

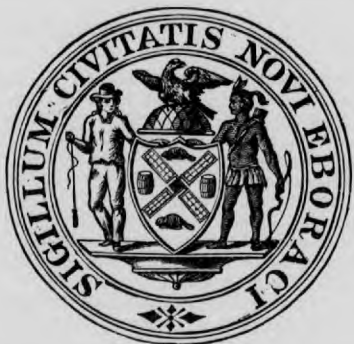
# THE CITY RECORD.

## OFFICIAL JOURNAL.

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### COMMISSIONERS OF ACCOUNTS.

Preliminary Report on the progress made in repaving Fifth Avenue, under the authority of Chapter 371, Laws of 1885, and how far the work already executed conforms to the specifications of the Contract, dated October 28, 1885.

OFFICE OF THE COMMISSIONERS OF ACCOUNTS,  
ROOM 115, STEWART BUILDING,  
NEW YORK, May 26, 1886.

To the Commissioners of Accounts:

Complying with request of the 10th inst., that I should personally examine the work of repaving Fifth Avenue. Have visited the work in progress, 37th to 42d street, and 90th to 87th street, five times. In addition my Engineer Assistant has for the past 12 days been constantly on the line of the work, noting details. Securing samples of the materials used. And at the close of each day making a detailed report. Have endeavored to execute your instructions as circumspcctly as possible; believe no suspicions have been excited.

Act for repaving Fifth Avenue, passed May 28, 1885, contemplated the procurement of the VERY BEST PAVEMENT IT WAS POSSIBLE TO LAY. Language of the statute.

The wording of the act leaves no room for doubt as to the kind of pavement intended. In order that bidders should be fully apprised, the words of the act describing the kind of pavement to be laid were embodied in the advertisement for proposals, which appeared twelve times in CITY RECORD.

September 17, 1885, the "Fifth Avenue Repaving Board," by a resolution awarded the contract to Matthew Baird for the sum of \$429,559.50.

Agreement entered into October 28, 1885, between Commissioner of Public Works and Matthew Baird, provides that,

The contractor is to furnish in STRICT ACCORDANCE WITH THE SPECIFICATIONS, all the materials and labor necessary to regulate and pave with granite, carriage-way of Fifth Avenue, from 9th street to 90th street, except five blocks, 32d to 37th street.

Commissioner of Public Works to appoint an Engineer and two Inspectors.

Who are to inspect the materials furnished and the work done and see that they correspond with the specifications of the contract.

Have carefully read the specifications and find that with the exception of some obscurity in the description of paving-blocks and use of coal-tar residuum in place of asphalt cement, it provides for the best pavement.

GENTLEMEN—In compliance with your request made on Monday, the 10th inst., that I should at an early day, personally examine the work of repaving Fifth Avenue, between Ninth and Ninetieth streets, at such localities as the same might now be in progress, I beg to say, that since the date named I have on five occasions visited that portion of the avenue between Thirty-seventh and Forty-second streets, have made a single visit to the part between Seventy-seventh and Ninetieth streets (these being the only localities at which work is yet carried on), and that for the past twelve days my assistant, Mr. E. E. Coryell, an experienced engineer, has, under my direction, been constantly on the line of the avenue, carefully noting the number of men employed, the kind and quality of the materials in use and the character

of the work done, securing from time to time, samples of the sand, gravel and broken stone actually incorporated into the road-bed, and at the close of each day making a detailed report of the results of his observations.

We have endeavored to exercise the greatest circumspection in carrying out your wishes, and while presenting you with an accurate reflection of the situation as it exists to-day, have reason to believe that no suspicions, on the part of the Contractor or his men, have been excited.

Such being my sources of information I have the honor to lay before you the following report:

#### PROVISIONS OF LAW.

The act relating to the repavement of Fifth Avenue was passed May 28, 1885 (chapter 371). That the Legislature contemplated making provision for the very best pavement it would be possible to lay, is clear from the language of the statute, which provides in its first section as follows:

"The said pavement to be of granite blocks, and in order to secure the best description of such pavement, of the best material and workmanship, to be laid in the most substantial manner, and with the best foundation; the said Commissioner of Public Works shall by public advertisement in the CITY RECORD, inserted for at least ten days, invite plans and proposals with specifications annexed for such work."

The phraseology here employed to indicate the character of the material and workmanship intended, leaves no room for the least doubt as to the kind of pavement the framers of this act had in view; and in consonance with this intention, and in order that the quality of the work to be executed should be fully and fairly set out for the information of bidders, this description was made a part of the advertisement for proposals, dated July 6, 1885, which appeared twelve times in the CITY RECORD, between July 7 and 20, 1885.

On the 17th of September, 1885, the Board, to which was referred by the act, the question as to which bid, under the advertisement for proposals, should be accepted, by a resolution of that date awarded the contract to Matthew Baird, on his proposal numbered 2, for the sum of \$429,559.50.\*

#### THE CONTRACT.

Accordingly on the 28th day of October, 1885, an agreement was entered into, by and between the Commissioner of Public Works, representing the Mayor, Aldermen and Commonalty of the City of New York, and Matthew Baird, by which, among other things, the said Baird agreed to:

"furnish and provide at his, or their own proper cost and expense, all the necessary materials and labor, and in a good, firm and substantial manner, and strictly in accordance with the following specifications, regulate and pave, with granite-block pavement, the carriage-way of Fifth Avenue, from Ninth street to the northerly line of Ninetieth street, except the five blocks from the north side of Thirty-second street to the south side of Thirty-seventh street; and also lay and relay crosswalks; all the said work to be done in the manner and under the conditions hereinafter specified; and

"has further agreed that the said Commissioner of Public Works shall be and is hereby authorized to appoint an Engineer, and such person or persons, not exceeding two in number, as he may deem necessary to properly inspect the materials to be furnished and the work to be done under this agreement; and to see that the same correspond with the specifications hereinafter set forth, which are, and are to be taken, as forming part of this contract."

I have read the specifications here referred to with great care and have no hesitation in saying that, with the exception of some obscurity of expression in the description of the shape and dimensions of the paving blocks—no limits to the dimensions of the lower or inferior face being given—and the use of the coal-tar residuum prescribed, in place of a suitable asphalt cement; a pavement laid in strict conformity with these specifications will endure for many years without any expense for repairs, and for heavy traffic will be the very best in the city.

\* See CITY RECORD for November 13, 1885, pages 2606-2607.

#### APPOINTMENTS OF ENGINEERS AND INSPECTORS.

Second section of the act of May 28, 1885, provides that the appropriation made in the tax levy of 1885, for repaving Fifth Avenue (\$150,000), and the amount necessary to complete the work (\$294,000);

Including the expense of Engineer and two Inspectors, shall be included in tax levy for 1886.

The contractor formally agrees that the Engineer and Inspectors shall properly inspect the materials and work furnished under this agreement.

February 19, 1886, J. McIntyre Smith was appointed ENGINEER on the work, and Christopher Havican and Thomas Abbott, Inspectors, on April 5, 1886.

Notwithstanding these appointments, and the specific terms of the law, on the 6th May, 1886, the Commissioner of Public Works writes to the Corporation Counsel for his opinion, as to his power to appoint the Engineer and Inspectors.

As to what position such Engineer occupies, and does he supersede the ordinary administration as to certifying to work done under the act?

Is the Department of Public Works justified in acting upon the certificates of the Engineer and Inspectors, without the official action of the Water Purveyor, as provided by law and ordinance?

Counsel to the Corporation replied on the 11th instant.

Counsel says: The act in question contemplates that the work should be of a superior quality. It also provides for an Engineer and two Inspectors, to be paid out of the appropriation for the contract.

The ordinary provisions of law do not apply to this work.

The officers charged with letting the contract must proceed as the statute directs, and the work must be done as the statute provides.

The Commissioner must appoint the Engineer and Inspectors. The Engineer does not take the place of the Commissioner.

Upon whom rests the responsibility of a proper execution of the contract.

Legislature assumed that if proper care was exercised in selecting the Engineer and Inspectors, the Commissioner could depend on their certificates.

If the Commissioner has any doubt as to the trustworthiness of these officers, it is his duty to obtain such information as will enable him to act intelligently on the final certificate.

It is evident from the foregoing that every facility has been granted to insure good work.

And that the public interests have been fully guarded.

If the provisions of the law and the contract are carried out, the end aimed at will be fully accomplished.

It remains to be ascertained whether the work so far executed conforms to the law and the contract.

And whether the officers representing the municipal government who are charged with the supervision of this work have done, and are now doing their duty.

This can only be ascertained by an inspection by a competent and disinterested person.

The second section of the act of May 28, 1885, chapter 371, Laws of 1885, provides that:

§ 2. "The appropriation made by the board of estimate and apportionment of said city, in the tax levy for the year eighteen hundred and eighty-five, for the partial payment of said avenue is hereby appropriated for the performance of the work by this statute authorized, and the amount neces-

sary to complete the whole work, including the expense of not more than two inspectors and one engineer, shall, on the certificate of the said commissioner of public works, be included in and appropriated by the tax levy for said city for the year eighteen hundred and eighty-six."

It has been shown in the quotation from the contract, made on page 3 of this report, that the contractor formally agrees that the engineer and the Inspectors, so appointed by the Commissioner of Public Works, shall properly inspect the materials to be furnished, and the work to be done under this agreement, and (to) see that the same correspond with the specifications hereinafter set forth," etc., etc.

By reference to the records of the Department of Public Works, I find that on the 19th of February, 1886, the Commissioner of Public Works appointed Mr. J. McIntyre Smith (understood to be a brother and business partner of Mr. William V. Smith, the present Deputy Commissioner), Engineer and Surveyor, on the work of repaving Fifth Avenue, and that on the 5th of April, Christopher Havican and Thomas Abbott were appointed Inspectors.

Notwithstanding these appointments, on the 6th inst., the Commissioner of Public Works addressed a communication to the Counsel to the Corporation, to the following effect:

"Referring to the second section of chapter 371, Laws of 1885, providing for the repavement of Fifth Avenue, from Ninth street to Ninetieth

street, I would ask you to advise this Department as to the power of the Commissioner of Public Works to appoint the engineer and inspectors therein specified. An appropriation having been made to cover the expense of the work, including the services of an engineer and two inspectors, what position does the engineer, when appointed, occupy in reference to the performance of the work? Does he supersede the ordinary administration of the Department as to the supervision and certification of the

work done under the act, and is this Department justified in acting upon his certificate and the certificates of the inspectors, as to any work done without the co-operation or supervision, or official action of the Water Purveyor, as provided for by law and ordinance in reference to ordinary work connected with the Bureau of the Water Purveyor?"

To this letter the Counsel to the Corporation replied on the 11th inst.† After acknowledging the receipt of the Commissioner's letter and its reference to chapter 371, Laws of 1885, and reciting the interrogatories propounded therein, the Counsel says:

"The act in question, which provides for the specific job of repaving Fifth Avenue, seems to contemplate that the work to be done in accordance with its provisions shall be of a superior quality and performed in a special manner. The act itself provides for the appointment of an engineer and two inspectors; and further, that their compensation shall be included in the appropriation for the contract, and not be borne by the Department of Public Works out of its ordinary appropriations for engineering services.

"The ordinary provisions of law and ordinance which apply to other works of the City of like description, do not, in my opinion, apply to the performance of this work. The officers of the City charged with the duty of letting the contract were required to proceed as the statute specially directed, and the work under the contract let must be proceeded with as the statute and the contract provides.

"It is plainly your duty to appoint the engineer and the two inspectors contemplated by the act, and whose compensation is provided for by the appropriation. The engineer, however, does not take the place of the

Commissioner of Public Works, upon whom the contract very plainly rests the responsibility of satisfying himself as to its proper execution. No other certificate, however, than that of the engineer and the inspectors provided for, and of the Commissioner of Public Works, is a condition precedent to payment for the work.

"It was apparently assumed by the Legislature that if proper care was exercised in the selection of the engineer and inspectors, the Commissioner of Public Works would have sufficient information in their certificates to enable him to pass intelligently upon the question whether or not he would accept the work performed under the contract. There is nothing, however,

to prevent the Commissioner of Public Works, and, in fact—if he has any doubt as to the efficiency or trustworthiness of the engineers or inspectors—it is his duty to obtain by any means which may commend itself to his best judgment, such information as to the manner in which the work is performed as will enable him to intelligently give or withhold the final certificate of acceptance, which the contract contemplates."

#### WHAT THE PUBLIC WANT AND EXPECT.

It is evident enough from the tenor of this correspondence and from the quotations made from the statute and the agreement, that so far as the law and the contract are concerned, every facility which abundant means and ample authority could give, to promote the end in view, have been freely granted. Moreover, in providing these essentials to a proper execution of the work, the public interests have been most faithfully, and, indeed, jealously guarded.

Hence it is clear, that if the provisions for the protection of these interests, now imbedded in these two instruments, are strictly and conscientiously carried out and enforced by the officers specially charged with this responsibility—the end aimed at—and that for which all this technical and legal circumspection has been exercised, namely: "The best description of pavement, of the best material and workmanship, laid in the most substantial manner and with the best foundation," will be successfully accomplished.

It now remains to be ascertained whether the work of repaving thus far executed, and that which is in process of execution, conforms strictly to the requirements of the law and the contract.

In other words, whether the Inspectors, the Engineer and the Commissioner of Public Works, who virtually represent the municipal government and through it, the people of this city, have done and are now doing, their entire duty in this matter?

This can only be ascertained from actual observation of, and a personal and unremitting inspection of the work as it progresses, by a competent person, who is entirely independent of, and who has no connection whatever with, any of the parties in interest.

\* See Appendix "A."

† See Appendix "B."



## WHAT THE PUBLIC ARE GETTING.

This portion of the report divided into two parts.

In order that it may be clearly understood what the public are getting, I have divided this portion of my report into two parts.

1. *The progress of the work to date, and*
2. *The manner in which the work thus far accomplished has been executed.*

## 1. Progress of the work.

Paving-blocks have been delivered for some months from 37th to 90th street at various points. State of the work on May 22, 1886.

## 1. PROGRESS OF THE WORK.

The work of delivering the paving-blocks along the line of the avenue, from Thirty-seventh street north to Ninetieth street, must have been going on for several months prior to the 10th instant.

At my first examination of the avenue, from Thirty-seventh to Fortieth street, on the afternoon of the 11th instant, I found the state of the work as follows:

37th to 38th street.

## THIRTY-SEVENTH TO THIRTY-EIGHTH STREET—

*Paving-blocks*, properly piled on both east and west sidewalks. *New bridge-stones*, delivered in Thirty-seventh and Thirty-eighth streets, near the avenue.

*Old gutter-stones* removed.

*Old curbs* in place, reset and aligned.

*Road-bed*, trap-block pavement removed and carriage-way excavated (apparently) to sub-grade. No grade stakes were to be seen and there was no evidence from any bench marks on the curbs that any grades for the axis of the street had been given.

*Concrete foundation*, no concrete had been made or laid, but preparations for mixing were at hand, two platforms being on the road-bed, fifty feet north of Thirty-seventh street, some barrels of cement covered with canvas, a pile of sand extended up the middle of the avenue, nearly the length of the block, and some twenty or more loads of broken stone and dust were piled near the platforms.

*There were no indications whatever that the road-bed had been either rolled or rammed.*

38th to 39th street.

## THIRTY-EIGHTH TO THIRTY-NINTH STREET—

*Paving-blocks* were properly piled on both east and west sidewalks.

*New bridge-stones* had been delivered in Thirty-ninth street, near avenue. *Old gutter-stones* had been removed.

*Old curbs* were being reset.

*Road-bed*, the trap-block pavement had been removed and the work of excavating the road-bed to sub-grade was in progress; about one-third done.

39th to 40th street.

## THIRTY-NINTH TO FORTIETH STREET—

*Paving-blocks* were properly piled on both east and west sidewalks.

*New bridge-stones* had been delivered in Fortieth street, near avenue.

*Old gutter-stones* partly removed.

*Road-bed*, the trap-block pavement had been removed except for about seventy feet at north end of block.

40th to 41st street.

## FORTIETH TO FORTY-FIRST STREET—

*Paving-blocks* were properly piled on both east and west sidewalks.

*New bridge-stones* had been delivered in Forty-first street, near avenue.

Block open for traffic still.

41st to 42d street.

## FORTY-FIRST TO FORTY-SECOND STREET—

*Paving-blocks* were properly piled on west sidewalk; none on east side.

Street open for traffic.

90th to 88th street.

## NINETIETH TO EIGHTY-EIGHTH STREET—

My assistant was informed that the work of excavating the road-bed commenced here about the 8th inst.

90th to 82d street.

## NINETIETH TO EIGHTY-SECOND STREET—

*Paving-blocks*. On the 15th instant, blocks were found piled on both east and west sides of the avenue.

Progress of work to May 22.

*The progress on the entire work, up to Saturday night, May 22, was as follows:*

37th to 40th street.

