contract to include?

A. The work mentioned in the specifications.

Q. In regard to the plans and drawings?

A. With regard to the plans and drawings; those plans and drawings that were executed were at this office, that I had access to.

Q. Did you have access to the plans and drawings shown at the letting?

A. I did.

Q. Did you consider this office in which the plans were exhibited as in fact a part of your office?

A. I did, and spent considerable time here—say once or twice a week—certain parts of certain days I had set apart.

By Mr. Worthen :

Q. The drawings that you took up to your office – Mr. Franklin presented certain drawings here, marked "Aldrich;" what were they made from?

A. Those drawings were made from the tracings and the specifications.

Q. (Handing witness his last estimate of the work). Read the first item.

A. The quantity is "earth excavation 156,207 yards."

By Mr. Bogart:

Q. In preparing for this "earth excavation," did you direct certain trees and bushes to be moved away?

A. I did.

Q. Was there anything in the department, that you were aware of, which designated that certain trees should be saved?

A. Yes, sir.

Q. What was it; a map?

A. Not in the department; I referred to Mr. Olmsted.

Q. Then you consulted hlm?

A. Always before taking down trees.

Q. And he directed that certain trees should be carefully preserved?

A. Yes, sir.

Q. Was there any top soil excavated, Mr. Aldrich, under your direction, and placed in piles?

A. Yes, sir; quite a large quantity.

Q. Was any of that while you were in charge taken away and spread over slopes?

A. I think not—that is, from the pile.

Q: Mention is made in the specifications of required grades and slopes, and for side lines prescribed; was there anything to show the grade or slope of those portions of Riverside Avenue, between the side drive and the main drive?

A. There was in pencil line upon the cross-section, at certain places.

By Mr. Worthen :

Q. How near was your last approximate estimate to your final estimate in amounts?

A. It was customary with me, at each monthly estimate, to measure up carefully at the end of each quarter—three months—and I went over the last estimate for the previous three months, and checked them; the last estimate that I handed in, to the best of my knowledge and belief, was within two and a-half per cent. of the actual work—work completed at that time.

Q. That two and a-half per cent., was it over or under?

A. I think it was under, but I suppose it might be either way, because the edges were ragged.

Q. Your next item, Mr. Aldrich?

A. It is "rock excavation, 63,607.04 yards."

Q. In that rock excavation you made careful classification, according to the specifications with reference to boulders?

A. I measured each boulder and painted it as I measured it; and also included that in the estimate, where it exceeded one and one-half yards.

Q. (Reading from specifications.) The price for the excavation of the earth and rock included its removal and final disposition; did you pay the price, or did you estimate any excavation of earth or of rock, which was not finally disposed of according to these specifications? A. In excavating earth I only returned as much earth as I considered fully excavated—that is excavated and put in place—disposed of.

Q, And with regard to rock?

A. In regard to rock, there was a line drawn where that limit of excavation should end and the other part commence; it was a source of some dispute as to whether the rocks should be paid for as excavated, before it was put in place; rock excavated from the pit, and thrown out just directly at the mouth of the pit, when it was naturally going into the wall at some distance away, a part of it going into the wall, and part of it wherever the contractors might use it, it would be a question as to how much of that I was to estimate as being fully in place; I made a measurement of rock that was not fully in place or deposited, and made a calculation what it would cost under the price of the contract to put it in such place, and made a deduction, leaving rock which I had paid for as rock excavated, only such proportion of it as would reach that amount.

By Mr. Worthen:

Q. With regard to rock excavation, when did you consider it disposed of?

A. All rock excavated, which was going into the wall, I considered disposed of when put within handling of one derrick, and roadbed-rock when it was within one handling of the roadbed.

#### By Mr. Bogart:

Q. Read the next item ?

A. "Embankment 160,981.3 yards."

Q. Did you allow any rock filling within three feet of the finished grade?

A. I did not.

Q. Or any such parts of the embankment as would interfere with trenches or pits, or provisions for the roots of trees?

A. In these places I gave orders to leave it below those points, preparatory to the reception of sewers or roots of trees. Q. In embankments made of stone chiefly did you have so much earth deposited with the stone as would be sufficient to fill the interstices thereof?

A. I did.

Q. Did you put any filling behind the walls?

A. I did.

Q. Did you have that laid in layers?

A. Packed in layers; yes, sir.

Q. In making the deductions which are at the foot of your estimate, you made them in accordance with this formula at page six of the contract?

A. Yes, sir.

Q. Read your next item?

A. "Dry wall 28,287.3 yards."

Q. With regard to the back of the wall, how is it built?

A. I ordered it built with off-set, but did not confine them to a nicety on the off-set.

Q. Did you insist on the wall being full to the dimensions shown on the tracings exhibited?

A. I did not.

Q. You did not make them build it as large as that?

A. No. sir; not as thick.

Q. In regard to this wall, Mr. Aldrich, if you will look at the contract, page 6, section 8, paragraph (a), was the foundation substantially laid and built as directed by that paragraph?

A. It was—that that I accepted.

Q. Was there any foundation for the dry wall not accepted by you, which had not been taken up at the time you were relieved from the charge of the work ?

A. I don't think there was any foundation.

Q. Look at section (b); this refers to the main dry wall; was it substantially laid in accordance with these specifications?

A. It was.

Q. Was any of the dry wall laid under your directions condemned by you?

A. It was.

Q. Was all that was condemned taken up and relaid?

A. It was not at the time of my exit?

Q. Have you any idea of how much of that wall there was condemned ?

A. I have not the quantity in my mind at the present time although there is data from which I could tell.

### By Mr. Worthen:

Q. Where was this wall?

A. Most of it was on the second division; it was between Ninety-sixth and One Hundred and Tenth streets; there were three or four places; there was some below the bridge, some above Ninety-sixth street, above the cave; there was some up opposite Mr. Church's house, or that vicinity—that is One Hundred street, I think—and there was some further up, about One Hundred and Fourth street; I think there were five places where it was condemned.

Q. In what was it defective?

A. It was defective in bend, in the size of the stones, the quality of the stone, some of it, and in having spals and pinners in the face.

#### By Mr. Bogart :

Q. What is the next item?

A. Brick masonry 115.2 cubic yards.

Q. Was that all done according to contract?

A. It was.

Q. Was there any coping of parapet wall delivered while you were in charge?

A. Yes; and stone as a sample.

Q. Was that accepted?

A. It was.

Q. Did you give directions to the contractors to deliver the coping in accordance with that sample?

A. I did.

Q. Do you know where it is now?

A. I know where I left it; on the front stoop of the office.

Q. Did it have a chisel draft?

A. Yes, it had on the side that would be towards the road?

Q. Will you state what you understand was the reason of that being delivered at your office?

A. To see the quality of the granite so as to get an idea of the color and fineness agreeable to paragraph 9 of the specifications.

Q. Did you request the contractor to deliver a sample of granite to be approved by the Department?

A. I did, I think.

Q. And he did deliver this sample that you refer to?

A. Yes, sir.

Q. Did you consider that then to be the sample, whereby the delivery of granite coping was to be pledged?

A. Yes, sir; both as to quality and workmanship.

Q. What is the next item?

A. "Concrete, 26.3 yards."

Q. Was that done in accordance with the contract see paragraph 12?"

A. Yes, sir.

Q. What is your next item?

A. It is plank and timber for foundations—measurements 3,076.4 feet.

Q. Where was that used?

A. Part of it was used in the sewer in the vicinity of One Hundred and Twentieth street—that circular sewer—and part of it to make that shutter for the temporary trench at about One Hundred and Twenty-fifth street.

Q. What is your next item?

A. It is 10,394.5 pounds cast-iron.

Q. Was that all cast in shape and form as required by the drawings and the contract?

A. It was.

Q. What is your next item?

A. Wrought iron,  $444\frac{1}{2}$  pounds.

Q. The same question?

A. It was.

Q. What is your next item?

A. 1,564.3 lineal feet twelve-inch pipe-sewer pipe.

Q. Was that sewer pipe delivered in accordance with the contract?

A. It was, and approved by the Department, that is the sample was approved by the Department, and was left there by me in the office. Q. And this corresponded with the sample approved; when you left the work was that sample in your office?

A. It was marked "approved," with the date of approvai.

Q. In excavating trenches for sewer pipes, and in laying the pipe in trenches, were the requirements of these specifications carefully carried out?

A. They were

Q. In levelling the back fillings?

A. They were.

Q. Was the material rammed?

A. It was.

Q. With rammers?

A. With rammers.

Q. Did you take care that there should not be any stone within one and one-half feet of the top of the pipe as provided?

A. I did.

Q. Was the pipe under your direction laid to true lines and grades without irregularities?

A. It was; they were all straight lines; that is, from point to point—from basin to basin—as you might say; you will find that you can "shine" them from point to point direct; that is, the angles were made at basins.

Q. Read your next item?

A. It is 292.2 lineal feet of eight-inch sewers, and 68.7 sixinch pipe sewers.

Q. In estimating your pipe sewer, suppose at the time of your making an estimate, a trench should be opened and a sewer pipe partially laid and back-filling not done, what was your course in regard to estimating that?

A. My course was not to estimate sewers until completed.

By Mr. Worthen :

Q. I see, Mr. Aldrich, that you say seven-tenths; how did you measure that sewer?

A. We measured from centre to centre of manholes, but there is a provision made, I think, in this contract in regard to that whether we should measure it, calling in all pipe or not; it was measured on the ground with a steel tape, if I remember.

#### By Mr. Bogart :

Q. I wish to ask you in regard to paragraphs 29 and 30 of the contract, page 13, was cement furnished by the contractor while you were in charge, inspected and tested.

A. It was.

Q. What sort of test did you have for cement?

A. The hydraulic test; I took the clear cement, mixed it in a ball, making a slow paste of it, and leaving so many minutes, after making the ball, laying on the point, leaving it so many minutes to the air, then immersing it in water, leaving it so many minutes in the water; at the end of that number of minutes it must have a certain tenacity, tenacity so that it should hold together while we tossed it from point to point.

By Mr. Worthem:

Q. How many barrels did you test out of that lot?

A. We made a point where cement was delivered in quantities of testing alternate barrels, or perhaps one out of every five barrels, but afterwards we directed to test every barrel, and did test every barrel as a general thing.

By Mr. Bogart:

Q. Did you reject any cement?

A. We did.

Q. Was it taken away from the works?

A. It was in some cases.

Q. Was any of it left there when you left?

A. I think a part of it was.

By Mr. Worthen :

Q. Was any of it used?

A. Not to my knowledge.

By Mr. Bogart :

Q. Was the mortar made in accordance with the specifications?

A. It was.

Q. Was it mixed in boxes, or on the ground?

A. It was mixed in boxes.

Q. Referring to section 42 of the contract, it speaks of cast

iron pipes in accordance with the plans; did you prepare any plans for cast iron pipes in accordance with that?

A. I did; I think the small plan had not been delivered to the contractor at that time; we had not got along to that part; I left that at the office.

Q. Has anything been done by you in relation to the samples of gravel to be used in construction of roads ?

A. No more than this: I had received at the office certain samples that had been left there by the contractor for me to look at; I won't say whether they were left directly by the contractor, but they were supposed to come through the contractor.

Q. Did you accept any such samples?

A. No, sir.

Q. Any gutter laid while you were there?

A. No, sir.

Q. Will you just look at the contract, page 19, section 53, referring to granite curb angle stones at ends of tree plots?

A. The plans had been prepared; I am not able to say whether I had delivered to the contractors the tracings of the working plan or not at that time, but my books will show if they were delivered.

Q. Did you understand that those granite curb angle stones were to be placed at the ends of all tree plots?

A. At all tree plots where the designs called for them; I could not say whether it was at all tree plots without going on the ground.

Q. How would the contractor know when he made his proposition here?

A. My recollection is that those gravite ends were to be at certain tree plots that stood in particular places.

Q. What was to be at the other ones?

A. I can't say; that was a little further than we got when I left.

Q. Had any bluestone curb been delivered on the work?

A. There had.

A. There was a sample of bluestone curbing left in the office by me.

Q. Was such as had been delivered in accordance with that sample?

A. It was not.

Q. You communicated it to the contractor?

A. I did.

Q. Had they removed it?

A. They had not; it was there on the work still, when I left, still on the work.

Q. What was the matter with it?

A. It was deficient in several particulars; one of them was the dressing.

Q. Were any bluestone edgings delivered on the work while you were in charge?

A. There was.

Q. Did you leave that sample at the office?

A. Yes, sir.

Q. It was marked "approved?"

A. It was.

Q. Was the bluestone edging that was delivered accepted by you?

A. It was not.

Q. It was rejected?

A. Yes, sir.

Q. Had it been removed from the work?

A. No, sir; it might not have been considered on the street, but it was within the limits of this contract.

Q. Was any accepted while you were in charge?

A. No, sir.

Q. Do you know whether any of the rejected stone has been set?

A. I do not.

Q. Were any circular curbs of bluestone delivered while you were on the work?

A. Not to my knowledge.

Q. Had you taken any plans to the contractors with regard to circular corners?

A. I had delivered at the contractor's office tracings of them.

Q. Were these curbs all in one piece, or more than one?

A. They were all in one piece.

Q. Were any cross-walk stones delivered on the work while you were there?

A. There was.

Q. Was there any sample of circular corners?

A. There was not, except in quality of stone.

Q. Were any granite cross-walks delivered while you were on the work?

A. There were.

Q. Were they accepted by you?

A. No, sir.

Q. Were they rejected?

A. Yes, sir.

Q. Were they removed?

A. I think so; I think they were sold down here afterwards.

Q. Were any special directions given by you to the contractors in regard to cross-walks?

A. No, sir.

Q. Did you have any sample?

A. No, except as to the quality—that it should be granite of the same quality as the granite coping.

Q. Were any granite steps delivered by the contractors while you were in charge?

A. No, sir.

Q. Was anything done towards the construction of granite steps.

A. No, sir.

Q. There is a section in the contract called section (H) which refers to the engineer and inspecting force; was the engineer and inspecting force, while you were in charge, the same as this contract?