## THIRTY-SEVENTH TO FORTIETH STREET—

*Road-bed*. From the line of the south curb of Thirty-seventh street to a point forty feet south of the south curb-line of Fortieth street, the road-bed has (apparently) been excavated to sub-grade and covered with a bed or layer of concrete. Upon the concrete has been spread gravel to an average depth of 1½ inches, in which are an abundance of small stones, measuring 1, 1½, 2, 3 and even 4 inches in their longest diameter. The box marked No. 30 contains fair specimens of these stones as picked up on the road-bed of the avenue, near north side of Thirty-ninth street, on Sunday, May 23. Specimen No. 38 is a fair sample of the gravel as spread over the concrete.

40th to 41st street.

## FORTIETH TO FORTY-FIRST STREET—

*Road-bed*. About one-half the trap-block pavement has been removed. Excavation to sub-grade is in progress.

41st to 43d street.

## FORTY-FIRST TO FORTY-THIRD STREET—

*Paving-blocks* have been properly piled on the east side, from Forty-first street to a point twenty feet north of the north curb of Forty-third street; on the west side the pile of blocks only extends to Forty-second street.

37th to 39th street.

## THIRTY-SEVENTH TO THIRTY-NINTH STREET—

*Coal tar cement*, for jointing blocks, has been delivered at Thirty-seventh and Thirty-eighth streets. Everything appears to be in readiness for laying the blocks.

90th to 88th street.

## NINETIETH TO EIGHTY-EIGHTH STREET—

*Road-bed*. The old metaling and Telford bottoming have been removed to (apparently) sub-grade. The rock bottoming has been converted into "broken stone" and piled along the centre of the avenue ready for use in making concrete.

*Concrete foundation*. Two mixing platforms, a supply of cement and sand are in position, between Ninetieth and Eighty-ninth streets, ready to commence mixing concrete on the ensuing Monday morning.

88th to 87th street.

## EIGHTY-EIGHTH TO EIGHTY-SEVENTH STREET—

*Road-bed*. The old metaling has been removed from the north half of the block and stored along the south side of Eighty-eighth street, east of avenue. The Telford bottoming is about half excavated; one portion is being taken to the breaker at Seventy-seventh street and Fifth avenue, and the rest stored along Eighty-seventh street.

Disposition of the force employed.

*The force engaged on Saturday, May 22, at the two points at which work is in progress was as follows:*

38th to 39th street.

## THIRTY-EIGHTH TO THIRTY-NINTH STREET—

3 men wheeling gravel on street.

39th to 40th street.

## THIRTY-NINTH TO FORTIETH STREET—

1 Walking boss.

1 Superintendent.

1 Foreman.

7 men mixing, wheeling and spreading concrete.

2 men aligning curbs.

40th to 41st street.

## FORTIETH TO FORTY-FIRST STREET—

1 Foreman.

7 Laborers removing old pavement.

7 Laborers grading road-bed.

42d to 43d street.

## FORTY-SECOND TO FORTY-THIRD STREET.

1 Foreman.

3 Laborers piling blocks.

34

39th to 88th street.

## EIGHTY-NINTH TO EIGHTY-EIGHTH STREET—

1 Foreman.

17 Laborers breaking stone.

2 men aligning curbs.

88th street.

## EIGHTY-EIGHTH STREET—

5 Laborers prying out old pavement.

3 Laborers loading carts with stone.

88th to 87th street.

## EIGHTY-EIGHTH TO EIGHTY-SEVENTH STREET—

1 Foreman.

5 Laborers prying out old pavement.

9 Laborers picking metaling.

43

3 carts hauling stone to breaker, 2 hauling stone to stock pile in Eighty-eighth street.

Total force employed.

TOTAL FORCE, 77 MEN AND 5 CARTS. (Teams hauling blocks, cement, gravel, etc., at work, Thirty-seventh to Forty-third street, not included.)

## 2. MANNER OF EXECUTING THE WORK.

## Grades.

The grade of the middle line of the avenue is determined by the front edges of the realigned curbs.

To insure good workmanship, the exact position of the axis of the avenue should be first ascertained.

This grade fixed, it is easy to give the proper curve to the road-bed.

Given by grade stakes, placed at suitable distances apart.

On these are marked the depth of the sub-grade and a point six inches above.

Exact curve of sub-grade, and of concrete foundation fixed by means of templates.

No grade stakes seen on the work.

The work of preparing the street for paving-blocks, has been done without the use of grade stakes.

Surfacing done by the eye only.

No guarantee that the road-bed has been properly prepared for the blocks.

Proposal of M. Baird for excavating road-bed.

Specifications with respect to excavating road-bed.

The surface of the road-bed to be thoroughly rammed or rolled.

Until the surface has been thoroughly compacted.

This provision of the contract does not appear to have been regarded in the slightest degree. No rollers or rammers seen on the work.

Concrete spread on soft and even muddy ground.

Where this was observed.

Concrete laid on soft, clayey ground.

On muddy ground.

Specifications respecting spongy material or vegetable matter.

If such precautions are necessary, spreading concrete on the mud cannot be justified.

Character of the foundation prescribed by law.

Conditions imposed cannot be fulfilled where a foundation is laid on a soft bottom.

The pavement will yield obedience to natural rather than statute law.

Opinion of General Gillmore as given in his "Treatise on Roads, Streets and Pavements," on the absolute necessity of good foundations for street pavements.

The position of the curbs, as reset and realigned, fix the grade of the avenue along their front edges, but as in a cross section of the street, a right line joining the upper corners of opposite curbs, should be tangent to the curve of the finished pavement at its middle point, i. e., where the middle longitudinal element of the furnished surface intersects the section in question, it is absolutely essential to insure that "good workmanship" required by law, that this point should be accurately fixed; a succession of such points giving the exact grade of the axis of the street. These points should be determined by the Engineer at the very inception of the work; that done, it is an easy thing to give the proper curve to the road-bed, on which to lay the monolithic concrete foundation.

The positions of these points are given by means of grade stakes placed at a suitable distances apart, along the middle line of the avenue, on which are marked as a guide to the workmen, the depth of the sub-grade, and the point on each, six inches above the sub-grade, where the upper surface of the concrete foundation is to cut the stake. These points established, it is a simple matter, by means of a suitable templet or level, joining these points and corresponding ones on the face of the curbs, to give the exact curve to the sub-grade and to the surface of the concrete foundation, necessary to make them conform accurately to the rounded surface of the roadway when completed.

During the twelve days the progress of the work of repaving the avenue has been under examination, neither my assistant nor I have been able to discover any grade stakes, or any indications that any surveyor's instruments had been used on the work.

The street has been excavated, the surface of the sub-grade prepared and the monolithic foundation laid, from the south line of Thirty-seventh street to a point forty feet south of the south curb-line of Fortieth street, apparently, without the use or aid of any of the methods or appliances heretofore indicated. The adjustment and surfacing being done solely by the eye of the superintendent or of his foreman.

The public have no guarantee whatever, so far as I can see, that the avenue has been excavated to the proper depth, that the concrete foundation has been laid of a uniform and proper thickness, or that its surface corresponds to the true curve of the finished street. For these reasons I regard the manner of executing this portion of the work as open to the gravest objections.

## Preparation of the Road-bed.

Proposal No. 2 of Matthew Baird for repaving Fifth avenue, opened by the "FIFTH AVENUE REPAVING BOARD," on the 20th of July, 1885, which was duly accepted on the 17th of September, 1885, and was subsequently made the basis of the contract dated October 28, 1885, the execution of which forms the subject of this report; recites under the third head of "the digest of the specifications as received," referring to the preparation of the road-bed; that, "subsoil to be excavated so that surface, after rolling, shall be 16 inches from top of pavement."

The 12th paragraph of the specifications of the contract of October 28, 1885, provides that:

"All paving and other stones unfit for further use shall be taken up and immediately removed from the line of the work, and shall become the property of the contractor; the subsoil or other matter (be it earth, rock, or other material) shall then be excavated and removed by the contractor to such a depth as that, when the surface is thoroughly compacted by ramming or rolling, it shall be left sixteen inches below established grade of the top line of the finished pavement, except where stones of less dimensions are to be used, then to be excavated to such depth as the Commissioner of Public Works shall direct."

If this paragraph has any meaning at all, it is that the very first step in the process of preparing the street for the concrete foundation to the paving-blocks, after the requisite quantity of earth, or other material has been removed, is to "roll" or "ram" the surface of the ground until it is "thoroughly compacted."

So far as the work of preparing the road-bed from THIRTY-SEVENTH TO FORTY-FIRST STREET, AND FROM NINETIETH TO EIGHTY-EIGHTH STREET, is concerned, this provision of the contract does not appear to have been regarded in the slightest degree. Neither my assistant nor I have ever seen any rollers or rammers used, any indications that they had been used, or either rollers or rammers, on the line of the work.

On the contrary, on several occasions I observed the workmen spreading the concrete over considerable areas of the sub-grade, where the ground was so soft and muddy from the effects of rain or a leaking hydrant, that a half loaded barrow could with great difficulty be driven over the surface, the wheel settling two or more inches; while the shoes of the men working on the spot were covered with mud.

I observed this, on Monday, May 17, at a point seventy-five feet north of the north line of Thirty-eighth street, and on Saturday, May 22, on an area of two hundred square feet in front of No. 448 Fifth avenue.

My assistant reports as follows:

Monday, May 17. "The concrete is being laid on the soft, clayey ground without any previous ramming."

Wednesday, May 19. "Along the gutters on the east and west side of the avenue where the concrete is being laid, the ground is very muddy."

As if to emphasize the necessity for ramming or rolling, paragraph twelve further provides that:

"Should there be any spongy material or vegetable matter in the bed thus prepared, all such material shall be removed, to a depth of not less than two feet below the established grade last aforesaid, and the space filled with clean gravel or sand carefully rammed, so as to make such filling compact and solid."

If such precautions are necessary where there is any spongy material present, certainly spreading the concrete on a mud bottom cannot be justified.

The law of May 28, 1885, chapter 371, is very specific in stating that the pavement is to be laid "in the most substantial manner and with the best foundation."

Neither of these conditions can possibly be fulfilled, where a foundation is laid on a soft or muddy bottom, as has been frequently done during the progress of this job to date. Unequal settlements must be the inevitable, ultimate result, and the pavement now being laid, yielding obedience to the laws of natural philosophy, rather than to the declarations of chapter 371 of the Laws of New York for 1885, will sooner or later, show the bad effects of such settlements, precisely as does the surface of every other paved street in the City of New York, except Broadway, below Fourteenth street.

Upon this question of the absolute necessity of a good foundation for street pavements, especially such as the Fifth avenue, which are called upon to sustain an ever increasing, heavy traffic, General Gillmore, of the U. S. Engineers, who ranks among the highest authorities in this country on the subject of Roads and Pavements, says in his "Treatise on Roads, Streets and Pavements," page 142:

"The object of a pavement being to secure a hard, even and durable surface, and not to any considerable extent, nor necessarily, to support the weight of heavy loads, it is evident that the surface will soon subside

\* See CITY RECORD for November 13, 1885, page 2604.  
† These words are italicized in the specifications.



"unequally, forming ruts and depressions, unless it rests upon a firm and solid foundation. A good foundation is as necessary for the stability of a pavement as for that of any other construction."  
 "Bad foundations invariably produce bad pavements sooner or later, while with a good foundation the quality of the surface upon which the wear takes place, depends upon the material used for paving and the manner of laying it down."

#### Preparing the Concrete for the Monolithic Foundation.

M. Baird's formula for making concrete as given in his proposal No. 2.

Specifications of contract respecting concrete. Its thickness.

Formula for making.

Quality of the material to be first considered.

#### I.—Cement.

The description of the cement in the specification more carefully worded than in the proposal.

Important amendments made. Under the proposal any kind of cement would have to be received.

The quality of the cement must be tested.

Nature of the test.

The fact that a test was introduced in the specifications is a proof that it was expected to be observed.

No proofs that any cement has ever been tested. If it has not, an indispensable duty has been neglected.

#### II.—Sand.

Clean, sharp sand defined.

Standard samples. "A"

"B"

Conform to the definition given above.

Samples from the work.

No. 0.

No. 8.

No. 31.

No. 33.

Have repeatedly seen the concrete mixed with this material.

Never screened.

If compared with samples A and B, the difference is obvious.

No one could have the hardihood to maintain that gravel is sand.

Judged by the standard samples no clean, sharp sand has as yet been used on the work.

If the Elevated R. R. Co. and builders of tenement-houses can procure a good quality of sand there is no reason why Mr. Baird cannot do the same.

In Proposal No. 2 of Matthew Baird, as given in the "Digest of the specifications as received," heretofore referred to, the following language in relation to this part of the work is used:

"Concrete of such depth as Commissioner requires, to be composed of one part of American hydraulic cement, two parts clean, sharp sand, and three parts of broken or uneven stone, sound and solid, that will pass through a two-inch ring."

The thirteenth paragraph of the specifications of the contract of October 28, 1885, provides that:

"Upon the foundation thus prepared shall be placed a bed of concrete, to the depth of six inches."

"The concrete shall be composed of one part of fresh ground American hydraulic cement, of the best quality, two parts of clean, sharp sand, and three parts of broken or screened stone, the proportion to be determined by measurement."

In considering the question as to in how far this part of the contract has been complied with I shall examine,

FIRST, THE QUALITY OF THE MATERIALS OF WHICH THE CONCRETE IS REQUIRED TO BE COMPOSED.

#### I.—Cement.

It will be noted that the proposal is for a concrete to contain "one part of American hydraulic cement," and that in the specifications this expression has been qualified to read, "one part of fresh ground American hydraulic cement of the best quality."

These are most important amendments, since under the wording of the proposal any American brand of (so-called) hydraulic cement would have to be accepted, whether fresh or long ground, whether of the best, of a good or even of bad quality.

As a precaution against the use of any cement but that which is of the "best quality," the standard of excellence by which the quality of every barrel should be tested is given in the same paragraph of the specifications to which reference has just been made, in these words: "The cement to be capable of resisting a tensile strain of fifty pounds per square inch after thirty minutes exposure in air and twenty-four hours immersion in water."

The mere fact that this test has been introduced into the specifications is the best evidence that its observance was regarded by the Commissioner of Public Works, under whose direction the contract was drafted, as an indispensable step in the process of preparing "the best foundation" as required by law.

While I am not prepared to assert that this portion of the contract has not been observed, it can be stated with truth that neither my assistant nor I have ever seen the least proof that this condition has been complied with. We have never seen any barrels which showed any indications of having been sampled, and there has not been since the 11th instant, and there is not now, any testing going on in the vicinity of the work.

If I am right in my conjectures, and none of the cement used has been tested as prescribed, then a most important, indeed an indispensable duty has been neglected.

#### II.—Sand.

The second component of the cement is "clean, sharp sand." By this expression I understand is meant small particles of silicious stone, crystalline in structure and angular in shape, of a size small enough to pass through a 1/8-inch mesh, which will not cohere when wet, and which are not associated with clay, loam or any organic matter.

I hand you herewith two samples of sand:

Sample A is a sand brought from Long Island. This specimen was obtained from the Morrisania Boat Dock, Harlem river, and is the kind and quality now being used in making the concrete beds for the piers of the Second Avenue Elevated Railroad in this city.

Sample B is a sand brought from the west side of the city, and was taken from a pile now being used in the construction of four tenement-houses situated on the south side of One Hundred and Thirty-seventh street, between Alexander and Willis avenues, New York City.

Each of these samples conforms to the definition of sand as given above, and entirely fulfills the conditions named in the specifications, viz.: 1st. It is sand. 2d. It is clean; and 3d. It is sharp.

I also hand you as a contrast to samples A and B four samples obtained from the line of the work on Fifth avenue, as follows:

Sample No. 0.—Specimen of sand used in making the concrete foundation between Thirty-seventh and Thirty-eighth streets, taken from a pile at a point ten feet south of south house-line of Thirty-eighth street, on Thursday, May 13, 1886.

Is largely mixed with clay and loam.

Sample No. 8.—Specimen of so-called sand, taken from the concrete mixing platform on Fifth avenue, between Thirty-eighth and Thirty-ninth streets, opposite the lot-line between Nos. 425 and 427, on Sunday, May 17, 1886.

This is a fair sample of the mixture of sand and gravel used on this block (without screening) for making concrete.

Sample No. 31.—Specimen of so-called "sand," taken from a pile opposite No. 450 Fifth avenue, on Sunday, May 23, 1886, used in making concrete between Thirty-ninth street and Fortieth street.

All the mixture of sand and gravel used in making the concrete foundation on this portion of the avenue contained many stones, varying in weight from one to six ounces. The large stone in this sample weighs 3 1/2 ounces.

Sample No. 33.—Specimen of "sand" from a pile on Fifth avenue, twenty-five feet south of south line of Ninetieth street, obtained on Sunday, May 23, 1886.

All this lot was largely mixed with clay and loam. Sand from this pile was used on Monday, May 24, without screening, for making concrete.

Both my assistant and I have repeatedly seen the concrete mixed with material similar to samples Nos. 0, 8 and 31, and the process can be witnessed any day as the work progresses north from Fortieth and south from Ninetieth street.

Not a pound of this material has ever been screened before use.