A. No, sir; not in all respects.

• Q. How many men did you have acting as inspectors?

A. Two, I think, was the whole number of inspectors—that is, that were classed under that head.

Q. How large was your force?

A. There was first the principal assistant, Thomas H. Loomis, who was classified as "Assistant Engineer;" Wilson Crosby, who was ranked on the pay-roll as "Second Assistant Engineer;" next came Mr. Haynes, who was ranked as leveler, I think; Henry Gilbert, who was ranked as transit man, I think; there were four or five more.

Q. You say there were two inspectors; were not all your assistants authorized, in going over the work, also to inspect?

A. Always; every time they passed over the work they were to take special care; each one had his division, except the assistant who went over the whole; they were to look at any fault they could find in the workmanship, make note of it, and refer it to me; or if on their division, see that it was righted.

By Mr. Worthen:

Q. Who were your inspectors?

A. Patrick H. Norton and Mr. Cushing.

By Mr. Bogart:

Q. What were their duties?

A. To look particularly after the work from morning until night, and to lie, as you may say, continually on the work.

#### By Mr. Worthen :

Q. Was there any division of their work as to location or anything else?

A. There was.

#### By Mr. Bogart:

Q. Was it division as to the location of the work?

A. At first, before Cushing was appointed, Norton had charge of the whole; afterwards it was divided into two divisions; Norton had charge of the upper division, and Mr. Cushing of the lower.

By Mr. Worthen:

Q. How much were you over the line?

A. I made a point of being over the whole work every day, and a great many times, twice.

Q. You were head inspector to all intents and pupposes?

A. Yes, sir; I walked over the whole line every day?

Q. If there is anything concerning which we have not ques-

tioned you, and which you would like to state, you are at liberty to do so.

A. You asked me if I built the wall as thick as shown on the tracings. I built it as thick as shown on the working plan, but I consider that the tracing gives a general idea of the wall all through, and the thickness would be varied at different places, according to the material that would lay behind it and the foundation where it set.

Q. Did you have loose stone put in behind the wall? A. I did.

By Mr. Bogart :

Q. Were there any changes from the plan exhibited at the letting, in alignment?

A. No, sir.

Q. Where gaps in the wall were shown on the plan, you left them ?

A. I did.

Q. Did you change, in any way, the lines or widths of drives, roads, walks or tree plots?

A. No, sir.

#### THOMAS H. LOOMIS.

THOS. H. LOOMIS was next introduced. He was questioned as follows:

By Mr. Bogart :

Q. What was your position on the Riverside Avenue Improvement?

A. Principal Assistant Engineer-next to Mr. Aldrich.

Q. Were you removed at the same time Mr. Aldrich was?

A. About two weeks afterwards.

Q. Have you examined the work that has been done since that time?

A. Yes, sir; somewhat.

Q. Have you examined the wall?

A. Yes, sir.

Q. Do you know whether it has been done, in all respects, according to the specifications since?

A. No, sir; it is in all respects contrary to the specifications.

#### Q. In what respects?

A. The interior joints are wide; it will run fully six inches in many places, and is filled in; I kicked out some of it, and it crumbled up in my hand like so much dust, at the upper end; at the entrance, north end, I picked up some there that I judged had been laid the day before; it was still wet, and there was not a particle of set to it; the stones of the parapet wall are thin slabs, set on their edge; I noticed this last time I visited the ground, particularly as to the hardness and soundness of the stone; last summer I was up there and saw them cut it at Seventy-second street, and every time they struck it a handful would fly off.

Q. You don't think it was sound and durable?

A. No, sir; I don't know whether it went into the wall or not, but they were certainly cutting it there for the wall.

By Mr. Worthen :

Q. How many times have you been over the work since you were employed on it?

A. The whole work, twice; then several times during the summer I was up there.

Q. Can you point out any places in that parapet wall where the interior filling is of the character you describe?

A. The place where I picked the filling out was between One Hundred and Eighth and One Hundred and Twentieth streets.

Q. You say that in the parapet wall these centre joints were six inches?

A. Yes, sir; fully up to that.

Q. As a general thing, how was it?

A. As a general thing, I think it would average three to four inches.

Q. In looking at the end joints from the face backwards?

A. I don't think they would average the full depth of the stone.

Q. What should you think would be about the average?

A. It would be pretty small; you must remember that I saw very little.

Q. Did you see one joint that you would call a good full joint—clear to the back?

A. I would not say about that; I know the large majority were not full.

Q. How deep do you suppose you saw a joint there?

A. I could not answer.

Q. Was not all the first above the cement wall, exposed?

A. I think not.

By Mr. Bogart :

Q. Did you see any iron clamps put into that wall?

A. No, sir.

Q. How many courses was the wall going in there?

A. I think it was two.

#### By Mr. Worthen :

Q. What was the character of that stone, that you saw that was in the wall, as to its destructive character?

A. It was just stone as comes from the cuts on this work there, I should say.

Q. Some of it is better than others, is not it?

A. Yes, sir.

Q. Some is micaceous, and some strong gneiss?

A. Yes, sir.

Q. Some of this that you saw in was a free rock?

A. Yes, sir; it did not seem to be culled much.

By Mr. Bogart:

Q. What other points do you think of in which the contract has not been lived up to thoroughly?

A. In the roadways, what is built of them.

Q. In what respect?

A. The stones are not of such a character as they ought to be, or as called for in the specifications; they are not as carefully laid as they should be, and there has been no care taken whatever to preserve the similar character of the lower part of it; under the wall at Ninety-fifth street the dirt is washed out; I should judge they were all puddlefull underneath.

Q. That is not stuff that has been laid over it, and washing in?

A. No; I should judge this had been spread; it looked too evenly distributed to be washed out, and the gutters are not laid in sand or gravel, or whatever it calls for in the specifications.

Q. What are they laid in?

A. What I saw I should judge to be the regular soil they founds on the oil there.

Q. How are the surfaces of the stones of the gutter?

A. Very uneven indeed, and rough.

Q. Not what you would call good work?

A. Not at all; the curb is not backed up with a foot of gravel or sand, as called for-nothing but the ordinary soil.

#### By Mr. Worthen:

Q. Is the curb such as was called for by the plan and sample?

A. I would hardly like to say; it is so long since I saw it; the flagging does not come up to specifications in thickness; I measured a lot of it at Seventy-sixth street, and it ran—well, a great portion of it, fifty or sixty or seventy per cent. would run under two and one-half inches in thickness; then there was another pile at Ninetieth street; I measured a few of those, but I did not stop to measure many, but I picked out some that I thought within, and those measured considerably under two and one-half inches.