If these samples are compared with samples A and B, either under a magnifying glass, by rubbing in the hand, or by covering with water in a tumbler, allowing the latter to stand for a few minutes and then reversing it, the difference in the quality will be at once perceived.

Certainly no one can have the hardihood to maintain that a coarse gravel, full of large pebbles and containing even stones weighing from two to six ounces, should be classed as sand.

Judged by the standard samples A or B, I have no hesitation in asserting that up to the date of this report there has been no "clean, sharp sand" used on the work.

It seems almost superfluous to remark that if it is practicable for the Manhattan Railroad Company to obtain such a fine quality of sand for its substructures, as that shown in sample "A," and if builders of tenement-houses are using the quality shown in sample B, no valid reason can be given why it is not equally practicable for Mr. Matthew Baird (particularly in view of his voluntary proposal, supplemented as it was by the self-imposed obligation of a formal contract) to obtain and use an equally good article.

#### III.—Broken stone.

Kind of broken stone Mr. Baird proposed to supply.

Kind and quality of broken stone the specifications require.

The broken stone used on the work between 37th and 40th streets well illustrates the difference between promises and performance.

Fifth avenue, from 59th to 60th street, originally paved with Telford pavement.

Surfaced with trap-rock, well rolled.

Contract provides that this pavement shall be entirely removed. As fast as stone is taken out it is either broken by hand or removed to the breaker.

Much of the rock so excavated is "rotten."

Other portions so disintegrated by the weather as to be easily broken by the fingers.

For these reasons not less than 20 per cent. of the bottoming should be rejected for making concrete.

In the breaker, much of this stone is reduced to powder.

Disposition of the crushed rock at the breaker.

Of the portion broken by hand, at least 20 per cent. is unfit for concrete making.

It would have been easy to have screened the crushed rock as it came from the breaker, and so separate the standard size from the dust and large pieces.

Nothing of the kind has been done. If it had been, at least 15 per cent. of that thus far used would have been thrown out.

Samples of the "broken stone" used.

If a portion of the "broken stone" should be rejected because it contains dust and is not solid, another considerable portion was unfit for use on account of the size of the pieces.

Samples above standard size.

Have seen quantities of pieces worked into the concrete which would not pass through a three or even a four inch ring.

Gauged by the standard, 30 per cent. of the broken stone ready for use between 60th and 67th streets would be rejected.

There is a large quantity of good trap-rock in the metaling. If this material is well screened, it will make a superior concrete.

Sample of the metaling. The evidence before me forces me to the conclusion that none of the broken stone used on the work has been equal to the standard prescribed. If the Engineer and the Inspectors had done their duty it would all have been rejected.

Requirements of the specifications.

It is fair to the contractor to assume that he will adopt that method of mixing adopted by the highest authorities.

#### III.—Broken Stone.

The third component of the concrete is broken or screened stone.

In Proposal No. 2 of Matthew Baird, already referred to, occurs the following language, describing the broken stone he proposes to use in preparing the concrete used in repaving Fifth avenue, in case his bid is accepted: "and three parts of broken, or uneven stone, sound and solid, that will pass through a two-inch ring."

Paragraph 13 of the specifications of the contract of October 28, 1885, provides that:

"The broken or screened stone to be sound and solid trap or gneiss rock, and of a size not larger in any dimension than will pass through a two-inch ring, free from dust and dirt."

The better to appreciate the character of the "broken stone" thus far used in making all the concrete laid from Thirty-seventh street to Fortieth street, and as well illustrating the wide difference there may be between promises and performance, it is necessary to explain that that portion of the

Fifth avenue from Fifty-ninth street to Ninetieth street appears to have been originally paved with the "Telford" pavement, the bottoming of which was composed of rough pieces of gneiss rock, as they came from the ledges in the vicinity, set in place, with their lines of stratification vertical.

The voids between the stones were then filled, and the whole surface of the street was covered with trap-rock metalling, well rolled.

By the terms of the contract, this pavement is to be entirely removed and such of the stone in it "as is unfit for further use" becomes the property of the contractor. As fast as the stone is taken up from its old bed, it is either broken by hand on the spot or removed to a stone-breaker located on the southeast corner of Seventy-seventh street and Fifth avenue, to be crushed. This breaker has a capacity of from forty-five to fifty cubic yards per day.

A very considerable portion of the rock so excavated, as is characteristic of the parent ledges from which it was quarried, contains an excess of mica, rendering it soft and friable, or, in the parlance of street contractors, "rotten," thus rendering it utterly unfit for making a tough, hard concrete. Samples No. 10, presented herewith, are fair specimens of the rock here described.

Other portions of the gneiss bottoming now being removed from the avenue have become so disintegrated from the effect of moisture and frost as to be easily broken by the fingers when wet.

I estimate that, on account of its micaceous and disintegrated character, not less than 20 per cent. of this bottoming should be rejected for making concrete, nevertheless it all goes either to the breaker or under the stone hammers; in the breaker, the greater portion is reduced to powder.

At the breaker, the crushed rock including the dust, is run into a large hopper, from which it is discharged directly into the wagons which transport it to the work between Thirty-seventh and Forty-first streets.

As to that portion broken by hand now lying on the avenue between Ninetieth and Eighty-seventh streets, I feel justified in asserting that twenty per cent. of this stone is entirely unfit for the purpose for which it is intended, and for which a portion is at this moment being used, and does not come within the meaning of the terms "sound and solid trap or gneiss rock," as given in the specifications.

With respect to that portion of the stone sent to the breaker, it would be an easy matter to run the broken rock over a set of graduated screens, by which the "dust and dirt" would be separated from the larger fragments, and the standard size, "not larger in any dimension than will pass through a two-inch ring," segregated from the larger pieces.

Nothing of the kind has been, or is now being done; and I think I am within bounds when I say, that if this plan had been followed at least fifteen per cent. of the material actually delivered and worked up into concrete between Thirty-seventh street and Fortieth street, would have been sifted out.

I hand you herewith samples of the dust referred to, as follows:

No. 9.—Specimen of "broken stone," with associated dust, taken from a pile of "broken stone" on Fifth avenue, between Thirty-eighth and Thirty-ninth streets, opposite No. 427, on Sunday, May 17, 1886.

No. 35.—Specimen of "broken stone," with associated dust, as used for making concrete on Fifth avenue, between Thirty-ninth and Fortieth streets, taken from a pile of "broken stone" opposite doorway of No. 452 Fifth avenue.

But if one portion of this broken stone should have been rejected because it was not "free from dust and dirt," and that much of the rock was neither "sound" nor "solid trap or gneiss," another very considerable portion, for still another reason, was unfit for the purpose for which it has been or is intended to be used, because the pieces would not "pass through a two-inch ring."

I hand you herewith Samples Nos. 11, 15 and 17, being specimens taken from a pile on Fifth avenue, between Thirty-eighth and Thirty-ninth streets, opposite No. 427, on Sunday, May 17, 1886, and

Samples Nos. 21 and 23, being specimens taken from a pile on Fifth avenue, twenty-five feet south of the south line of Ninetieth street, on Sunday, May 23, 1886.

None of which will pass through a two-inch ring.

Samples Nos. 19 and 20, being specimens taken from a pile of broken stone on Fifth avenue at northeast corner of Thirty-ninth street, on Thursday, May 20, 1886.

Neither of which will pass through a THREE-INCH RING.

Both my assistant and I have seen quantities of pieces worked into the concrete which would not pass through a three or even a four-inch ring, and at one mixing I saw a stone at least six inches in diameter, as big as my two fists, thrown into the batch by a laborer without an objection being raised.

Were the piles of broken stone now lying in the avenue between Ninetieth and Eighty-seventh streets ready for use, to be subjected to this two-inch test, I feel confident that at least thirty per cent. would be rejected.

There is a large quantity of broken trap-rock in the metaling now being removed from the avenue below Ninetieth street. As taken from the street it is mixed with some twenty per cent. of dirt and dust. If this material is well screened, it will make a superior quality of concrete; but if used, as all the broken stone has been thus far, without screening, the concrete made therefrom will be of an inferior grade. See sample No. 36, accompanying this report.

As the result of my own observations and those of my assistant, I am forced to the conviction that none of the broken stone, in the condition in which it has thus far been used on the work, has conformed in quality, in uniformity of size, or in freedom from dust, to the specifications of the contract; and that if the Engineer and the two inspectors appointed by the Department of Public Works, had faithfully executed the duty which both the statute and the contract imposed, it would all have been rejected.

#### SECOND—METHOD OF MIXING THE CONCRETE.

The thirteenth paragraph of the specifications (page 7 of contract) provides that

"The cement and sand shall be first thoroughly mixed dry, then water added in sufficient quantity to form a mortar; the broken stone to be next added, and the mass worked and turned over until the broken stone presents no dry surface."

As regards the specific manner in which the cement and sand are to be mixed before adding the broken stone, in order to give the strongest concrete, it is but fair to the contractor to assume (until it is proved otherwise) that in view of the requirements of the law, which demands that the "foundation" is to be the "best," he would follow that method of incorporating his materials which the experience of engineers most familiar with the use of concrete has prescribed.



General Gillmore of the U. S. Engineers, whose work on "Limes, Hydraulic Cements and Mortars" ranks him among the highest authorities on this subject, in his "Treatise on Roads, Streets and Pavements" gives the following rules for preparing

#### "Hand-made Concrete."

Details of the method of mixing hand-made concrete prescribed by General Gillmore in his work on "Roads, Streets and Pavements."

Spreading the sand.

Spreading the cement.

Mixing the sand and cement.

Forming a basin.

Introduction of the water.

Making the cement mortar.

Introduction of the "broken stone."

Sprinkling with water.

Turning over the bed.

Time required to make one batch.

This method followed by the United States Engineers and Pennsylvania Railroad Company. Contractor's method as witnessed at certain specified times.

Spreading the "sand."

Spreading the cement.

Without the "sand" and cement having been mixed, the broken stone is thrown on the top of the mass.

Mixing the materials.

Application of water.

A portion of the broken stone was screened when the work of making concrete commenced.

No screens seen in use since.

Judged by General Gillmore's rules, the concrete thus far made has not been half mixed.

Extracts from field notes touching manner of mixing. Monday, May 17.

Wednesday, May 19.

Thursday, May 20.

Wednesday, May 26.

"Each batch of mortar or concrete should correspond to one cask of the cement. In mixing it by hand labor, four men constitute a gang for measuring out and mixing the ingredients, who proceed to the several steps of the process in the following order:

"First. The sand is spread upon the platform in a rectangular layer about two inches in thickness.

"Second. The dry cement is spread equally all over the sand. If lime be used as one of the ingredients, it should first be slaked to a powder by sprinkling, and then mixed with the dry cement, before the latter is spread over the sand.

"Third. The men place themselves, shovel in hand, two on each side of the rectangle, at the angles, facing inward.

"Furrows of the width of a shovel are then turned outward along the ends of the rectangle, until the whole bed is turned. The two men on one side then find themselves together, and opposite the two on the other side, having, of course, left a vacant space transversely through the middle, of double the width of a shovel. They then move quickly to the ends of the wide furrow, and turn successive furrows inward, when the bed occupies the same space that it did previous to the first turning. The turning is executed by successively thrusting the shovel under the material, and turning it over about one angle as a pivot. Each shovel thus moves to the middle of the bed, where it is met by the one opposite, when each man moves back to the side in dragging the edge of the shovel over the furrow he has just turned.

"Fourth. A basin is formed by drawing all the material to the outer edge of the bed."

"Fifth. The water is poured into the basin thus formed.

"Sixth. The material is thrown back upon the water, absorbing it, when the bed occupies the same space that it did in the beginning.

"Seventh. The bed is turned twice, by the process above described. If required for mason's use, the mortar is heaped up to be carried when and where required. If for concrete, the mortar occupying the rectangular space as at first.

"Eighth. The coarse materials (whether broken stone, bricks, gravel, shells, or a mixture of two or more, or all of them) are spread equally over the bed.

"Ninth. A bucket full of water more or less (depending on the quantity of stone, their absorbing power, and the temperature of the air) is sprinkled over the bed.

"Tenth. The bed is turned once as before and then heaped up for use. The act of heaping up, when done with care, has the effect of a second turning.

"The time consumed in making a batch of concrete, composed of one barrel of cement, two and a half to three barrels of sand, and five or six barrels of the coarse materials, is from twenty-five to twenty-eight minutes. An experienced gang of first-rate laborers can do it in a little over twenty minutes."

The method outlined above is followed in its essential features by the United States Engineers and the engineers of the Pennsylvania Railroad Company, in the works under their charge.

Having thus set out in detail the proper method of making concrete, I will now describe that followed by the contractor on this work, as witnessed by me on Thursday, May 13, at a point on the avenue just north of Thirty-seventh street, and opposite the Brick church; on Monday, May 17, on the avenue, at a point about seventy-five feet north of the north side of Thirty-eighth street; and on Saturday, May 22, on the avenue, south of Fortieth street, opposite No. 448. Also, by my assistant daily, from May 13 to May 26.

From five to five and a half inches deep of unmeasured and unscreened sand, or the mixture of sand and gravel, similar to samples Nos. 8, 31 and 33, is spread evenly on the platform; on this is spread the contents of three or four barrels of cement, making a layer two to two and a half inches thick, the gravel and cement together averaging, say, seven to eight inches thick, close up to the edges of the platforms, which are thirteen feet square.

Without any mixing of these two materials, immediately on top is shoveled from the pile, as dropped from the wagons, the broken stone intermixed with breaker dust, as shown in samples Nos. 9, 35, 11, 15, 17, 19, 20, 21 and 23, to the depth of about nine inches. The stone is not measured, but the quantity appears to be regulated solely by the judgment of the foreman.

Seven to eight men are usually employed on a batch.

All the broken stone having been thrown on, the men commence shovelling and throwing the material towards the centre from each of the four edges of the platform, until there is a space, say, fifteen inches wide cleared all around the platform, and the material is mounded up in the middle to a height of, say, three to three and a half feet. Water from a small rubber hose, connected with the nearest hydrant, is next poured on the top and sides of the pile, and as it courses down the sides, carrying with it the finer particles of cement and sand, the laborers standing around the platform pull down the loose stones with their shovels and mix little batches on the edges of the platform, the foreman occasionally, and only spasmodically, throwing into those batches which he thinks require it a bucket either full or half full of water. From these batches of imperfectly mixed material it is shoveled into barrows. Occasionally, the foreman will throw half a bucket of water into each barrow before it is loaded, but this is not done invariably.

During the first two days on which concrete was mixed just above Thirty-seventh street, a portion of the broken stone was screened. It was here that on Thursday, May 13, I observed the amusing spectacle of the men who were mixing the concrete, taking the broken stone needed from both the screened and the unscreened piles.

The rain, which occurred about that time, so moistened the breaker dust in the piles of stone that it clogged the meshes of the screen, and its use was soon abandoned; neither my assistant nor I have seen any screens used on any part of the work since.

Judged by General Gillmore's rules as quoted, the concrete thus far used on the work has not been half mixed. In some barrow-loads I could see the unmixed sand or gravel; in others, from a superabundance of water and cement, the material was as thin as slush.

On this subject of mixing, I make the following extracts from my assistant's field notes:

"Monday, May 17, at three P. M., more than one-third of a cubic yard of dirt and small stones, which had been shoveled from the gutter on the east side of the avenue, between Thirty-eighth and Thirty-ninth streets, was piled on one of the mixing platforms and incorporated with the sand and cement." No water is added to the sand and cement until they are mixed with the "broken stone."

"Wednesday, May 19, at three P. M., the only platform which is in use to-day was piled five feet high with sand, cement, broken stone, breaker dust and dirt from the bed of the avenue. There was more than one-third of a yard of dirt in this batch from the street-bed."

"Thursday, May 20.—One of the workmen informed me that the material excavated was worked into the concrete."

"Wednesday, May 26.—Four consecutive barrow-loads, taken from a pile I saw mixed, contained not more than a barrowful of stone. One of the spreaders thus addressed one of the wheelers: 'Sometimes it's all sand, and sometimes all stone, that you're bringing.'"

Proportion of cement, sand and broken stone in the concrete as stated by contractor's superintendent.

Up to this date not a single rule for making concrete as laid down in the specifications has been observed.

Laying concrete foundation.

What Mr. Baird proposed in his Proposal No. 2.

What the specifications require.

The depth of the concrete laid between 37th street and 40th street will not probably average five inches, and it is doubtful whether it will average four inches.

Thickness under the bridge-stones, on avenue, north side 38th street, between 8th street and 9th street 2 to 4 inches.

Considering its poor quality the thickness of the concrete should have been increased rather than diminished.

Have never seen the concrete rammed, nor any rammers to do it with.

This essential requirement has not been observed.

Surface of concrete.

What the specifications require.

How the specifications have been complied with.

Bedding for blocks.

What Mr. Baird offered in his Proposal No. 2.

What the specifications require.

How they have been complied with.

Sample of the gravel used.

Samples of the stones found in the gravel.

No screening or drying attempted.

The substitution of this coarse material for the sand required by the contract will largely defeat the object in view.