### By Mr. Bogart :

Q. How do you know but those were rejected?

A. I don't know.

Q. Do you know anything about the flag that has been set? A. We did not raise any of the flagging that had been set already; I could see that in the neighborhood of One Hundred and Fifth street many of those laid there are badly cracked or broken; I don't know whether that was done before or after they were laid; I had no means of judging.

### By Mr. Worthen:

Q. What were they laid in?

A. I didn't notice.

Q. Is there anything else you think of?

A. The basin tops at Ninetieth street were set at quite an angle from the curb, instead of being set parallel to it.

### By Mr. Bogert :

Q. Do you know anything about the alignment, width of roads or tree plots, or anything of that kind?

A. The alignment of the curb is very bad.

Q. Did you stake out the work up hill or down hill for the Park?

A. Not personally; no sir.

Q. Do you know anything about the changes in the alignment of the wall?

A. Not while I was there; there has been since; they closed up openings that we had built to give access to the Park; at One Hundred and Fourth street and One Hundred and Eighth street they have closed up the street; a working map that we had showed it cut through.

### By Mr. Worthen:

Q. Now, that upper grade at One Hundred and Twentysixth and One Hundred and Twenty-ninth streets; do you recollect that grade?

A. Yes, sir; it was right, according to the tracing, as we laid it.

Q. What rights did you exercise in regard to throwing out stone or anything of that kind?

A. I had a right to do it; but I called the attention of the division engineer to it, when I saw anything wrong, or sometimes I called Mr. Aldrich's attention to it; there being two division engineers, I thought it better to call their attention to it than to have it done myself.

Q. Do you know of their taking action upon any work to which you called their attention as not being according to contract?

A. Yes, sir.

Q. About the inspectors, Norton and Cushing, ; were they under your instructions?

A. They were immediately under the instructions of the division engineers.

Q. What were they?

A. Mr. Cushing was a mason and had been on Government fortification work; about Mr. Norton, I am not positive whether he was a mason or not; he had been connected with the Dock Department, in building the new docks, as contractor; Mr. Cushing had also, I believe, been doing the cutting for the windows of the new cathedral; he was a stonecutter, rather than a mason, I should say.

Q. Is there anything else you think of?

A. There has been a change made in the plan, from One Hundred and Fifth to One Hundred and Eighth streets; the wall had been omitted and supplied by planting; there is another thing, I suppose you also know about; they are taking soil from the Park limits; the wall also between the Drive and the walk at Seventy-sixth street is very bad; I pulled out quite a number of spalls with my hand, so that I could look into the wall; the grade at Seventy-ninth street also is wrong.

The Commission adjourned until Thursday, December 19th, at 9 o'clock, when it is to visit the work and take measurements.

#### DECEMBER 19th, 1878.

At nine o'clock Mr. Worthen visited the Roosevelt Hospital and questioned the mason, Martin Callahan, a patient at the hospital, who has been already referred to, as follows:

#### MARTIN CALLAHAN.

Q. What is your business, Mr. Callahan? A. I am a stone mason.

Mr. Callahan then made the following statement:

From November, 1876 to May, 1877, I was at work in the employment of the Park Department, on the first section of the Riverside Avenue Improvement, between Seventy-seventh and Eighty-sixth streets; I worked on the foundation of the wall; at that time Mr. Aldrich was engineer, and tried to get all the work done as well as he could; the work already then done by the Department on that section was not held by Mr. Aldrich to be a specimen, as the face of the new work was to be without small stone; Mr. McEncroe, one of the contractors, and superintending, complained that he was doing the work too well, and gave directions to Mr. Aldrich, who stopped the work; I went up to the office with Mr. Decker, and arranged to go on with the work; I went back to work, and it was not done as well as the old work; the middle of the wall was not as well bonded as the old work, and there were many soft stones in it; a continued contest between Mr. Aldrich and Mr. Decker ensued. I left there and went up to One Hundred and Fortieth street to work on the retaining wall there, and remained about seven weeks; that work was done the same as the other, in fact rather worse, as the contractor had no notice, or inspector ---Mr. Aldrich or any body else; I left and gave notice to Mr. Aldrich that I could not serve him and Mr. Encroe, and I quit. I was out of work for a considerable time, and was back and forth frequently, endeavoring to have the matter settled, and get back to work again. I had some other work for Decker myself in Fifty-eighth street, cutting out work for Decker's wall in the first section. I had an opportunity of seeing how the parapet wall was being built, which was subcontracted by Patrick Walsh, from Seventy-second to Eighty-sixth street. He commenced his work by setting stones up like flags, and filling stone in between; some had not over four inches bed, others more; it was cut without regard to the natural bed, and finished and set in the same way; I saw that it was soft stone, and not fit to go into the wall; he made no cull at all; there were no joints in full, and the mortar had too much sand; it was all sand nearly, and not full at that; they frequently threw in spalls to fill the holes, and plastered over the top; I never saw any anchors or holes for anchors; at different times I would take a walk up to the work and look at the walls, and I frequently scratched off the top of the wall, and found loose stone and cement between; this was the case all the way from Eighty-sixth to One Hundred and Sixth street; Decker himself did that portion of the wall; the bondstone that ought to be crossed to the face on each side, you might run forty feet along the wall and not find one; I only saw a few through stones crossing the wall; the character of the stone was bad here, the same as the other; the softer the stone was the more they could cut and pack in,

because it cut better; it was a bad, dirty, yellow rock; the men took advantage of the stone the best way they could. About the rubble work under the parapet wall, that was the same kind of stone, same kind of mortar, and the general character of the work was the same; that was not laid full; it was just like the parapet wall, thrown in dry; the face was made to show fair; I saw it at that time, and from time to time, and as I went up looking for work, on account of the stone, I was cutting down here. Right in the rear of Fernando Wood's property, I took particular notice of the place. One Sunday morning I went up on the wall, and I found the stones shaking under my feet; I got down and picked out the fillings, and then put my hand to one of the stones and pitched it off the wall; you can find where the walls are hollow by sounding with a hammer.

I have never done anything but mason work since I was born: I learned my trade in Ireland; am forty-two years of age, and was regularly apprenticed at the business when I was fourteen, remaining until I was twenty-one years old. I worked at stone cutting and masonry and general stone work; I have been in this country about twenty-five years; I worked eight and a half years in the Department of Parks; I worked for Smith & Stewart-Jeremiah Smith; I also worked for Corcoran, the builder; I worked for Decker, and I did a lot of work for Vanderbilt; I was working for Vanderbilt all summer on the new grain elevator that has been built by Dillon; I worked on the other grain elevator, and was foreman on it for that gentleman that built Masonic Hall, a gentleman from Hartford; I worked also in the Department of Public Works, under Mr. Kellogg, for four or five years, and I worked for him before he left the Department of Parks.