Reasons why it will so do.

In thus substituting an inferior material for the sand specified in the contract, one of its most essential provisions has been deliberately violated.

Paving-blocks.

Quality and size.

What Mr. Baird offered to supply.

What the specifications require.

Results of measurements of random blocks.

What the quantity of each of the ingredients of the concrete should be, as understood by the contractor, I had from the lips of his superintendent on Monday, May 17. In reply to a question as to how the concrete was made, he stated that "to a barrel of cement there was three times as much sand and gravel, and four times as much broken stone."

These statements, made from personal observations extending over a period of twelve working days, clearly prove, that up to this date, in mixing the concrete, not a single one of the rules laid down in the contract for conducting this operation has been complied with.

#### Laying the Concrete Foundation.

As regards spreading the concrete after mixing, Proposal No. 2 of Matthew Baird, hereinbefore referred to, provided that it should be done in this way:

"Concrete of such depth as Commissioner requires, \* \* \* to be rammed and compacted until a clear mortar surface, which surface shall be 10 inches below line of pavement."

Paragraph 13 of the specifications† requires that:

"upon the foundation thus prepared shall be placed a bed of concrete to the depth of six inches. \* \* \* The concrete shall be placed in proper position and then rammed until it is thoroughly compacted and has a clear mortar surface, which surface when left shall be ten inches below the grade of the top of the finished pavement."

Regarding the depth of the concrete foundation, as laid between Thirty-seventh street and Fortieth street, my assistant and I have noted with great care the work of laying and spreading it, and we both agree in the opinion (which, however, we have not been able to verify by measurement, owing to the constant watch kept on the work day and night by the contractor), that between the streets named, it will not average five inches in thickness and we entertain grave doubts whether it will not average less than four inches.

Under the bridge-stones of the crossing of Fifth avenue on the north side of Thirty-eighth street, it will be found less than three inches thick.

My assistant notes that on Wednesday, May 26, at a point between Eighty-ninth street and Ninetieth street, the "concrete was spread from about two to four inches in thickness."

Considering the poor quality of the concrete, mixed as it has been with so much disintegrated, micaceous stone, and so large a percentage of dust, if any departure was made from the strict letter of the contract, it should have been in the direction of increasing its depth, rather than of diminishing it.

With respect to the concrete being "rammed until it is thoroughly compacted and has a clear mortar surface," neither my assistant nor I have seen any such operation performed, or any rammers on the ground to do it with.

After being dumped from the barrow, the concrete is spread and then patted down lightly with the back of a shovel, but by no distortion of language could this act be called "ramming." This essential requirement of the contract has not been complied with.

#### Surface Protection.

Paragraph 13 of specifications, just referred to, says of the surface of the concrete after laying:

"The surface to be kept wet until covered with sand."

As soon as convenient after laying, the surface has been covered with a thin coating of the same mixture of unscreened gravel and sand, used in making the concrete. See Samples Nos. 8, 31, 33. Much of this material is too coarse to fulfill the purpose, as it is full of pebbles and even good-sized stones.

#### Bedding for Paving-blocks.

As touching this part of the work, the offer embodied in Matthew Baird's Proposal No. 2, is that:

"On this concrete shall be laid a bed of clean, sharp sand, perfectly free from moisture, and not less than 1½ inches thick."

While Paragraph 13 of the specifications provides that, "On this concrete foundation shall be laid a bed of clean, sharp sand, perfectly free from moisture (made so by artificial heat, if deemed necessary), not less than one and one-half inches thick, to the depth necessary to bring the pavement to the proper grade, when thoroughly rammed."

This provision has been met by spreading over the concrete a bed of the same material as is used in making it, i. e., a mixture of sand and coarse gravel, of which Sample No. 38 is a fair specimen, except that it conveys no idea of the size of the stones scattered through it and which can be seen spread over the avenue before the paving-blocks are laid.

Sample No. 30 is a fair specimen of these stones.

No attempt has been made to either screen or dry this gravel.

I have no hesitation in asserting that the substitution of this coarse, damp material for the clean, sharp and dry sand required by the specifications of the contract, as based Mr. Baird's own offer, will largely defeat the object of this intermediate bed; namely, to afford a medium, the minute and dry particles of which will quickly (as the blocks are rammed), adjust themselves to every irregularity of the inferior surfaces of the blocks, so that when the latter are finally settled in place, the sand becomes a solid medium, through which any pressure on the upper face of a block will be at once and evenly transmitted to the monolithic concrete foundation; the under face of each block presenting the maximum number of bearing points for that purpose. Conversely, the coarser the intervening material, the larger the stones it contains and the damper it is, the more difficult will it be for the material to adjust itself to the irregularities of the inferior surfaces of the stones; the fewer will be the points of contact between the blocks and the gravel, and the latter and the concrete; the greater will be the pressure on each point of contact and the greater will be the liability to unequal settlements.

In thus substituting for the "clean sharp sand, perfectly free from moisture" prescribed by the contract, an inferior material, the use of which is positively detrimental, a most essential provision of the contract has been deliberately violated and ignored.

#### Paving-blocks.

##### I.—QUALITY AND STANDARD SIZE.

Touching the quality and standard size of the paving-blocks Mr. Baird offered to supply, his Proposal No. 2 reads as follows:

"Quality to be equal to sample submitted, and to be durable and sound; size, not less than 10 nor more than 12 inches long, not less than 4, nor more than 4½ inches wide, not less than 7 nor more than 7½ inches deep; to be dressed so as to form end and side joints, not exceeding ½ inch wide."

Paragraph 6 of the specifications (5th page of contract) provides:

"The stone blocks for the pavement to be of granite of a durable and sound quality, each measuring on the face or upper surface not less than 10 or more than 12 inches in length, not less than 4 nor more than 4½ inches in width, not less than 7 nor more than 7½ inches in depth, to be split and dressed so as to form when laid, end joints not exceeding ½ inch wide, and side joints not exceeding one inch wide, with fair and true surfaces on top and bottom, and are to be in all respects equal to the specimen blocks at the office of the Commissioner of Public Works."

At my visits to the work on the 13th, 14th, 17th and 22d instant, I measured not less than thirty blocks, taken at random as they lay in the piles from Thirty-seventh to Forty-second street, and from Ninetieth to Eighty-third street.

I give herewith the results of these measurements:

\* See CITY RECORD, November 13, 1885, page 2604.

† See page 7 of contract.



STANDARD SIZE, AS OFFERED BY MR. BAIRD AND AS PRESCRIBED BY THE CONTRACT.

| WIDTHS.        |                | LENGTHS.       |                | DEPTHS.        |                |
|----------------|----------------|----------------|----------------|----------------|----------------|
| Not less than. | Not more than. | Not less than. | Not more than. | Not less than. | Not more than. |
| Inches.        | Inches.        | Inches.        | Inches.        | Inches.        | Inches.        |
| 4 to 4½        |                | 10 to 12       |                | 7 to 7½        |                |

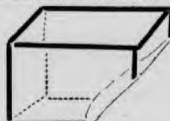
Single dimensions of blocks, measured as described above, any one of which would be a sufficient cause for their rejection.

|     |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|
| *2¼ | — 4¾  | *3    | — *13 | *6    | — 7¾  |
| *2¾ | — 5   | *8½   | — *14 | *6½   | — *8  |
| *3  | — *5½ | *9    | —     | *6¾   | —     |
| *3¼ | —     | *9½   | —     | ..... | ..... |
| *3½ | —     | ..... | ..... | ..... | ..... |
| *3¾ | —     | ..... | ..... | ..... | ..... |

Irregular shapes.

Fractured blocks.

Among the blocks I observed a considerable number of irregular shapes, as with one face full size and the other an inch wide, some with the corners knocked off, thus: but, as a rule, the quality being uniform in texture and free from seams and flaws.



Record of measurements by assistant.

My assistant has measured upwards of forty blocks taken at random; from his report I select the following examples:

#### STANDARD SIZES.

| WIDTHS.        |                | LENGTHS.       |                | DEPTHS.        |                |
|----------------|----------------|----------------|----------------|----------------|----------------|
| Not less than. | Not more than. | Not less than. | Not more than. | Not less than. | Not more than. |
| Inches.        | Inches.        | Inches.        | Inches.        | Inches.        | Inches.        |
| 4 to 4½        |                | 10 to 12       |                | 7 to 7½        |                |

8. May 16.

Dimensions of eight consecutive blocks lying together in line on top of pile at southwest corner of Thirty-ninth street and Fifth avenue. Sunday, May 16, 1886.

|    |     |     |
|----|-----|-----|
| *3 | 11  | 7½  |
| *3 | 10  | 7   |
| *3 | *14 | 7½  |
| 4  | 10½ | 7½  |
| 4  | 10  | 7   |
| 4  | 12  | *8½ |
| 4  | 11  | 7½  |
| 4  | 11  | 7   |

3. May 17.

Three blocks on pile opposite No. 459 Fifth avenue. Monday, May 17, 1886.

|    |     |     |
|----|-----|-----|
| 4  | *6  | *6  |
| *3 | *9½ | *6½ |
| 4  | *9  | 7   |

\* Should have been rejected.

#### STANDARD SIZES.

| WIDTHS.        |                | LENGTHS.       |                | DEPTHS.        |                |
|----------------|----------------|----------------|----------------|----------------|----------------|
| Not less than. | Not more than. | Not less than. | Not more than. | Not less than. | Not more than. |
| Inches.        | Inches.        | Inches.        | Inches.        | Inches.        | Inches.        |
| 4 to 4½        |                | 10 to 12       |                | 7 to 7½        |                |

6. May 23.

Depth only of six blocks lying together on top of pile, opposite gateway leading to basement of No. 473 Fifth avenue. Sunday, May 23, 1886.

|       |       | One end. | Other end. |
|-------|-------|----------|------------|
| ..... | ..... | *6½      | 7          |
| ..... | ..... | 7        | 7½         |
| ..... | ..... | 7½       | *8         |
| ..... | ..... | 7½       | *8         |
| ..... | ..... | 8        | *8½        |
| ..... | ..... | 7        | *8         |

5. May 22.

Dimensions of 5 paving-blocks lying on top of pile, opposite doorway of No. 495 Fifth avenue. Saturday, May 22, 1886.

|    |     |    |
|----|-----|----|
| *3 | *7  | 7  |
| *3 | 10  | 7  |
| 4½ | 10½ | *8 |
| 4  | *14 | 7  |
| 4½ | *15 | 7½ |

\* Should have been rejected on inspection.

Of 22 blocks measured, 15 were not up to the standard.

It will be observed that of 22 blocks, the dimensions of which are here given, 15 or sixty-eight per cent. should have been rejected for not coming within the limits prescribed by the contract.

If such material is found on top of the piles, it is fair to assume that there are quite as many concealed from view in the interior of the piles.

Either the blocks now piled on the avenue have not been inspected, or if they have, the officers charged with this duty have grossly violated their duty.

I am entirely satisfied from the measurements and observations made, either that none of the paving-blocks now lying piled along Fifth avenue have ever been handled, measured, or passed upon by the Engineer, or the Inspectors appointed by the Commissioner of Public Works, under the act of May 28, 1885, and now supposed to be in daily attendance on the work; or, that if they have, these officers have grossly violated, in the interest of the contractor, the trust reposed in them.

Inspection of the blocks, when and where to be made.

What the specifications require shall be done.

#### II.—INSPECTION.

As to When and Where it is to be Made.

Paragraph 11 of the specifications (page 6 of contract) provides:

"Inspection of Materials.—On the day designated by the said Commissioner for the commencement of the work at any point or points on the line thereof, the said contractor shall, before disturbing or making any alteration in the present roadway, haul upon the line of the work, at each of such points, a sufficient quantity of stone blocks and bridge-stones, for the paving of at least the space between any two intersecting streets.

"The stones so brought upon the ground, and before they are laid, will be carefully and thoroughly inspected, as provided for in Specification 6, and all rejected stones shall be immediately removed by the contractor from the line of the work. The contractor will then be required to pile such stones as may have been approved, neatly on the front of the sidewalk, and not within three feet of any fire-hydrant, and in such manner as will preserve sufficient passageway on the line of the sidewalks, and also permit of free access from the roadway to each house on the line of the street.

"After this inspection has been made, and after all the rejected stones shall have been removed entirely from the line of the work, and the accepted stones piled in the manner aforesaid, and not until each of these conditions shall have been faithfully fulfilled, will the contractor be permitted to proceed with the preparation of the road-bed for the new pavement."

Not until every condition imposed has been faithfully fulfilled can the contractor proceed with the preparation of the road-bed.

"It being expressly understood that the work is to be prosecuted in sections of not less than the space between any two intersecting streets, and that these provisions relative to the hauling, inspection and removal and piling of stones shall apply to the work on each of said sections on the whole line of the work."

Inspection, how made.

How the Inspection is to be made.

Requirements of the specifications.

Paragraph 6 (page 5 of contract) provides:

"The stones will be carefully inspected after they are brought on the line of the work, and all blocks, which, in quality and dimensions, do not conform strictly to these specifications\* will be rejected, and must be immediately removed from the line of the work. The contractor will be required to furnish such laborers as may be necessary to aid the Inspector in the examination and culling of the blocks; and in case the contractor shall neglect or refuse so to do, such laborers as in the opinion of the Commissioner of Public Works may be necessary, will be employed by said Commissioner, and the expense thus incurred by him will be deducted and paid out of any money then due or which may thereafter grow due to the said contractor under this agreement."

Certainly, no instrument could be more carefully drawn to protect the interests of the City than is this, as is exemplified by the details prescribed for receiving the paving-blocks.

The interests of the City could not be more carefully protected so far as this instrument is concerned. Brief of the course of procedure.

The course of procedure, with respect to them, could not be more plainly marked out.

At the order of the Commissioner of Public Works, they are to be brought on the ground, at such point as he shall designate; there "carefully and thoroughly inspected," by either the Engineer or the Inspectors appointed by the Commissioner under the provisions of the statute; all such as "in quality and dimensions" do not "conform strictly to these specifications," are "to be rejected," and "immediately removed from the line of the work."

The accepted blocks are to be piled "neatly" on "the front of the sidewalk," in a certain specified manner.

"Not until each of these conditions shall have been faithfully fulfilled will the contractor be permitted to proceed," etc.

If blocks are found piled as prescribed, the fair inference is that every condition prescribed has been fulfilled.

If, therefore, blocks are found to be "neatly" piled on "the front of the sidewalk" in the particular manner prescribed, and the contractor is found at work on the carriage-way, the plain and only inference is that "each of the conditions named has been FAITHFULLY FULFILLED," and that there is not a single block so piled which does not conform "strictly to the specifications."

But when on coming to measure at random some of the blocks so piled, and it is found that sixty-eight per cent. of those gauged fail to come up to the standard fixed by the contract, the only deduction which can possibly be made is, that which I have already enunciated—that either no inspection whatever has been had, or else the inspectors have worked only in the interest of the contractor.

So far as the blocks piled on either sidewalk, from Thirty-seventh street to Forty-second street, are concerned, as I have reported, they were in place when I first examined the avenue on the 11th instant.

The blocks of which the record of measurement has just been given were from this locality. The only conclusion is that either they were never inspected or the work was done perfunctorily.

The blocks, a record of whose dimensions has just been given, were all found within these limits; hence it is but fair to conclude that the blocks so located have either never been inspected, or if they have, that that important duty has been most perfunctorily performed.

The Engineer has already been paid \$1,005.53.

And the Inspectors \$140.

Both Engineer and inspectors have grossly violated their trusts and subjected themselves to the penalties imposed by § 57, Consol. Act 1882.

The blocks delivered since the 14th instant, viz., 42d to 45th street, and 82d to 81st street, have all been "neatly" piled, etc., etc., and presumably have been inspected.

As a matter of fact, not a single one has been inspected, and the piles stand as monuments of the impudent frauds which have been and are at this moment being practiced on the tax-payers of this city in this matter of repaving Fifth avenue.

Laying the blocks.

To be made the subject of a second report.

#### Laying the Paving Blocks.

As the work of laying the blocks at Thirty-seventh street was only commenced on Tuesday, the 25th instant, at 1 P.M., I omit any further reference here to this part of the work, as I propose to make it the subject of a second report.

Conclusions.

#### CONCLUSIONS.

The results of my own observations since the 11th instant, and of those of my assistant since the 13th instant, may be briefed as follows:

1. No grade-stakes appear to have been set, or bench-marks made, by which to fix the grade of the middle line of the avenue; consequently there does not appear to be any official guarantee that the sub-grade upon which the concrete foundation has been laid is at the proper distance below the surface of the street as it is to be finished, or that the concrete foundation is of a uniform thickness of six inches over the whole road-bed.

2. The surface of the road-bed, after being excavated to the proper depth, has neither been "rammed" nor "rolled"; so, far from the surface

\* Referring to that portion of paragraph 6 giving the limits of size.

† See Comptroller's Voucher No. 8739, of March 19, 1886. Paid May 6, 1886.

‡ See Comptroller's Voucher No. 9034, of April 30, 1886.



No evidence to show that a single barrel of cement has been inspected.

The "sand" does not conform to the specifications.

Nor the "broken stone."

The manner of preparing the concrete does not conform to the contract.

For the covering of "clean, sharp sand," a mixture of sand and gravel has been substituted.

Many of the paving blocks do not conform to the prescribed dimensions.

No evidence to show that the Engineer or inspectors have ever interposed any serious objections to the use of the improper material and bad workmanship. If made, have had no effect.

The interests of the City have been subordinated to those of the contractor.

Hence the special object of the law has been practically defeated.

And the requirements of the contract have not been fulfilled.

In view of these facts, and of the important interests which are at stake,

I am forced to the conclusion that a more scandalous job has never disgraced the history of the Department of Public Works.

It has been my endeavor to show by illustrations based on accurate information, in how far the contractor has departed in his manner of executing his work from the letter of his agreement.

That he has so departed and is now departing from it, no fair-minded person can doubt.

Neither the requirements of the statute nor of the contract can ever be fulfilled, until every foot of concrete thus far laid, is removed, and the work commenced *de novo*.

Not a dollar should be paid the contractor until this has been done and the new work replacing the old conforms in every particular to the terms of the contract.

being uniformly compressed, as required, the concrete foundation has been laid in many places on a soft and even muddy bed, the results of which must sooner or later be unequal settlements.

3. Regarding the character and quality of the materials composing the concrete, there is not the slightest evidence to show that a single barrel of the cement has ever been inspected or tested, as prescribed by the contract.

The so-called "sand" used is an unscreened mixture of sand and coarse gravel, which does not in a single particular conform to the requirements of the specifications.

The "broken stone" is largely composed of a soft, micaceous and disintegrated rock, instead of "hard trap or gneiss"; is used without "screening," although containing a large percentage of dust, while much of it is in pieces too large to pass through the standard gauge, a two-inch ring, unless the latter was made of rubber.

4. The manner in which the concrete has been and is now being prepared conforms neither in the proportion of the ingredients, the method of mixing, nor the method of laying, to that provided for by the specifications, while for the covering of "clean, sharp sand, perfectly free from moisture," there has been deliberately substituted a damp mixture of sand and coarse gravel, in which are found numbers of stones weighing from four ounces to one and a half pounds.

5. Many of the granite blocks now piled on the avenue ready for use do not conform to the dimensions fixed by the contract of the whole amount so delivered. I estimate that not less than 25 per cent. would be rejected, were they rigidly inspected in the manner the contract directs.

6. During the fifteen days the work of repaving has been under surveillance, no evidence has appeared to show that either the Engineer or the inspectors have ever interposed any serious objections to the use of the improper material, or to the faulty manipulation and bad workmanship, which has thus far characterized the work. If such objections have ever been made, they have been practically unheeded, and have produced no effect whatever.

7. In the work as it has been and is now carried on, the interests of the "Mayor, Aldermen and Commonality of the City of New York" would appear to have been and to be entirely subordinated to the pecuniary interests of the contractor.

8. These facts clearly indicate that the special object and purpose of the law, namely, "to secure the best description of pavement, of the best material and workmanship, to be laid in the most substantial manner, and with the best foundation," HAS UP TO THIS TIME BEEN PRACTICALLY DEFEATED.

And that the requirements of the contract, that the work specified shall be done "in a good, firm and substantial manner, and strictly in accordance with the following specifications," have not been complied with.

Considering these facts, and bearing in mind that this disreputable work is at this moment in daily progress, under the very eyes of the public and especially of many of those whose taxes will pay the largest part of its great cost; that the Fifth avenue is one of the main arteries of this metropolis, filled with an ever increasing tide of traffic; lined for miles with costly and elegant structures; and hence, at once demanding and worthy of the very best carriage-way which engineering skill can devise; I AM FORCED TO THE CONCLUSION, THAT WHEN THE WHOLE TRUTH CONCERNING THIS SCANDALOUS JOB COMES TO BE KNOWN, IT WILL BE FOUND THAT A MORE DELIBERATE, FLAGRANT AND UNBLUSHING DISREGARD OF A VOLUNTARY PROPOSAL, SUPPLEMENTED AND ENFORCED BY ALL THE FORMALITIES OF AN OFFICIAL COMPACT, DOES NOT DISGRACE THE HISTORY OF THE DEPARTMENT OF PUBLIC WORKS.

#### RECOMMENDATIONS.

It has been my endeavor in this report to show by illustrations based upon accurate information, in just how far the contractor has departed, and is now departing in his manner of doing his work, and in the character of the materials he is using, from the letter and spirit of the obligations he voluntarily assumed in subscribing to this contract.

That he has so departed and very widely, to the manifest injury of many important interests of this community, no fair-minded person can for a moment doubt on the evidence adduced.

NEITHER THE PURPOSE OF THE STATUTE, NOR THE TERMS OF THE CONTRACT CAN EVER BE FULFILLED, UNTIL EVERY SQUARE FOOT OF THE SO-CALLED CONCRETE THUS FAR LAID HAS BEEN REMOVED FROM THE AVENUE; EVERY PAVING-BLOCK PROPERLY INSPECTED, AND THE WORK OF REPAVING THE AVENUE COMMENCED *de novo*.

I recommend that until this has been done, and until the new work replacing that so condemned, shall have been executed in strict conformity with the terms of his contract—NOT A SINGLE DOLLAR BE PAID TO THE CONTRACTOR.

All of which is respectfully submitted.

GEORGE T. BALCH.

#### APPENDIX "A."

DEPARTMENT OF PUBLIC WORKS—COMMISSIONER'S OFFICE,  
No. 31 CHAMBERS STREET,  
NEW YORK, May 6, 1886.

Hon. E. HENRY LACOMBE, Counsel to the Corporation:

DEAR SIR—Referring to the second section of chapter 371, Laws of 1885, providing for the pavement of Fifth avenue, from Ninth street to Ninetieth street, I would ask you to advise this Department as to the power of the Commissioner of Public Works to appoint the engineer and inspectors therein specified. An appropriation having been made to cover the expense of the work, including the services of an engineer and two inspectors, what position does the engineer, when appointed, occupy in reference to the performance of the work? Does he supersede the ordinary administration of the Department as to the supervision and certification of the work done under the act, and is this Department justified in acting upon his certificate and the certificates of the inspectors as to any work done without the co-operation or supervision, or official action of the Water Purveyor, as provided for by law and ordinance in reference to ordinary work connected with the Bureau of the Water Purveyor. I inclose an executed copy of the contract for the repaving, which please return with your reply, and oblige,

Yours, very respectfully,  
(Signed) ROLLIN M. SQUIRE, Commissioner of Public Works.

#### APPENDIX "B."

LAW DEPARTMENT,  
OFFICE OF THE COUNSEL TO THE CORPORATION,  
NEW YORK, May 11, 1886.

Hon. ROLLIN M. SQUIRE, Commissioner of Public Works:

SIR—I am in receipt of your communication under date of May 6th, referring to the second section of chapter 371 of the Laws of 1885, providing for the repaving of Fifth avenue, from Ninth street to Ninetieth street, and asking that I advise your Department as to the power of the Commissioner of Public Works to appoint the engineer and inspectors therein specified.

It appears that an appropriation has been made covering the expense of the work, including the services of an engineer and two inspectors, and a contract for the doing of such work has been duly entered into.

The points upon which you particularly request advice are as to what position the engineer, when appointed, occupies in reference to the performance of the work under the contract. Whether he supersedes the ordinary administration of the Department as to the supervision and certification of the work done under the act and whether the Department of Public Works is justified in acting upon his certificate and the certificates of the inspectors as to any work done without the co-operation or supervision or the official action of Water Purveyor, as provided for by law and ordinance with reference to ordinary work connected with the Bureau of the Water Purveyor.

The act in question, which provides for the specific job of repaving Fifth avenue, seems to contemplate that the work to be done in accordance with its provisions shall be of a superior quality and performed in a special manner. The act itself provides for the appointment of an engineer and of two inspectors, and further that their compensation shall be included in the appropriation for the

contract and not be borne by the Department of Public Works out of its ordinary appropriations for engineering services. The ordinary provisions of law and ordinance which apply to other works of the City of like description do not, in my opinion, apply to the performance of this work. The officers of the City charged with the duty of letting the contract, were required to proceed as the statute specially directed, and the work under the contract let must be proceeded with as the statute and the contract provides. It is plainly your duty to appoint the engineer and the two inspectors contemplated by the act and whose compensation is provided for by the appropriation. The engineer, however, does not take the place of the Commissioner of Public Works, upon whom the contract very plainly rests the responsibility of satisfying himself as to its proper execution. No other certificate, however, than that of the engineer and the inspectors provided for and of the Commissioner of Public Works is a condition precedent to payment for the work. It was apparently assumed by the Legislature, that if proper care was exercised in the selection of the engineer and inspectors, the Commissioner of Public Works would have sufficient information in their certificates to enable him to pass intelligently upon the question whether or not he would accept the work performed under the contract. There is nothing, however, to prevent the Commissioner of Public Works, and, in fact—if he has any doubt as to the efficiency or trustworthiness of the engineer or inspectors—it is his duty to obtain, by any means which may commend itself to his best judgment, such information as to the manner in which the work is performed, as will enable him to intelligently give or withhold the final certificate of acceptance which the contract contemplates.

I am, sir, yours respectfully,  
(Signed) E. HENRY LACOMBE, Counsel to the Corporation.

#### APPROVED PAPERS.

Ordinances and Resolutions passed by the Common Council during the week ending June 26, 1886.

AN ORDINANCE to amend an ordinance entitled an "Ordinance to amend section 107 of Article VIII. of chapter 8 of the Revised Ordinances of 1880, as amended by resolution approved March 20, 1883," approved April 16, 1884.

The Mayor, Aldermen and Commonality of the City of New York do ordain as follows: Section 1. Section 107 of Article VIII. of chapter 8 of the Revised Ordinances of 1880, as amended by resolution approved March 20, 1883, approved April 16, 1884, is hereby amended by adding thereto, at the end thereof, the following: Stand No. 25—North side of One Hundred and Fifty-fifth street, from the corner of Eighth avenue, three hundred feet east.

Sec. 2. All ordinances or parts of ordinances inconsistent or conflicting with the provisions of this ordinance are hereby repealed.

Sec. 3. This ordinance shall take effect immediately.

Adopted by the Board of Aldermen, June 9, 1886.

Approved by the Mayor, June 21, 1886.

Resolved, That permission be and the same is hereby given to the Independence Day Association of Harlem to parade in the streets with bands of music; also that the said association be and is hereby permitted to give a display of fireworks and fire salute with cannon in any of the streets or public places of the city on Monday, the 5th day of July, 1886.

Adopted by the Board of Aldermen, June 16, 1886.

Approved by the Mayor, June 21, 1886.

Resolved, That permission be and the same is hereby given to F. Broemer to place and keep a post, surmounted by an emblematic sign (clock), on the sidewalk, near the curb, in front of No. 318½ Grand street, provided such post and clock shall not be an obstruction to the free use of the street by the public, nor exceed ten feet high by eight inches in diameter; such permission to continue only during the pleasure of the Common Council.

Adopted by the Board of Aldermen, June 16, 1886.

Approved by the Mayor, June 21, 1886.

Resolved, That the Comptroller be and he is hereby authorized and directed to draw a warrant in favor of each of the persons named in the annexed bills, for the respective amounts thereof, viz.:

|  |                |
|--|----------------|
| Brower Brothers, for printing.....                     | \$10 00        |
| P. S. Gilmore, music.....                              | 400 00         |
| E. Ferrero, rent of Assembly Rooms.....                | 300 00         |
| A. J. Murphy, Secretary, rent of Academy of Music..... | 265 00         |
|  | <hr/> \$975 00 |

—and charge the amounts to the appropriation made "towards defraying the expenses of the Annual Encampment of the Grand Army of the Republic in the City of New York in 1886."

Adopted by the Board of Aldermen, June 16, 1886.

Approved by the Mayor, June 21, 1886.

Resolved, That the name of James F. Mahon, recently appointed a Commissioner of Deeds, be corrected so as to read Joseph F. Mahon.

Adopted by the Board of Aldermen, June 23, 1886.

Resolved, That the resolution permitting "Buffalo Bill's" show of the "Wild West" to parade in some of the streets of this city on Saturday, the 19th instant, which was approved June 18, 1886, be and is hereby amended by striking therefrom the figures and letters "19th" before the abbreviated word "inst.," and inserting in lieu thereof the figures and letters "26th," thereby permitting the proposed parade to take place on the 26th instead of the 19th instant.

Adopted by the Board of Aldermen, June 23, 1886.

Approved by the Mayor, June 23, 1886.

Resolved, That permission be and the same is hereby given to H. F. Kasefang to place and keep a watering-trough on the sidewalk, near the curb, in front of No. 283 Seventh avenue, the work to be done and water supplied at his own expense, under the direction of the Commissioner of Public Works; such permission to continue only during the pleasure of the Common Council.

Adopted by the Board of Aldermen, June 16, 1886.

Approved by the Mayor, June 24, 1886.

Resolved, That permission be and the same is hereby given to property-owners to regulate, grade and set curb and gutter stones and flag in front of their premises in One Hundred and Twentieth street, between Sixth and Seventh avenues, the work to be done at their own expense, under the direction of the Commissioner of Public Works.

Adopted by the Board of Aldermen, June 16, 1886.

Approved by the Mayor, June 24, 1886.

Resolved, That permission be and the same is hereby given to Bernard Rourke to lay a crosswalk of two courses of blue stone across Grand street from No. 250 to 253, the work to be done at his own expense, under the direction of the Commissioner of Public Works; such permission to continue only during the pleasure of the Common Council.

Adopted by the Board of Aldermen, June 16, 1886.

Approved by the Mayor, June 24, 1886.

Resolved, That permission be and the same is hereby given to the Bartholdi Hotel Company to place and keep three ornamental lamp-posts and lamps in front of Nos. 954 and 956 Broadway, the work to be done and gas supplied at their own expense, under the direction of the Commissioner of Public Works; such permission to continue only during the pleasure of the Common Council.

Adopted by the Board of Aldermen, June 16, 1886.

Approved by the Mayor, June 24, 1886.

Resolved, That a crosswalk of three courses of blue stone be laid across Broadway, opposite No. 756, under the direction of the Commissioner of Public Works, the expense to be paid from the appropriation for "Repairs and Renewal of Pavements and Regrading."

Adopted by the Board of Aldermen, June 16, 1886.

Approved by the Mayor, June 24, 1886.



Resolved, That gas-mains be laid, lamp-posts erected and street-lamps placed thereon and lighted in Prospect avenue, from One Hundred and Sixty-fifth to One Hundred and Sixty-sixth street, under the direction of the Commissioner of Public Works.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Edgecomb avenue, from One Hundred and Thirty-seventh to One Hundred and Fortieth street, be regulated and graded, the curb-stones set and sidewalks flagged a space four feet wide through the centre thereof, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Croton water-mains be laid in Seventy-fourth street, from Ninth to Tenth avenue, as provided in section 356 of the New York City Consolidation Act.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Sixty-fifth street, from Tenth to Eleventh avenue, be regulated and graded, curb-stones set and sidewalks flagged a space four feet wide through the centre thereof, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That a crosswalk of three courses of blue stone be laid across Thirty-seventh street, opposite the main entrance to the Church of St. Gabriel, under the direction of the Commissioner of Public Works, the expense to be charged to the appropriation for "Repairs and Renewals of Pavements and Regrading."

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That the carriageway of Ninety-sixth street, from the westerly curb-line of First avenue to the easterly curb-line of Third avenue, be paved with Belgian pavement, except that at the intersections of said street with the First, Second and Third avenues, crosswalks of three courses of blue stone be laid, parallel with and within the line of the sidewalks of said avenues, where not already laid, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That the carriageway of One Hundred and Ninth street, from Madison to Fourth avenue, be paved with Belgian or trap-block pavement, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Croton water-pipes be laid in Seventy-third street, from Avenue A to First avenue, as provided in section 386 of chapter 410, Laws of 1882 (the Consolidation Act).

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That gas-mains be laid, lamp-posts erected and street-lamps lighted in Ninety-seventh street, from Fourth avenue to Lexington avenue, under the direction of the Commissioner of Public Works.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That one lamp-post and lamp be placed in front of each of the three entrances on Sixth avenue to the Dutch Reformed Church, on the northwest corner of Sixth avenue and One Hundred and Twenty-third street, and two lamp-posts and lamps be placed in front of the entrance to chapel adjoining the church, on One Hundred and Twenty-third street, under the direction of the Commissioner of Public Works.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That permission be and the same is hereby given to the United States Illuminating Company to lay a pipe, to convey salt water only, through and under East Twenty-ninth street, from the East river to the engines at their new station at No. 416 East Twenty-ninth street, the length of said pipe to be about one hundred and forty-five feet, the work done at their own expense, under the direction of the Commissioner of Public Works; such permission to continue only during the pleasure of the Common Council.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That One Hundred and Forty-eighth street, from Seventh to Eighth avenue, be regulated and graded, the curb-stones be set and the sidewalks be flagged a space four feet wide through the centre thereof, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Ninety-seventh street, from the westerly crosswalk of Ninth avenue to the easterly crosswalk of Tenth avenue, be paved with trap-block pavement, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Hamilton street, from Catharine to Market street, be repaved, as provided in section 321 of the New York City Consolidation Act of 1882, in the manner specified, and with the materials recommended by the Commissioner of Public Works in the foregoing communication from the said Commissioner of Public Works.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That a crosswalk be laid across Park Row, on a line with the sidewalk on the south-east side of Chambers street, under the direction of the Commissioner of Public Works; the expense to be charged to the appropriation for "Repairs and Renewal of Pavements and Regrading."