Mr. Worthen then proceeded to the terminus of the work at Seventy-second street, where he joined Mr. Haswell and Mr. Bogart, and the day was spent in taking accurate measurements of wall, drive, tree plots, and roadway.

# STATEMENT OF MR. THOMAS FRANKLIN, SUPERINTENDING ENGINEER OF RIVERSIDE AVENUE CONSTRUCTION.

RIVERSIDE AVENUE, January 14th, 1879.

To Hon. JAMES F. WENMAN,

President, and Board of Commissioners of the Department of Parks:

Gentlemen,—In accordance with a resolution of your Board, I beg leave to submit the following statement in regard to the work on Riverside avenue, and the recent report and publications connected therewith.

This matter has, by dint of chicanery and misrepresentation, been placed before the public in a very false light, with a view of discrediting the administration of the Park Department, and to serve the unworthy purposes of selfish and designing persons. In fact, there seems to be sufficient evidence to warrant the charge of a conspiracy on the part of these individuals.

I propose, as concisely as possible, to state the exact facts in the case, with the determination of disabusing the public mind and exposing the real motives which underlie the conduct of those who have set on foot this discreditable business.

If brief, the Riverside avenue is a drive-way or road laid out on the westerly side of the City, in pursuance of an act of the Legislature, authorizing a change in the original plan of the City. The straight and formal avenues laid down on that plan were, in this instance, discarded, and the line of the road follows, in a great measure, the topographical sinuosities of the river along the high crest near the line of Twelfth avenue, as that avenue was laid out on the original map. The Drive extends from the foot of Seventy-second street, North river, to One Hundred and Thirtieth street, at Manhattanville, being about three miles in length. It crosses numerous ravines, winds around several prominent elevations, and on its westerly side requires a large amount of masonry construction to sustain the roadway and protect the bank at the river side. A considerable area adjoining the Drive, some of it in detached portions, has been acquired by the City for a public park known as "Riverside Park." The improvement of this ground is not included in the work under consideration. The contract for the work was awarded on the 31st day of October, 1876, to Messrs. Decker and Quintard, two prominent citizens of New York, the former a well known contractor on railways.

The work was commenced on the 10th day of November, 1876, under the superintendance of James C. Aldrich, civil engineer, who continued in charge until the 13th of March, 1878, at which time, being then in the employ of the Park Department, I assumed charge of the work, it is, perhaps, needless to say without solicitation on my part. I received the specifications accompanying the contract as my guide in superintending the work. These specifications I found to be crude in their character, confused in statement and verbose to an extreme degree. They were evidently not the production of an engineer possessing a clear comprehension of the work to be done, but a patchwork of paragraphs made up from old specifications of one kind or another, put together in a most incongruous manner. These paragraphs attained the extraordinary number of two hundred and twenty-four, although they referred to the construction of a simple roadway, involving no novel features. Of these paragraphs, sixty-five were especially left, in their interpretation and execution, to the judgment and discretion of the engineer in charge of the work. In addition to this, the topographical surveys upon which the plans and specifications were based were inaccurate, making it a matter of impossibility to conform the work to the lines laid down on the plan, while the details of the plan itself were left, in a great measure, undefined and obscure. In fact, the contract could not have been carried out at all had it not been for the saving clause in the agreement between the contractors and the Department (see paragraph B in the agreement), by which it was agreed upon by both parties that the engineer appointed by the Department should, in all cases, determine the amount or the quality of the several kinds of work to be paid for under the contract, and determine all questions in relation to lines. levels and dimensions of work.

I found that my predecessor, acting in accordance with the wide latitude of the specifications, had modified the character of the work to some extent from that laid down, or attempted to be laid down, in the specifications and plan, and it would have been impossible for him to do otherwise if he exercised ordinary common sense. I was obliged to do the same. I am now called upon by the resolution of your Board to reply to the criticisms upon the exercise of a discretion forced upon me by these crude specifications and plan, and I proceed to do so in detail.

I desire, however, at this point, to protest against and denounce the unfair, uncalled for and offensive manner in which the persons appointed to examine the work have gone out of their way, while assuming to compare the terms of the contract with the work done under it, to fill their report with unwarranted and unnecessary personal imputations. The duty they were called upon to perform was plain enough. Their conduct, however, leaves open to serious imputations both their motives and their capacity, and I propose to convince your Honorable Board, or at least a majority of it, of this fact before I finish this statement.

The following is the resolution under which the report was made that I am required to answer :

"Resolved, That the matter of the Riverside Avenue contract be referred to Montgomery A. Kellogg, Esq., Civil Engineer, to examine the work done under the contract between this Department and Decker & Quintard, the contractors, and report the present condition of the work, and in what respects it is done in conformity with the contract, and in what respects it is not so done; and that the said civil engineer be, and he is hereby, directed to act in said examination in conjunction with two other civil engineers, to be appointed, one by the Mayor and one by the Comptroller, if those officers shall so elect. Notice of such appointments, if made by the Mayor and Comptroller, to be given to this Department."

Mr. Kellogg having declined to act, the Department, at its meeting held on the 4th day of December, 1878, appointed John Bogart, Esq., civil engineer, in his place. The Mayor appointed Wm. E. Worthen, Esq., civil engineer, and the Comptroller appointed Charles H. Haswell, Esq., civil engineer.

What was the plain duty of these individuals under the terms of the above resolution? They were engineers, supposed to have been selected on account of their engineering capacity and their knowledge of such work as that which they were requested to examine. Possessing this knowledge, it would naturally be supposed that taking the specifications (which were the basis' of the contract) in their hands they would proceed at once to the work in question, and with an unbiased judgment, a clear intelligence, and a manly respect for a member of their own profession, who claims to be their peer in every respect, to *compare* the work with the specifications, assuming the specifications to be what they pretended to be.

Not so, however. What they did let the following correspondence show:

### DEPARTMENT OF PUBLIC PARKS, 36 UNION SQUARE, NEW YORK, December 7th, 1878.

# WILLIAM IRWIN, ESq.,

Secretary Department Public Parks:

Sir,—The Commissioners in the matter of Riverside Avenue contract have received the accompanying note from Smith E. Lane, Esq., Treasurer of the Department of Public Parks.

In accordance with the request contained in that note, this Commission has appointed 3 P. M. of Monday, December 9th, for Mr. Lane to appear before them.

Will you please also notify the Commissioners of the Department of this appointment, in order that they may be represented, should they deem fit.

Respectfully,

JOHN BOGART, Secretary of Commission.

## DEPARTMENT OF PUBLIC PARKS, 36 UNION SQUARE, NEW YORK, 7th December, 1878.

# Messrs. John Bogart, William E. Worthen and Charles H. Haswell,

### Commission in the Matter of the Riverside Drive:

Gentlemen,—I desire to submit, orally and in writing, my views in regard to the matter submitted for your consideration, together with some documentary matter, and respectfully suggest that you assign a time for the hearing and submission, and that my associate Commissioners be invited to be present, and requested to submit their views.

Respectfully yours,

S. E. LANE,

Treasurer D. P. P.

DEPARTMENT OF PTBLIC PARKS, 36 UNION SQARE, December 9th, 1878.

# JOHN BOGART, Esq., Secretary Commission to Examine Riverside Avenue Improvement :

Dear Sir,—The Secretary of this Department has handed me yours of the 7th inst., inclosing a copy of a communication from Commissioner Lane, requesting that your Commission would appoint a time to hear his views, and those of the other Commissioners, in relation to the subject you are appointed to examine.

It is the opinion of all the Commissioners of this Department, except Mr. Lane, that your Commission should not be in any manner influenced in your determination of the questions submitted to you by the views of any particular Commissioner, but solely by the condition of the work, and by the specifications, contract, maps, plans and papers relating to the work, all of which will be furnished you on request, by the Secretary of this Department.

Under any other conditions, the report of your Commission would be liable to be impeached as not impartial. On behalf of my associate Commissioners, Messrs. Wetmore and Conover, and also on my own behalf, I decline to influence your judgment in any way by the expression of our views, and I trust you will yourselves take the same course in regard to Commissioner Lane.

I remain, yours respectfully,

JAS. F. WENMAN, Presd't Dep't Public Parks.

The minutes of the proceedings of these experts show that notwithstanding the unmistakeable tone of the latter communication, the dignity and propriety of which cannot be questioned, it was absolutely ignored by them, and at their first meeting, before informing themselves by personal examination of the character of the work, they permitted Mr. Lane to address them in condemnation of his colleagues and the employés of the department, setting forth in laudatory terms his own conduct, and his views of the work from the standpoint "of a lawyer!!"

This was followed by an inquisitorial and extremely offensive examination of myself, and terminated by a mass of testimony from discharged employés, who seemed to have occupied an extended period of idleness (including Sundays) in accumulating a quantity of puerile criticisms in regard to the character of the work.

Having obtained this important information, the three examiners found time to expend a few hours on the work itself, subsequently giving their report to Mr. Lane and the newspapers! in advance of its transmittal to the Board that directed it to be made. Even then, it was distributed in copies to the different members of the Board, instead of being sent as an official paper, through the proper channel and in the proper method.

I now proceed to reply in detail to the statements which this report contains.

Its authors begin by setting forth that they were appointed to examine the work done under the contract, for the improvement of Riverside avenue. They then state that they have examined the work and materials *jurnished* as thoroughly as was practicable in the time at their disposal. The resolution under which these persons were appointed to act contained, it will be observed, no limit whatever as to time, and any judgment expressed by them, after a merely cursory examination must necessarily be imperfect and unjust to all parties concerned.

If they were not able to give the time required for a careful and intelligent examination, they should not have undertaken so responsible a duty. If they were induced by Mr. Lane, for reasons best known to bimself, to hurry their report (and the date would seem to confirm the supposition), that it might be made public before the radical change should take place in the administration of City affairs that was to occur on the 1st of January, they stultified themselves as engineers, and their report is unworthy of consideration.

In either case a grave suspicion attaches itself to this extraordinary document. After thus apologising for the hasty and incomplete character of the report, the signers proceed with their criticisms by taking up, as they assert, the several specifications in the order in which they occur. Yet, before they reach the paragraph numbered 4, they jump to the 83d, and finally wind up with the 26th—27 being the total number, out of the 224 paragraphs contained in the contract, that are referred to in the least—leaving nearly 200 paragraphs that they had not time to notice at all.

Surely, such an examination as this is unworthy of any credit whatever.

Out of the 27 paragraphs they assumed to have examined, about half meet with their unqualified approval, so far as concerned the work done under them. And not only this, but the most important, the most expensive, and the most difficult portions, are affirmed, without hesitation, to have been done in a manner superior to that called for in the specifications.

I might safely, so far as this report is concerned, rest my professional reputation on such broad, clear and positive terms of approbation, since the Department and the public are thus assured of the excellence and durability of the work.

Notwithstanding this admission on their part of the superior character of the work, they have, however, endeavored and

13

succeeded in giving a false and subtle tone to other portions of their criticisms, which, although relating to comparatively insignificant items, convey an appearance of deserved censure, and they do in fact, without having shown any foundation whatever for such action, indulge in grossly personal imputations upon myself.

It becomes necessary, therefore, that I should notice in detail every item of this unfair and ill-judged criticism, which refers chiefly to those paragraphs in the specifications the execution of which was left to the discretion of the engineer in charge, upon whom the responsibility of their interpretation is absolutely forced. Where these critics differ from me, it is, therefore, merely a difference of opinion, and not of fact, and from what has preceded, I think I can safely question the wisdom and fairness of the disputants.

Item No. 1 of the criticism refers to the removal of a certain amount of material from the ground adjoining the drive, and used in filling, having been estimated as excavation. This was unsightly debris, which required removal sooner or later, and was used as filling in the absence of more convenient material, to expedite the completion of the work, and was estimated as excavation, because I so interpreted the specification. (See Excavation of Earth, No. 5.)

Item No. 2 refers in a general way to the cutting down of trees, implying a cause for censure (without a positive statement), while there is not a shadow of foundation for it, as no tree has been removed which was not in the roadway or where the surface has been undisturbed.

Item No. 3 refers to the preservation of top-soil, another subtle implication without a fact to base it upon, as every shovelful of soil that was worth preserving has been saved. When, in my judgment, the top-soil was so destitute of humus as not to be worth the fifty cents a yard it cost to save it, I caused it, as a matter of course, to be deposited in the filling.

Item No. 4 states that slopes cost more to shape than it costs to make ordinary excavation of earth. This is a matter of doubt. But the statement is also made that the approximate estimates should be governed by this assumption. I will state that the approximate estimates fully cover that, and I fail to see the bearing of this item. No assertion is offered that the approximate estimates have not been made with reference to this point. Nevertheless, the color of an imputation is sought to be conveyed by this item. These slopes, like all the rest of the work, are as yet in an unfinished conditon.

Item No. 5 states that nearly all the rock excavation has been finished. This may be an important statement, but seems to require no comment.

Item No. 6 refers to embankments, and that at many points large stones have been used, according to my statement, which is true, and asserting that proper attention was not being given to the clause of the contract which requires that the interstices between the stones shall be filled with earth, and that, consequently, the surface has settled, forming holes, and that in some places, the edging gutter and walk areas have settled, "recommending also that before further proceeding to the construction of walks, drives, &c., special measures should be taken to prevent their further subsidence, which will certainly occur unless this precaution is taken."