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That gas-pipes be laid, lamp-posts erected and street-lamps placed thereon and lighted during the night-time in Rachel's lane, from Mangin to Goerck street, under the direction of the Commissioner of Public Works.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That One Hundred and Thirtieth street, from Old Broadway to the Boulevard, be regulated and graded, the curb-stones set and sidewalks flagged a space four feet wide through the centre thereof, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That the carriageway of Thirty-ninth street, from the crosswalk on the easterly side of First avenue to the bulkhead-line on East river, be paved with trap-block pavement, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Croton water-pipes be laid in West End avenue, from One Hundred and First to One Hundred and Second street, as provided in section 356 of the New York City Consolidation Act.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That One Hundred and Forty-third street, from Seventh to Eighth avenue, be regulated, graded, curb-stones set and sidewalks flagged a space four feet wide through the centre thereof, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Croton-mains be laid in Tenth, east side of avenue, from Seventy-ninth to Eightieth street, pursuant to section 356 of the New York City Consolidation Act.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That Croton-mains be laid in Eightieth street, from Ninth to Tenth avenue, pursuant to section 356 of the New York City Consolidation Act.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That an additional course of flagging, four feet wide, be laid on the southeast corner of Lexington avenue and One Hundred and Twenty-third street, where not already done, under the direction of the Commissioner of Public Works; and that the accompanying ordinance therefor be adopted.

Adopted by the Board of Aldermen, June 16, 1886.  
Approved by the Mayor, June 24, 1886.

Resolved, That in order to prevent obstructing the sidewalk and carriageway of Broad street, and to preserve both for the free uses of the public, that permission be and the same is hereby given only during the alteration and enlargement of the "Stock Exchange building," to Robert L. Darragh to erect a tower, ten by sixteen, and three stories high, with an extended platform to the windows of the third story, to be used for the purpose of hoisting and lowering building material inside thereof, the work to be done under the supervision of the Superintendent of Buildings, and on condition that the said Robert L. Darragh shall stipulate with said Superintendent of Buildings to save the City harmless from any loss or damage that may occur during the erection or use of said tower and platform by said Robert L. Darragh.

Adopted by the Board of Aldermen, June 23, 1886.  
Approved by the Mayor, June 25, 1886.

Resolved, That the Comptroller be and he is hereby authorized and directed to draw a warrant in favor of James F. Casey for the sum of fifty (\$50) dollars, for furnishing to the Common Council files of all bills of the Legislature of the State, session of 1886, and charge the amount to the appropriation for "City Contingencies."

Adopted by the Board of Aldermen, June 23, 1886.  
Approved by the Mayor, June 25, 1886.

F. J. TWOMEY, Clerk Common Council.

## LEGISLATIVE DEPARTMENT.

OFFICE OF THE BOARD OF ALDERMEN,  
NO. 8 CITY HALL,  
NEW YORK, May 29, 1886.

### PUBLIC NOTICE.

A resolution, of which the following is a copy, was adopted by the Common Council, May 26, 1886, and was approved by the Mayor, May 28, 1886, viz.:

"Resolved, That in consideration of the fact that little, if any, business is transacted in the public offices of the Corporation after 12 o'clock, M., on Saturdays during the summer season, the various offices of the City, except those specially required by law to be kept open, be closed at noon every Saturday during the months of June, July, August and September, and the heads of the several departments of the City government be and are hereby requested to give their employees a half-holiday on Saturdays during the months above named."

FRANCIS J. TWOMEY, Clerk Common Council.

## FINANCE DEPARTMENT.

CITY OF NEW YORK—FINANCE DEPARTMENT,  
COMPTROLLER'S OFFICE,  
June 12, 1886.

To Hon. WM. R. GRACE, Chairman Board of City Record:

Weekly statement, showing the appropriations made under the authority contained in section 189, New York City Consolidation Act of 1882, for advertising, printing, stationery and blank books, from January 1 to December 31, 1886, both days inclusive, and of the payments made up to and including the date hereof for and on account of each appropriation, and the amount of unexpended balances.

| TITLES OF APPROPRIATIONS.                   | AMOUNT OF APPROPRIATIONS. | PAYMENTS.   | AMOUNT OF UNEXPENDED BALANCES. |
|---|---------------------------|-------------|--------------------------------|
| Expenses of Board of City Record:           |                           |             |                                |
| Publication of CITY RECORD, etc.....        | \$59,200 00               | \$23,188 19 | \$36,011 81                    |
| City Record—Salaries and Contingencies..... | 7,200 00                  | 2,880 31    | 4,319 69                       |
| Advertising.....                            | 7,500 00                  | 1,137 35    | 6,362 65                       |
| Printing, Stationery and Blank Books.....   | 144,500 00                | 70,213 30   | 74,286 70                      |
| Total.....                                  | \$218,400 00              |             |                                |

EDWARD V. LOEW, Comptroller.



## METEOROLOGICAL OBSERVATORY

OF THE

DEPARTMENT OF PUBLIC PARKS,  
CENTRAL PARK, NEW YORK.

Latitude 40° 45' 58" N. Longitude 73° 57' 58" W. Height of Instruments above the Ground, 53 feet; above the Sea, 97 feet.

## ABSTRACT OF REGISTERS FROM SELF-RECORDING INSTRUMENTS,

For the Week ending June 19, 1886.

## Barometer.

| DATE.         | 7 A. M.              | 2 P. M.              | 9 P. M.              | MEAN FOR THE DAY.    | MAXIMUM.             | MINIMUM. |
|---------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------|
| JUNE.         | Reduced to Freezing. | Reduced to Freezing. | Reduced to Freezing. | Reduced to Freezing. | Reduced to Freezing. | Time.    |
| Sunday, 13    | 30.028               | 29.928               | 29.902               | 29.953               | 30.044               | 0 A. M.  |
| Monday, 14    | 29.890               | 29.884               | 29.896               | 29.890               | 29.900               | 0 A. M.  |
| Tuesday, 15   | 29.898               | 29.888               | 29.872               | 29.886               | 29.900               | 9 A. M.  |
| Wednesday, 16 | 29.834               | 29.722               | 29.698               | 29.751               | 29.848               | 0 A. M.  |
| Thursday, 17  | 29.600               | 29.448               | 29.444               | 29.497               | 29.694               | 0 A. M.  |
| Friday, 18    | 29.632               | 29.724               | 29.892               | 29.749               | 29.956               | 12 P. M. |
| Saturday, 19  | 30.012               | 30.044               | 30.032               | 30.029               | 30.046               | 12 P. M. |

Mean for the week..... 29.822 inches.  
 Maximum " at 12 P. M., 19th..... 30.046 "  
 Minimum " at 5 P. M., 17th..... 29.396 "  
 Range " ..... .650 "

## Thermometers.

| DATE.         | 7 A. M.   | 2 P. M.   | 9 P. M.   | MEAN.     | MAXIMUM.  | MINIMUM.  | MAXIMUM. |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| JUNE.         | Dry Bulb. | Wet Bulb. | Dry Bulb. | Wet Bulb. | Dry Bulb. | Wet Bulb. | In Sun.  |
| Sunday, 13    | 64        | 63        | 70        | 67        | 65        | 66        | 73       |
| Monday, 14    | 60        | 60        | 60        | 60        | 59        | 60        | 63       |
| Tuesday, 15   | 61        | 60        | 69        | 67        | 66        | 65        | 73       |
| Wednesday, 16 | 63        | 63        | 78        | 71        | 70        | 69        | 81       |
| Thursday, 17  | 72        | 71        | 82        | 80        | 80        | 78        | 84       |
| Friday, 18    | 67        | 63        | 70        | 62        | 61        | 58        | 77       |
| Saturday, 19  | 59        | 55        | 70        | 61        | 67        | 65        | 75       |

Mean for the week..... 67.3 degrees.  
 Maximum for the week, at 1 P. M., 17th..... 84. " at 2 P. M., 17th..... 80. "  
 Minimum " at 5 A. M., 19th..... 54. " at 5 A. M., 19th..... 54. "  
 Range " ..... 30. "

## Wind.

| DATE.<br>JUNE.    | DIRECTION. |        |         | VELOCITY IN MILES.       |                          |                          |                                | FORCE IN POUNDS PER SQUARE FOOT. |         |         |      |            |
|-------------------|------------|--------|---------|--------------------------|--------------------------|--------------------------|--------------------------------|----------------------------------|---------|---------|------|------------|
|                   | 7 A. M.    | 2 P. M | 9 P. M. | 9 P. M.<br>to<br>7 A. M. | 7 A. M.<br>to<br>2 P. M. | 2 P. M.<br>to<br>9 P. M. | Distance<br>for<br>the<br>Day. | 7 A. M.                          | 2 P. M. | 9 P. M. | Max. | Time.      |
| Sunday, 13....    | S          | SE     | ENE     | 24                       | 43                       | 52                       | 119                            | 0                                | 1       | ¾       | 1¾   | 3.40 P.M.  |
| Monday, 14....    | ENE        | ENE    | ENE     | 90                       | 67                       | 88                       | 245                            | ¾                                | 1       | 1½      | 6½   | 3.50 A.M.  |
| Tuesday, 15....   | ENE        | ENE    | NNE     | 68                       | 65                       | 41                       | 174                            | ¾                                | 1       | 0       | 1¾   | 11.20 A.M. |
| Wednesday, 16.... | NNE        | SW     | SSE     | 24                       | 10                       | 22                       | 56                             | 0                                | ¾       | 0       | 1¾   | 2.20 P.M.  |
| Thursday, 17....  | SSE        | SSE    | WSW     | 12                       | 24                       | 46                       | 82                             | 0                                | ¾       | ¾       | 3¾   | 4.30 P.M.  |
| Friday, 18....    | NW         | NW     | NNW     | 71                       | 85                       | 55                       | 211                            | 1¾                               | 2¾      | 0       | 6    | 10.40 A.M. |
| Saturday, 19....  | NNE        | NNW    | SSW     | 28                       | 38                       | 23                       | 89                             | ¾                                | ¾       | 0       | 2¾   | 11.10 P.M. |

Distance traveled during the week..... 976 miles.  
 Maximum force " ..... 6 1/2 pounds.

| DATE.<br><u>JUNE.</u> | Hygrometer.     |         |         |                              |         |         | Clouds.                    |            |         | Rain and Snow. Ozone.             |                 |                    |                  |                |        |
|-----------------------|-----------------|---------|---------|------------------------------|---------|---------|----------------------------|------------|---------|-----------------------------------|-----------------|--------------------|------------------|----------------|--------|
|                       | FORCE OF VAPOR. |         |         | RELA-<br>TIVE HUMID-<br>ITY. |         |         | CLEAR, O.<br>OVERCAST, 10. |            |         | DEPTH OF RAIN AND SNOW IN INCHES. |                 |                    |                  |                |        |
|                       | 7 A. M.         | 2 P. M. | 9 P. M. | 7 A. M.                      | 2 P. M. | 9 P. M. | 7 A. M.                    | 2 P. M.    | 9 P. M. | Time of Beginning.                | Time of Ending. | Duration.<br>H. M. | Amount of Water. | Depth of Snow. | O. to. |
| Sunday, 13            | .562            | .622    | .617    | 94                           | 85      | 100     | 10                         | 10         | 10      | .....                             | .....           | ....               | ....             | ....           | 4      |
| Monday, 14            | .518            | .518    | .487    | 100                          | 100     | 94      | 10                         | 10         | 10      | 4.15 A. M.                        | 2 P. M.         | 9.45               | .85              | ....           | 2      |
| Tuesday, 15           | .505            | .635    | .639    | 94                           | 89      | 100     | 10                         | 7 Cir. Cu. | 2 Cir.  | 0 A. M.                           | 5 A. M.         | 5.00               | .02              | ....           | 0      |
| Wedn'day, 16          | .576            | .664    | .695    | 100                          | 69      | 95      | 8 Cu.                      | 0          | 10      | .....                             | .....           | ....               | ....             | ....           | 0      |
| Thursday, 17          | .745            | .996    | 1.023   | 95                           | 91      | 100     | 10                         | 10         | 4 Cir.  | 2 P. M.                           | 4 P. M.         | 2.00               | .47              | ....           | 4      |
| Friday, 18            | .522            | .449    | .443    | 79                           | 61      | 82      | 6 Cir. Cu.                 | 3 Cir. S.  | 3 Cir.  | .....                             | .....           | ....               | ....             | ....           | 4      |
| Saturday, 19          | .380            | .416    | .556    | 76                           | 57      | 84      | 0                          | 3 Cir.     | 0       | .....                             | .....           | ....               | ....             | ....           | 0      |

Total amount of water for the week..... 1.34 inch.  
 Duration for the week..... 16 hours, 45 minutes.

DANIEL DRAPER, Ph. D., Director.

## EXECUTIVE DEPARTMENT.

MAYOR'S MARSHAL'S OFFICE,  
NEW YORK, June 26, 1886.

Number of licenses issued and amounts received therefor, in the week ending Friday, June 25, 1886:

| DATE.                  | NUMBER OF LICENSES. | AMOUNTS    |
|------------------------|---------------------|------------|
| Saturday, June 19..... | 87                  | \$616 00   |
| Monday, " 21.....      | 104                 | 264 75     |
| Tuesday, " 22.....     | 146                 | 245 00     |
| Wednesday, " 23.....   | 138                 | 228 75     |
| Thursday, " 24.....    | 51                  | 80 75      |
| Friday, " 25.....      | 115                 | 234 25     |
| Totals.....            | 641                 | \$1,669 50 |

THOMAS W. BYRNES,  
Mayor's Marshal.MAYOR'S OFFICE,  
NEW YORK, January 7, 1886.

Pursuant to section 9 of chapter 339, Laws of 1883, I hereby designate  
 "New York Times" and the "Daily News"  
 two of the daily newspapers printed in the City of New York, in which notice of each sale of unredeemed pawns or pledges by public auction in said city, by pawnbrokers, shall be published for at least six days previous thereto, until otherwise ordered.

W. R. GRACE, Mayor.

MAYOR'S OFFICE,  
NEW YORK, December 31, 1885.

In pursuance of the ordinance, approved April 30, 1877, and amended June 1, 1877, entitled, "An ordinance to prevent the danger of hydrophobia to any of the inhabitants of the City of New York," notice is hereby given that all Dogs found at large in the City of New York on and after January 1, contrary to such ordinance, will be seized and disposed of as provided therein.

The Dog Pound at the foot of Sixteenth street, East river, is hereby designated as the place where dogs so captured must be delivered to the Keeper thereof. The Pound will be open from eight o'clock A. M. until five o'clock P. M. daily, Sundays excepted, on and after the first day of January, 1886.

WM. R. GRACE,  
Mayor.

## OFFICIAL DIRECTORY.

STATEMENT OF THE HOURS DURING WHICH all the Public Offices in the City are open for business, and at which each Court regularly opens and adjourns, as well as of the places where such offices are kept and such Courts are held; together with the heads of Departments and Courts

## EXECUTIVE DEPARTMENT.

## Mayor's Office.

No. 6 City Hall, 10 A. M. to 3 P. M.  
WILLIAM R. GRACE, Mayor; WILLIAM L. TURNER, Secretary and Chief Clerk.

## Mayor's Marshal's Office.

No. 1 City Hall, 9 A. M. to 4 P. M.  
THOMAS W. BYRNES, First Marshal.  
GEORGE W. BROWN, Jr., Second Marshal.

## COMMISSIONERS OF ACCOUNTS.

Rooms 114 and 115, Stewart Building, 9 A. M. to 4 P. M.  
WM. PITT SHEARMAN, J. B. ADAMSON.

## AQUEDUCT COMMISSIONERS.

Room 209, Stewart Building, 5th floor, 9 A. M. to 5 P. M.  
THE MAYOR, President; JAMES W. McCULLOH, Secretary; BENJAMIN S. CHURCH, Chief Engineer; J. C. LULLEY, Auditor.

## LEGISLATIVE DEPARTMENT.

## Office of Clerk of Common Council.

No. 8 City Hall, 10 A. M. to 4 P. M.  
ROBERT B. NOONEY, President Board of Aldermen.  
FRANCIS J. TWOMEY, Clerk Common Council.

## City Library.

No. 12 City Hall, 10 A. M. to 4 P. M.

## DEPARTMENT OF PUBLIC WORKS.

## Commissioner's Office.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
ROLLIN M. SQUIRE, Commissioner; WILLIAM V. SMITH, Deputy Commissioner.