The answer to this arraignment is that nothing is more difficult to accomplish than the filling of the interstices between stones in an embankment. A certain amount of time must be given for the earth to settle, and nothing but the superincumbent weight of the upper mass will do this, aided by the action of the elements. The water of a heavy rainfall, during the progress of a work, is the best assistance that can be had for this purpose, as every engineer will attest who knows anything at all, and the cavities that appear in an unfinished work are the best evidence of the effectiveness of this excellent agent. The time that must elapse before the work is completed, aided by the heavy rollers that are to be used on the upper surface, will finally consolidate the earth mass. Some of the edging and gutter, temporarily in place and not yet adjusted, may have settled, but in the final adjustment, which it has yet to undergo, all such unfinished work will be properly completed. This item alone exhibits the injustice of the attempt to closely criticise the superintendence of a work while in such an incomplete stage. Criticisms of this kind may be heard every day wherever a work of any kind is in progress, from those who know nothing whatever of the details. It appears to me that this item of criticism is extremely puerile, and the critics have "hunted far, for small game."

Item No. 7 refers to "Dry Wall," and is an unqualified approval of its character, stating that it is even better than that called for by the specifications and shown in the original drawings at the letting of the contract. As this forms the largest and most important item of the whole work, the fact that it is regarded by these critics as so much better than is called for would seem to make their minor points of criticism somewhat insignificant. It is further stated that the total amount of this expensive work is much less than the original estimate, which is of course, a great advantage, in an economical point of view. It is stated that economical change is entirely due to myself. This is not altogether true. My predecessor, as well as myself, made changes from the original plans, which reduced the quantity of Dry Wall. In some places I have found it necessary to add some of this kind of work.

Item No. 8 refers to parapet wall, and states that this would also have been less in quantity than the original estimate, were it not for the fact that I had increased the height by one foot. This is true; and it is an important fact. The wall, as originally planned, was but fifteen inches in height, without the coping. As this wall is intended for the sole purpose of protection against accidents from falling over the high retaining walls, it must be evident to the most obtuse person in the world that this height would fail to answer the purpose. Children, intoxicated persons, and even those who were sober, would, in the dark, be liable to fall over it and be killed or seriously injured. The amount of suits for damages against the City would soon become enormous; therefore, respect for life and limb, as well as a proper regard for the tax-payers, demanded that the height should be increased, and this action has met with the unqualified approval of all that have seen the wall, including engineers of the highest protessional character.

The wall itself is, however, condemned by these critics for the reason that it varies somewhat from the letter of the speci-The variation is due to utter impossibility of profications. curing, within a reasonable space of time, stones of the precise Where there has been a variation in size, so size called for. that two stones have been used in a course where one stone was called for, these two stones have been securely bound together with iron anchors, making them equal in strength to one stone. The vertical joints between them being sometimes a little wider than the letter of the specifications, were carefully filled with excellent cement and spawls, and as the massive coping fully shields the work from any possible action of the elements, the wall thus becomes as firm and durable as if it were one solid stone. I assert that it fulfills the spirit of the contract in an eminent degree—that it is firm, durable, and in every way permanent and satisfactory. This opinion is affirmed by the testimony of eminent engineers.

Item No. 9.—Coping. The character of this, say the critics, is good, and complies with the contract, except that chisel drafts of half an inch are omitted in some places, where called for. Half an inch draft would be of little effect. There is one inch, where a draft has been cut, and when the work is complete it will all have a one inch draft.

Item No. 10.—This refers to rubble masonry, and it is stated that it complies substantially with the contract. This is another important item, which is also positively approved, it being classed with the masonry of the bridge at Eighty-sixth street (Eighty-seventh street), "the face of which, it is stated, is *superior* to that with which it is classed, and much better than is called for by the contract."

Item No. 11.—"Stone filled in rear of wall." The examiners state that in their judgment this has not been where it ought to be. As the matter was left to my discretion, they say that whether done or not done makes no difference in the contract. As the embankment wall is composed of very large stones, some of them weighing many tons, there was no necessity for any special effort to relieve the slight pressure against them.

Item No. 12.—Concrete. This, they say, was not examined, as it was below the surface.

Item No. 13.—Drainage, A and B. This item refers to my statement that some deviation may have occurred in the manner of refilling the earth over the drain pipes, after they were laid, and quoting the specification in this respect. The necessity of ramming earth in and around drain pipes varies with the nature of the soil, and as in some cases along the Riverside Avenue, the compact loam formed a firm bed, and when thrown back into the trench from a height above, imbedded itself firmly, I considered a strict compliance with the letter of the specification to be unnecessary. But I assert that the drain pipes are well and firmly laid and covered. Quality of pipe not criticised.

Item No. 14.—Brick masonry not criticised. Said to be nearly all covered.

Item No. 15.—Cement not criticised, as none was being used. A full opportunity of seeing what had been used was afforded, but the critics have not the fairness to state in writing what they were repeatedly heard to say, that it was of excellent quality. The statement that my mode of testing was not such as is usual in public works is gratuitous. The test I made is borne out by the excellent quality of the cement on the whole line of the work.

Item No. 16.—Pavement of wheelway of Drive. The criticism on this portion of the work is, in brief, that the road-bed has not been prepared with a roller; that the stones that have been placed on a portion of it are, some of them, inferior in quality, and that they have not all been adjusted as required. My answer to this is that the light roller (2 tons) called for would have little or no effect below the surface, that the stones used were such as are always used in similar work, and that the adjustment of the stones has been under the charge of foremen who have had long experience in this particular kind of road construction, especially on St. Nicholas avenue; that they did their work in precisely the same manner as that done and accepted on that avenue; that the rolling was reserved for the final arrangement of the material, with a heavy roller of ten to fifteen tons, as being far preferable to the inferior work of a small roller. When this roadway is finished in accordance with the method proposed it will be equal in every respect to any road of the like description that is now in existence.

A limited amount of the first course of covering has been placed on the layer of stone. No gravel called for has yet been used anywhere, as the road is not in a condition for it. What has been done in the way of road covering is extremely imperfect, and altogether unfinished. No fair criticism can be made of this matter in the present stage of the work. Whether all the care that could possibly be exercised ever can or ever has prevented a road-bed of this character from being filled in its interstices is a matter of great doubt.

Item No. 17.—Pavement of Ride. The same criticism and the same answer applies to this item.

Item No. 18.—Pavement of walks. The statement is made that a large amount of walk surface has been brought to grade, but none of it rolled. Furthermore, that a large amount of these walk surfaces are over the embankment, close to the wall, and specially liable to settlement, and that in some cases the surface has already settled, and that the omission of rolling in such cases is injudicious. I repeat here the statement already made, that a light roller, such as called for in the specification, cannot possibly consolidate an embankment, as its influence and weight would not be felt more than two or three feet below the surface. Heavy embankments must be allowed a period for settlement. Even a very heavy roller alone could not accomplish this without the aid of the elements.

Item No. 19.—Gutters. These are reported to be unfinished, which is true of all the work on the avenue. The gutters laid have had the disadvantage of the incomplete condition of the road-bed, and the rain storms have had free access to the portion that has been laid, and the disarrangement thus caused will require that they be relaid in part. Item No. 20 (21).—Granite curb angle stones. The statement here made, that I had said that it had escaped my attention that granite was required for curb angle stones, is a mistake. What I did say was that the question asked me escaped my attention. I substituted blue stone in the place of granite at the ends of tree plots for the sake of uniformity, both in height and color, with the blue stone edgings. I regard this as a great improvement, besides saving money to the City.

Item No. 22 criticises the bluestone curb, stating, however, that it is generally of the specified thickness and depth, while many are slack at the ends, not having good joints, and quite a number cracked, and that a good deal of it is out of line. This statement is an exaggerated one. The relining, and, in some cases, resetting of curb will necessarily be required in the spring, when the roadway is completed. Imperfect pieces will, of course, be condemned and renewed before a final certificate is given.

Item No. 23.—Blue stone edgings. This item criticises the edging in about the same terms as the curb is criticised. The same answer applies to this. It seems impossible for these critics to remember that the whole is in a totally unfinished state If these strictures were made upon a completed work, which it was proposed to accept, there might be a show of reason; but for a piece of work totally incomplete, they are uncalled for.

Item No. 24.—Complains that some pieces of flagging are cracked, and some not quite up to the required thickness, and that in some places it was laid in loam. Also, that a careful inspection and removal of some of it will be required. As a matter of course, before a final estimate is given, all cracked pieces, or those otherwise not in conformity with the contract, will be removed.

Item No. 25.—Cross-walks reported as in conformity with contract.

Item No. 26.—Trestle-work reported as well constructed, framed, and of good material.

This ends the criticism by experts on the work on Riverside avenue. It indorses, in unqualified terms, the principal and most important part of the work, and the character of the materials. Also, in equally positive terms, it states that there is no apparent excess in the sum of the quantities returned on approximate statements, alleging neither fraud, deception nor over-estimate. Yet, in striking contrast of all these terms of approval, apparently forced from them, the signers pass a condemnation upon myself, intended to secure my removal, while the friends of two of them, as I have been informed, immediately proceed to solicit, with great earnestness, the place that is expected to be thus made vacant.

Further comment from me is unnecessary.

Being desirous, however, that the whole business should be clearly understood by the public, I requested that some disinterested parties would select from the American Society of Civil Engineers as many of the most eminent members of that organization as was deemed necessary (with the sole condition that they should not be even acquaintances of mine), to examine this work in person, with the specifications and the report of the experts before them, and express a candid opinion.

The high character and professional ability of the gentlemen so selected cannot be questioned.

Their report is annexed also, without comment, as well as the report of Engineer J. B. Bacon to the Comptroller.

It is proper to say that Mr. Bacon is an engineer of long experience of public works in the City of New York, and a gentleman of high character for probity and intelligence.

I have nothing whatever to add to all this. But perhaps it would be well for me to state that this splendid work, when finished, as it will be, in full accordance with the spirit of the specifications, will be completed at a cost far less than the original estimate—a fact so unusual with works of this nature, that it is at least worthy of record.

All of which is respectfully submitted.

THOS. FRANKLIN, Superintending Engineer.

.

### REPORT OF ENGINEER J, B. BACON.

### NEW YORK, October 14, 1878.

# DANIEL JACKSON, Esq., Auditor Finance Department:

Sir,—In reference to the operations on Riverside Drive, I respectfully report that I have gone over and examined a great portion of the work.

It is about three miles in length, and the greater part of it is in a transition state; much of it scarcely begun, and other parts half done. The length of the work, and the many tedious detours necessary in examining, occupied considerable time.

*Road-bed.*—On pages 17, 45–6, it is specified that the stones on the roadway are to be evenly adjusted and compactly brought together.

This appears to have been done not as asserted in the second diagram or sketch of an architect, but in compliance with Article C, following in the specifications; and the stones are laid inclined with an angle, and lapping over each other, to prevent the sinking of the gravel and earth, and to preserve the cellular character for proper drainage.

Gravel.—None of the road-bed has yet been prepared for the gravel; only the first coating of earth, as in specifications, has yet been laid, and of that only a portion.

Consequently, there has yet been no rolling done. The foundation road surfacing appears to be satisfactory, and also the gutters.

Parapet Wall.—This has been built even better than at first intended. At first it was of the insecure height of only 2 feet 1 inch.

Under the present management the height has been increased to 3 feet, and it is properly and strongly built. The foundations of the parapet walls above Seventy-ninth street are also well built. Below Seventy-ninth street there is a stretch of bad wall, which was done under other contractors and engineers; but the recent portions are strong.

On so long a stretch of work, and in its present state, my examination could not be exhaustive, for want of time. But I consider that the work is now well planned, and being well done, and in accordance with the latitude allowed by the specifications.

Very respectfully,

(Signed) J. B. BACON, Examiner.

# CERTIFICATE OF MESSRS. JULIUS W. ADAMS AND WM. J. MCALPINE.

The undersigned were requested to examine the materials furnished under the contracts for the construction of Riverside avenue, and the work done in pursuance of that contract under the supervision of Engineer Thomas Franklin, and to report their opinion as to the fitness of the material furnished for the construction of said Riverside avenue, and also their opinion as to the stability and permanence of the work done, and in general whether the spirit and intent of the contract and specification has been carried out by the engineer in his supervision of the work.

The undersigned, having duly examined the work so far as the inauspicious state of the weather would permit—that is to say, their examination was necessarily confined to what was in sight above ground, the severe frost preventing any examination of foundation—and having also examined the plans under which the work was originally contracted for, and also the changes which in the exercise of his discretion the engineer has seen fit to make in the original design of certain parts of the work, and also informed themselves by inquiries made at the office on the work as to the process and methods of construction pursued, and the nature and extent of the estimates of the value of the work done and materials furnished as stated by the engineer, submit the following as the result of their examination :

They find that neither in the materials furnished nor in the work done, has the engineer regarded any work as completed, but in the unfinished condition of the work appears to have left an ample margin in the estimates to provide for any resetting, relining, relaying or replacing of imperfect materials which in the very nature of things (exposed as the work will be to the elements), will become a necessity before it can be accepted as finished in accordance with the terms of the contract; and there is no work in view where any needed improvements or changes that may become necessary may not be made before its final acceptance as a complete work in accordance with the terms of the contract.

The changes made in the original design of the parapet wall are considered as judicious and apparently made in the exercise of a sound discretion, and not in the interests of the contractors.

The walling, where approaching completion, is of stable and permanent character, as, in view of the original designs, under the specifications governing them, it could be expected to be. It is seen in an unfinished and unprotected state, and to great disadvantage, and little defects can be magnified which would disappear in the completed work, without entailing any injury to its permanence or stability. The stone afforded by the excavation is not of the first quality. This was well known before entering into the contract, but its use was allowed by the specifications.

With this proviso, we are of the opinion that the materials furnished are every way suited to made good and permanent work, in accordance with the spirit of the contract.

> JULIUS W. ADAMS. WM. J. MCALPINE.

NEW YORK, January 14th, 1879.