## Bureau of Chief Engineer.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
GEORGE W. BIRDSALL, Chief Engineer.

## Bureau of Water Register.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
JOHN H. CHAMBERS, Register.

## Bureau of Street Improvements.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
WM. M. DEAN, Superintendent.

## Engineer-in-Charge of Sewers.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
HORACE LOOMIS, Engineer-in-Charge.

## Bureau of Repairs and Supplies.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
THOMAS H. McAVOY, Superintendent.

## Bureau of Water Purveyor.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
ALSTON CULVER, Water Purveyor.

## Bureau of Lamps and Gas.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
STEPHEN McCORMICK, Superintendent.

## Bureau of Streets.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
GEO. E. BABCOCK, Superintendent.

## Bureau of Incumbrances.

No. 31 Chambers street, 9 A. M. to 4 P. M.  
GEO. A. McDERMOTT, Superintendent.Keeper of Buildings in City Hall Park.  
MARTIN J. KEESE, City Hall.

## FINANCE DEPARTMENT.

## Comptroller's Office.

No. 15 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.  
EDWARD V. LOEW, Comptroller; RICHARD A. STORRS, Deputy Comptroller.

## Auditing Bureau.

Nos. 19, 21, 23 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.  
WM. J. LYON, Auditor of Accounts; DAVID E. AUSTEN, Deputy Auditor.

Bureau for the Collection of Assessments and Arrears of Taxes and Assessments of Water Rents.

Nos. 31, 33, 35, 37, 39 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.  
ARTEMAS S. CADY, Collector of Assessments and Clerk of Arrears.

Bureau for the Collection of City Revenue and of Markets.

Nos. 1 and 3 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.  
JAMES J. KELSO, Collector of the City Revenue and Superintendent of Markets.

## Bureau for the Collection of Taxes.

First floor, Brown-stone Building, City Hall Park.  
GEORGE W. McLEAN, Receiver of Taxes; ALFRED VREDENBURG, Deputy Receiver of Taxes.

## Bureau of the City Chamberlain.

Nos. 25, 27 Stewart Building, Chambers street and Broadway, 9 A. M. to 4 P. M.  
WM. M. IVINS, City Chamberlain.

## Office of the City Paymaster.

No. 33 Reade street, Stewart Building.  
City Paymaster.

## LAW DEPARTMENT.

## Office of the Counsel to the Corporation.

Staats Zeitung Building, third floor, 9 A. M. to 5 P. M. Saturdays, 9 A. M. to 4 P. M.  
E. HENRY LACOMBE, Counsel to the Corporation; ANDREW T. CAMPBELL, Chief Clerk.

## Office of the Public Administrator.

No. 49 Beekman street, 9 A. M. to 4 P. M.  
RICHARD J. MORRISON, Public Administrator.

## Office of the Corporation Attorney.

No. 49 Beekman street, 9 A. M. to 4 P. M.  
WILLIAM A. BOYD, Corporation Attorney.

## POLICE DEPARTMENT.

## Central Office.

No. 300 Mulberry street, 9 A. M. to 4 P. M.  
STEPHEN B. FRENCH, President; WILLIAM H. KIPP, Chief Clerk; JOHN J. O'BRIEN, Chief Bureau of Elections.

## DEPARTMENT OF CHARITIES AND CORRECTION.

## Central Office.

No. 66 Third avenue, corner Eleventh street, 8.30 A. M. to 5.30 P. M.  
HENRY H. PORTER, President; GEORGE F. BRITTON, Secretary.

## FIRE DEPARTMENT.

Office hours for all except where otherwise noted from 9 A. M. to 4 P. M. Saturdays, to 3 P. M.

## Headquarters.

Nos. 155 and 157 Mercer street.  
HENRY D. PURROY, President; CARL JUSSEN, Secretary.

## Bureau of Chief of Department.

CHARLES O. SHAY, Chief of Department.

## Bureau of Inspector of Combustibles.

PETER SEERY, Inspector of Combustibles.

## Bureau of Fire Marshal.

GEORGE H. SHELTON, Fire Marshal.

## Bureau of Inspection of Buildings.

ALBERT F. D'ONCH, Superintendent of Buildings.

## Attorney to Department.

WM. L. FINDLEY, Nos. 155 and 157 Mercer street.

## Fire Alarm Telegraph.

J. ELLIOT SMITH, Superintendent of Telegraph, Nos. 155 and 157 Mercer street.  
Central Office Fire Alarm Telegraph open at all hours.

## Repair Shops.

Nos. 128 and 130 West Third street.  
JOHN CASTLES, Foreman-in-Charge, 8 A. M. to 5 P. M.

## Hospital Stables.

Ninety-ninth street, between Ninth and Tenth avenues.  
JOSEPH SHRE, Foreman-in-Charge.  
Open at all hours.

## HEALTH DEPARTMENT.

No. 301 Mott street, 9 A. M. to 4 P. M.  
ALEXANDER SHALER, President; EMMONS CLARK, Secretary.

## DEPARTMENT OF PUBLIC PARKS.

Temporary Offices at Arsenal, Sixty-fourth street and Fifth avenue, 9 A. M. to 4 P. M.  
HENRY R. BECKMAN, President; CHARLES DE F. BURNS, Secretary.

## Civil and Topographical Office.

Arsenal, Sixty-fourth street and Fifth avenue, 9 A. M. to 5 P. M.

## Office of Superintendent of 23d and 24th Wards.

One Hundred and Forty-sixth street and Third avenue, 9 A. M. to 5 P. M.

## DEPARTMENT OF DOCKS.

Battery, Pier A North River, 9 A. M. to 4 P. M.  
L. J. N. STARK, President; B. W. ELLISON, Secretary.  
Office hours from 9 A. M. to 4 P. M. daily, except Saturdays; on Saturdays as follows: from October 1 to June 1, from 9 A. M. to 3 P. M.; from June 1 to September 30, from 9 A. M. to 12 M.

## DEPARTMENT OF TAXES AND ASSESSMENTS.

Staats Zeitung Building, Tryon Row, 9 A. M. to 4 P. M. Saturdays, 3 P. M.  
MICHAEL COLEMAN, President; FLOYD T. SMITH, Secretary.Office Bureau Collection of Arrears of Personal Taxes, Brown-stone Building, City Hall Park, 9 A. M. to 4 P. M.  
CHARLES S. BEARDSLEY, Attorney; WILLIAM COMBERFORD, Clerk.

## DEPARTMENT OF STREET CLEANING.

Nos. 31 and 32 Park Row, "World" Building, Rooms 8 and 9, 9 A. M. to 4 P. M.  
JAMES S. COLEMAN, Commissioner; JACOB SEABOLD, Deputy Commissioner; R. W. HORNER, Chief Clerk.







surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Any bidder for this contract must be known to be engaged in and well prepared for the business, and must have satisfactory testimonials to that effect; and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract, and said bondsman shall be held to be securely bound not only for the faithful compliance with all the specifications of this contract, but for the payment on demand on completion of the aforesaid work of the sum of money agreed upon in cash or current funds of the City of New York and continue to be so bound until released by the receipt in full of the Board of Public Charities and Correction by his or their bond, with two sufficient sureties, each in the penal amount of four thousand (\$4,000) dollars.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same; the names of all persons interested with him or them therein; and if no other person be so interested, it shall distinctly state that fact; also that it is made without any connection with any other person making an estimate for the same purpose, and is in all respects fair and without collusion or fraud; and that no member of the Common Council, Head of a Department, Chief of a Bureau, Deputy thereof or Clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof. The bid or estimate must be verified by the oath, in writing, of the party or parties making the estimate, that the several matters stated therein are in all respects true. Where more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they shall pay to the Corporation the excess, if any there be, of the amount which the Corporation would have been entitled to receive had the same been complete, over the amount which the person or persons to whom the contract may be awarded, at any subsequent letting may be obliged to pay to the Corporation. The consent above mentioned shall be accompanied by the oath, or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract, over and above all his debts of every nature, and over and above his liabilities as bail, surety or otherwise; and that he has offered himself as a surety in good faith and with the intention to execute the bond required by section 12 of chapter 7 of the Revised Ordinances of the City of New York, if the contract shall be awarded to the person or persons for whom he consents to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either a certified check upon one of the National or State banks of the City of New York, drawn to the order of the Comptroller, or money, to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be inclosed in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the Estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York, as liquidated damages for such neglect or refusal; but, if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to his or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it and as in default to the Corporation, and the contract will be readvertised and relet as provided by law.

Bidders will write out the amount of their estimate, in addition to inserting the same in figures.

Payment will be required on delivery of the scow or stone-barge, completed to the entire satisfaction of Charles H. Haswell, Assistant Supervising Engineer and the Board of Public Charities and Correction, whose receipt in full shall release the bondsmen of the Contractor.

Bidders are informed that no deviation from the specifications will be allowed, unless under the written instruction of the Commissioners of Public Charities and Correction.

The form of the agreement, including specifications, and showing the manner of payment, can be obtained at the office of the Department, where the plans will be on exhibition for information of bidders.

Dated, New York, June 22, 1886.

HENRY H. PORTER, President,  
THOMAS S. BRENNAN, Commissioner,  
CHARLES E. SIMMONS, Commissioner,  
Public Charities and Correction.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,  
No. 66 THIRD AVENUE.

### TO CONTRACTORS.

### PROPOSALS FOR CONSTRUCTION OF RECEPTION HOSPITAL, HARLEM, CITY OF NEW YORK.

**SEALED BIDS OR ESTIMATES FOR THE** aforesaid job, in accordance with the specifications and plans, will be received at the office of the Department of Public Charities and Correction, No. 66 Third Avenue, in the City of New York, until 9.30 o'clock A. M., of Wednesday, July 7, 1886. The person or persons making any bid or estimate shall furnish the same in a sealed envelope, indorsed "Bid or Estimate for Reception Hospital, Harlem," and with his or their name or names, and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the bids or estimates received will be publicly opened by the President of said Department, and read.

The Board of Public Charities and Correction reserves the right to reject all bids or estimates if deemed to be for the public interest, as provided in section 64, chapter 410, Laws of 1882.

No bid or estimate will be accepted from, or contract awarded to, any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Any bidder for this contract must be known to be engaged in and well prepared for the business, and must have satisfactory testimonials to that effect; and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract by his or their bond, with two sufficient sureties, each in the penal amount of five thousand (\$5,000) dollars.

Each bid or estimate shall contain and state the name

and place of residence of each of the persons making the same; the names of all persons interested with him or them therein; and if no other person be so interested, it shall distinctly state that fact; also that it is made without any connection with any other person making an estimate for the same purpose, and is in all respects fair, and without collusion or fraud; and that no member of the Common Council, Head of a Department, Chief of a Bureau, Deputy thereof or Clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof. The bid or estimate must be verified by the oath, in writing, of the party or parties making the estimate, that the several matters stated therein are in all respects true. Where more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they shall pay to the Corporation the excess, if any there be, of the amount which the Corporation would have been entitled to receive had the same been complete, over the amount which the person or persons to whom the contract may be awarded, at any subsequent letting may be obliged to pay to the Corporation. The consent above mentioned shall be accompanied by the oath, or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract, over and above all his debts of every nature, and over and above his liabilities as bail, surety, or otherwise; and that he has offered himself as a surety in good faith and with the intention to execute the bond required by section 12 of chapter 7 of the Revised Ordinances of the City of New York, if the contract shall be awarded to the person or persons for whom he consents to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either a certified check upon one of the National or State banks of the City of New York, drawn to the order of the Comptroller, or money, to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be inclosed in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the Estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York, as liquidated damages for such neglect or refusal; but, if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to his or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it, and as in default to the Corporation, and the contract will be readvertised and relet as provided by law.

Bidders will write out the amount of their estimate in addition to inserting the same in figures.

Payment will be made by a requisition on the Comptroller, in accordance with the terms of the contract.

Bidders are informed that no deviation from the specifications will be allowed, unless under the written instruction of the Commissioners of Public Charities and Correction.

The form of the agreement, including specifications, and showing the manner of payment, can be obtained at the office of the Department, where the plans will be on exhibition for information of bidders.

Dated New York, June 22, 1886.

HENRY H. PORTER, President,  
THOMAS S. BRENNAN, Commissioner,  
CHARLES E. SIMMONS, Commissioner,  
Public Charities and Correction.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,  
No. 66 THIRD AVENUE.

### TO CONTRACTORS.

### PROPOSALS FOR NEW BUILDING FOR GENERAL DRUG DEPARTMENT, INCLUDING CHEMICAL LABORATORY AND STOREHOUSE FOR SPIRITS AND OILS, CITY OF NEW YORK.

**SEALED BIDS OR ESTIMATES FOR THE** aforesaid job, in accordance with the specifications and plans, will be received at the office of the Department of Public Charities and Correction, No. 66 Third Avenue, in the City of New York, until 9.30 o'clock A. M., of Wednesday, July 7, 1886. The person or persons making any bid or estimate shall furnish the same in a sealed envelope, indorsed "Bid or Estimate for New Building for General Drug Department, etc.," with his or their name or names, and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the bids or estimates received will be publicly opened by the President of said Department and read.

The Board of Public Charities and Correction reserves the right to reject all bids or estimates if deemed to be for the public interest, as provided in section 64, chapter 410, Laws of 1882.

No bid or estimate will be accepted from, or contract awarded to, any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Any bidder for this contract must be known to be engaged in and well prepared for the business, and must have satisfactory testimonials to that effect; and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract by his or their bond, with two sufficient sureties, each in the penal amount of six thousand (\$6,000) dollars.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same, the names of all persons interested with him or them therein, and if no other person be so interested, it shall distinctly state that fact; also that it is made without any connection with any other person making an estimate for the same purpose, and is in all respects fair and without collusion or fraud; and that no member of the Common Council, Head of a Department, Chief of a Bureau, Deputy thereof or Clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof. The bid or estimate must be verified by the oath, in writing, of the party or parties making the estimate, that the several matters stated therein are in all respects true. Where more than one person is interested, it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they shall pay to the Corporation the excess, if any there be, of the amount which the Corporation would have been entitled to receive had the same been complete, over the amount which the person or persons to whom the contract may be awarded, at any subsequent letting may be obliged to pay to the Corporation. The consent above mentioned shall be accompanied by the oath, or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract, over and above all his debts of every nature, and over and above his liabilities as bail, surety, or otherwise; and that he has offered himself as a surety in good faith and with the intention to execute the bond required by section 12 of chapter 7 of the Revised Ordinances of the City of New York, if the contract shall be awarded to the person or persons for whom he consents to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

ness or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they shall pay to the Corporation the excess, if any there be, of the amount which the Corporation would have been entitled to receive had the same been complete, over the amount which the person or persons to whom the contract may be awarded, at any subsequent letting. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract over and above all his debts of every nature, and over and above his liabilities as bail, surety or otherwise; and that he has offered himself as a surety in good faith and with the intention to execute the bond required by section 12 of chapter 7 of the revised ordinances of the City of New York, if the contract shall be awarded to the person or persons for whom he consents to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either a certified check upon one of the National or State banks of the City of New York, drawn to the order of the Comptroller, or money, to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be inclosed in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the Estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall refuse or neglect within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York, as liquidated damages for such neglect or refusal; but, if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to his or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it, and as in default to the Corporation; and the contract will be readvertised and relet as provided by law.

Bidders will write out the amount of their estimate in addition to inserting the same in figures.

Payment will be made by a requisition on the Comptroller, in accordance with the terms of the contract.

Bidders are informed that no deviation from the specifications will be allowed, unless under the written instruction of the Commissioners of Public Charities and Correction.

The form of the agreement, including specifications, and showing the manner of payment, can be obtained at the office of the Department, where the plans will be on exhibition for information of bidders.

Dated New York, June 22, 1886.

HENRY H. PORTER, President,  
THOMAS S. BRENNAN, Commissioner,  
CHARLES E. SIMMONS, Commissioner,  
Public Charities and Correction.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,  
No. 66 THIRD AVENUE,  
NEW YORK, June 21, 1886.

**IN ACCORDANCE WITH AN ORDINANCE OF** the Common Council, "In relation to the burial of strangers or unknown persons who may die in any of the public institutions of the City of New York," the Commissioners of Public Charities and Correction report as follows:

At Morgue, Bellevue Hospital, from off Barretto's Point, Long Island—Unknown man; body in an advanced state of decomposition. Had on black diagonal overcoat, black sack coat, black ribbed pants and vest, white shirt, white knit undershirt and drawers, elastic garters, white cotton socks.

At Homoeopathic Hospital, Ward's Island—Elizabeth Breslin; aged 45 years; 5 feet 4 inches high; blue eyes; auburn hair. Had on when admitted, black alpaca skirt, brown calico sacque, brown alpaca cloak, white straw hat, buttoned gaiters.

Francis Snyder, colored; aged 29 years; 5 feet 6 inches high; black eyes and hair. Had on when admitted light calico skirt and sacque, black straw hat, buttoned gaiters.

Philip Stephens; aged 31 years; 5 feet 1 inch high; gray eyes; brown hair. Had on when admitted black coat, dark mixed vest, striped pants, laced shoes, black felt hat.

Patrick McCabe; aged 77 years; 5 feet 4 1/2 inches high; blue eyes; gray hair. Had on when admitted blue sack coat, black diagonal pants, striped woolen shirt, brogan shoes, black felt hat.

At Branch Lunatic Asylum, Hart's Island—Bridget N Tagg; aged 53 years.

Nothing known of their friends or relatives.

By order.

G. F. BRITTON,  
Secretary.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,  
No. 66 THIRD AVENUE.

### TO CONTRACTORS.

### PROPOSALS FOR GROCERIES, DRY GOODS, LEATHER, LIME AND CEMENT, AND LUMBER.

**SEALED BIDS OR ESTIMATES FOR FURNISHING**

- GROCERIES.
- 6,000 pounds Dairy Butter; sample on exhibition Thursday, July 1, 1886.
  - 1,000 pounds Cheese.
  - 1,000 pounds Dried Apples.
  - 3,000 pounds Barley; price to include packages.
  - 6,000 pounds Rio Coffee, roasted.
  - 1,200 pounds Chicory.
  - 3,000 pounds Wheaten Grits, price to include packages.
  - 3,000 pounds Prunes.
  - 5,000 pounds Rice.
  - 15,000 pounds Brown Sugar.
  - 3,000 pounds Coffee Sugar.
  - 1,500 pounds Granulated Sugar.
  - 2,000 pounds Oolong Tea.
  - 100 bushels Beans.
  - 100 bushels Rye.
  - 300 bushels Oats.
  - 50 barrels Pickles.
  - 10 barrels Crackers, 40-gallon barrels, 2,000 per barrel.
  - 50 pieces prime quality City cured Bacon, to average about 6 pounds each.
  - 20 dozen canned Peas.
  - 30 dozen canned Pears.
  - 40 dozen canned Tomatoes.
  - 500 barrels good sound Irish Potatoes, new crop, to weigh 168 pounds net per barrel, and delivered at Blackwell's Island.
  - 100 barrels prime Russia Turnips, 135 pounds net per barrel.
  - 50 barrels prime Onions.
  - 60 bags Coarse Meal, 100 pounds net each.
  - 1,800 dozen Fresh Eggs, all to be candled.

DRY GOODS.

- 10,000 yards Bandage Muslin.
- 100 pieces Oiled Muslin.
- 100 dozen Girls' Stockings.

### LIME AND CEMENT.

25 barrels best quality Plaster Paris.  
25 barrels Rosendale or Lehigh Valley Cement Company's Cement.

### ROPE AND TWINE.

1 coil best quality 4-inch Manila Rope, soft laid.  
100 pounds Sail Twine.

### LEATHER.

1,000 pounds Offal Leather.  
100 sides good damaged Sole Leather, to average about 22 to 25 pounds.  
100 sides prime quality Waxed Upper Leather, to average about 17 feet.  
100 sides prime quality Waxed Kip Leather, to average about 11 feet.

### LUMBER.

5,000 superficial feet first quality clear, thoroughly seasoned Georgia Yellow Pine Flooring, 2 1/2 inches by 1 1/2 inches, tongued and grooved, dressed both sides.

—will be received at the Department of Public Charities and Correction, in the City of New York, until 9.30 o'clock A. M., of Friday, July 2, 1886. The person or persons making any bid or estimate shall furnish the same in a sealed envelope, indorsed "Bid or Estimate for Groceries, Dry Goods, Leather, Lime and Cement, and Lumber," with his or their name or names and the date of presentation, to the head of said Department, at the said office, on or before the day and hour above named, at which time and place the bids or estimates received will be publicly opened by the President of said Department and read.

The Board of Public Charities and Correction reserves the right to reject all bids or estimates if deemed to be for the public interest, as provided in section 64, chapter 410, Laws of 1882.

No bid or estimate will be accepted from, or contract awarded to, any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The award of the contract will be made as soon as practicable after the opening of the bids.

Delivery will be required to be made from time to time, and in such quantities as may be directed by the said Commissioners.

Any bidder for this contract must be known to be engaged in and well prepared for the business, and must have satisfactory testimonials to that effect; and the person or persons to whom the contract may be awarded will be required to give security for the performance of the contract by his or their bond, with two sufficient sureties, in the penal amount of fifty (50) per cent. of the estimated amount of the contract.

Each bid or estimate shall contain and state the name and place of residence of each of the persons making the same; the names of all persons interested with him or them therein; and if no other person be so interested, it shall distinctly state that fact; also that it is made without any connection with any other person making an estimate for the same purpose, and is in all respects fair and without collusion or fraud; and that no member of the Common Council, head of a department, chief of a bureau, deputy thereof, or clerk therein, or other officer of the Corporation, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof. The bid or estimate must be verified by the oath, in writing, of the party or parties making the estimate that the several matters stated therein are in all respects true. Where more than one person is interested it is requisite that the verification be made and subscribed by all the parties interested.

Each bid or estimate shall be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the estimate, they will, on its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they shall pay to the Corporation any difference between the sum to which he would be entitled on its completion, and that which the Corporation may be obliged to pay to the person or persons to whom the contract may be awarded at any subsequent letting; the amount in each case to be calculated upon the estimated amount of the work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of this contract, over and above all his debts of every nature, and over and above his liabilities as bail, surety or otherwise; and that he has offered himself as a surety in good faith and with the intention to execute the bond required by section 12 of chapter 7 of the Revised Ordinances of the City of New York, if the contract shall be awarded to the person or persons for whom he consents to become surety. The adequacy and sufficiency of the security offered to be approved by the Comptroller of the City of New York.

No bid or estimate will be considered unless accompanied by either a certified check upon one of the National banks of the City of New York, drawn to the order of the Comptroller, or money, to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be inclosed in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the Estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk, and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same, within three days after the contract is awarded. If the successful bidder shall refuse or neglect, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York, as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

Should the person or persons to whom the contract may be awarded neglect or refuse to accept the contract within five days after written notice that the same has been awarded to his or their bid or proposal, or if he or they accept but do not execute the contract and give the proper security, he or they shall be considered as having abandoned it, and as in default to the Corporation; and the contract will be readvertised and relet as provided by law.

The quality of the articles, supplies, goods, wares, and merchandise must conform in every respect to the samples of the same, respectively, at the office of the said Department. Bidders are cautioned to examine the specifications for particulars of the articles, etc., required, before making their estimates.

Bidders will state the price for each article, by which the bids will be tested.

Bidders will write out the amount of their estimate, in addition to inserting the same in figures.

Payment will be made by a requisition on the Comptroller, in accordance with the terms of the contract, from time to time, as the Commissioners may determine.

Bidders are informed that no deviation from the specifications will be allowed, unless under the written instruction of the Commissioners of Public Charities and Correction.

No bid or estimate will be accepted from, or contract awarded to, any person who is in arrears to the Corporation upon debt or contract, or who is a defaulter, as surety or otherwise, upon any obligation to the Corporation.

The form of the agreement, including specifications and showing the manner of payment, can be obtained at the office of the Department.

Dated New York, June 21, 1886.

HENRY H. PORTER, President,  
THOMAS S. BRENNAN, Commissioner,  
CHARLES E. SIMMONS, Commissioner,  
Public Charities and Correction.



DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,  
No. 66 THIRD AVENUE,  
NEW YORK, June 18, 1886.

THE UNDERSIGNED WILL SELL AT PUBLIC  
Auction, for account of the Commissioners of Public  
Charities and Correction, at their office, No. 66 Third  
avenue, on Wednesday, June 30, 1886, at 11 o'clock A.  
M., the following articles, viz.:

15,000 pounds Mixed Rags, more or less.  
20,000 pounds Scrap Iron, "  
1,000 pounds Old Lead, "  
600 pounds Old Brass, "  
1,000 pounds Old Paper, "  
75 Empty Iron-bound Barrels, "  
150 Empty Syrup Barrels, "

—to be delivered at the foot of East Twenty-sixth street,  
and to be paid for as follows:  
Twenty-five per cent. of estimated value to be paid on  
day of sale, and the remainder on delivery.

R. E. CLEARY,  
Storekeeper.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,  
No. 66 THIRD AVENUE,  
NEW YORK, June 14, 1886.

IN ACCORDANCE WITH AN ORDINANCE OF  
the Common Council, "In relation to the burial of  
strangers or unknown persons who may die in any of the  
public institutions of the City of New York," the Com-  
missioners of Public Charities and Correction report as  
follows:

At Morgue, Bellevue Hospital, from Pier 50, North  
river—Unknown man; aged about 35 years; 5 feet 6  
inches high; sandy hair and moustache. Had on gray  
woolen shirt, black diagonal pants, blue flannel drawers,  
gray woolen socks, brogan shoes.

Unknown man, from Wolf street and Hudson River  
Railroad—Aged about 50 years; 5 feet 7½ inches high;  
gray hair and chin beard; brown eyes. Had on blue  
check jumper, blue overalls, white knitted undershirt  
and drawers, blue flannel coat, boots.

Unknown woman, from No. 403 Washington street—  
Aged about 45 years; 5 feet 5 inches high; dark brown  
hair mixed with gray; gray eyes. Had on black cash-  
mere waist, black Jersey, light gray dress, blue flannel  
undershirt, cloth top gaiters, red woolen stockings.

Unknown man, from foot of Twenty-second street,  
North river—Aged about 55 years; 5 feet 6 inches high;  
gray hair; chin whiskers and moustache. Had on black  
diagonal coat, vest and pants; white shirt, white knit  
undershirt and drawers, elastic gaiters, white cotton  
socks.

Unknown man (Chinese), from One Hundred and  
Seventieth street, Harlem river—Aged about 30 years;  
5 feet 5 inches high; black hair and moustache; black  
eyes. Had on black alpaca coat, black diagonal vest and  
pants, white shirt, white muslin drawers, gaiters, red  
woolen socks.

Unknown man, from Presbyterian Hospital—Aged  
about 50 years; 5 feet 5 inches high; dark hair mixed  
with gray.

Unknown man, from One Hundred and Fifty-eighth  
street and Harlem river—Aged about 55 years; 5 feet 7  
inches high; gray hair; blue eyes; light brown mous-  
tache; gray imperial. Had on black coat, pants and  
vest, white shirt, white knit undershirt and drawers,  
white cotton socks, gaiters.

Unknown man, from One Hundred and Thirtieth  
street and Harlem river—Aged about 45 years; 5 feet 10  
inches high; dark hair. Had on brown overalls, white  
knit undershirt and drawers.

Unknown man (colored), from No. 83 Sheriff street—  
Aged about 40 years; 5 feet 6 inches high; black mous-  
tache and chin whiskers. Had on striped cutaway coat,  
mouse colored vest, brown striped pants, blue hickory  
shirt.

At Homoeopathic Hospital, Ward's Island—Andrew  
Bressler; aged 62 years; 5 feet 4 inches high; blue  
eyes; gray hair. Had on when admitted, brown vest,  
dark striped pants, blue jumper, slippers, black hat.

At Hart's Island Hospital—Josephine Johnson; aged  
44 years.

Nothing known of their friends or relatives.

By order,  
G. F. BRITTON,  
Secretary.

## FINANCE DEPARTMENT.

CITY OF NEW YORK,  
FINANCE DEPARTMENT,  
COMPTROLLER'S OFFICE,  
April 13, 1886.

## NOTICE TO PROPERTY-OWNERS.

IN PURSUANCE OF SECTION 997 OF THE  
"New York City Consolidation Act of 1882," the  
Comptroller of the City of New York hereby gives public  
notice to all persons, owners of property affected by  
the assessment list for

Gansevoort street widening, between Washington street  
and West Thirtieth street, and West Thirtieth street,  
between Gansevoort street and Eighth avenue

—which was confirmed by the Supreme Court, March  
9, 1886, and entered on the 17th day of March, 1886,  
in the Record of Titles of Assessments, kept in  
the "Bureau for the Collection of Assessments and  
Arrears of Taxes and Assessments and of Water  
Rents," that unless the amount assessed for benefit  
on any person or property shall be paid within sixty  
days after the date of said entry of the assessment,  
interest will be collected thereon as provided in section  
998 of said "New York City Consolidation Act of 1882."

Section 998 of the said act provides that, "If any such  
assessment shall remain unpaid for the period of sixty  
days after the date of entry thereof in the said Record  
of Titles of Assessments, it shall be the duty of the officer  
authorized to collect and receive the amount of such  
assessment, to charge, collect, and receive interest  
thereon at the rate of seven per centum per annum, to be  
calculated from the date of such entry to the date of  
payment."

The above assessment is payable to the Collector of  
Assessments and Clerk of Arrears, at the "Bureau for  
the Collection of Assessments and Arrears of Taxes and  
Assessments and of Water Rents," Room 31,  
Stewart Building, between the hours of 9 A. M. and 2 P. M.,  
and all payments made thereon, on or before June 26,  
1886, will be exempt from interest as above provided,  
and after that date will be subject to a charge of interest  
at the rate of seven per cent. per annum from the date  
of entry in the Record of Titles of Assessments in said  
Bureau to the date of payment.

EDWARD V. LOEW,  
Comptroller.

## REAL ESTATE RECORDS.

THE ATTENTION OF LAWYERS, REAL  
Estate Owners, Monetary Institutions engaged in  
making loans upon real estate, and all who are interested  
in providing themselves with facilities for reducing the  
cost of examinations and searches, is invited to these  
Official Indices of Records, containing all recorded trans-  
fers of real estate in the City of New York from 1653 to  
1857, prepared under the direction of the Commissioners  
of Records.

Grants, grantees, suits in equity, insolvents'  
and Sheriff's sales, in 61 volumes, full bound,  
price..... \$100 00  
The same in 25 volumes, half bound..... 50 00  
Complete sets, folded, ready for binding..... 15 00  
Records of Judgments, 25 volumes, bound..... 10 00  
Orders should be addressed to "Mr. Stephen Angell  
Room 23, Stewart Building."

EDWARD V. LOEW,  
Comptroller.

## JURORS.

### NOTICE

## IN RELATION TO JURORS FOR STATE COURTS.

OFFICE OF THE COMMISSIONER OF JURORS,  
ROOM 127, STEWART BUILDING,  
CHAMBERS STREET AND BROADWAY,  
NEW YORK, June 1, 1886.

APPLICATIONS FOR EXEMPTIONS WILL BE  
heard here, from 10 to 3 daily, from all persons  
hitherto liable or recently serving who have become  
exempt, and all needed information will be given.

Those who have not answered as to their liability, or  
proved permanent exemption, will receive a "jury en-  
rollment notice," requiring them to appear before me  
this year. Whether liable or not, such notices must be  
answered (in person, if possible, and at this office only)  
under severe penalties. If exempt, the party must bring  
proof of exemption; if liable, he must also answer in  
person, giving full and correct name, residence, etc., etc.  
No attention paid to letters.

Persons "enrolled" as liable must serve when called  
or pay their fines. No mere excuse will be allowed or  
interference permitted. The fines if unpaid will be en-  
tered as judgments upon the property of the delinquents.

All good citizens will aid the cause of justice, and  
secure reliable and respectable juries, and equalize their  
duty by serving promptly when summoned, allowing their  
clerks or subordinates to serve, reporting to me any  
attempt at bribery or evasion, and suggesting names for  
enrollment. Persons between sixty and seventy years of  
age, summer absentees, persons temporarily ill, and  
United States and District Court jurors are not exempt.

Every man must attend to his own notice. It is a mis-  
demeanor to give any jury paper to another to answer.  
It is also punishable by fine or imprisonment to give or  
receive any present or bribe, directly or indirectly, in  
relation to a jury service, or to withhold any paper or  
make any false statement, and every case will be fully  
prosecuted.

CHARLES REILLY,  
Commissioner of Jurors.

## CORPORATION NOTICE.

PUBLIC NOTICE IS HEREBY GIVEN TO THE  
owner or owners, occupant or occupants of all  
houses and lots, improved or unimproved lands affected  
thereby, that the following assessments have been com-  
pleted and are lodged in the office of the Board of Assess-  
ors, for examination by all persons interested, viz.:

List 2115, No. 1. Regulating, grading, setting curb and  
gutter stones and flagging One Hundred and Thirty-fifth  
street, from Third to Alexander avenue.

List 2131, No. 2. Regulating, grading, setting curb and  
flagging One Hundred and Fifty-sixth street, from Kings-  
bridge road to Eleventh avenue.

List 2215, No. 3. Sewers in Eighty-sixth street, between  
Tenth and Riverside avenues.

List 2242, No. 4. Regulating and grading, setting curb  
stones and flagging the sidewalks, laying crosswalks and  
paving the roadway in Alexander avenue, from the  
Southern Boulevard to North Third avenue.

List 2286, No. 5. Paving Eighty-eighth street, from  
Second to Third avenue, with granite-block pavement.

List 2293, No. 6. Paving One Hundred and Thirty-  
fourth street, from Madison to Fifth avenue, with granite-  
block pavement.

List 2295, No. 7. Paving Eighty-second street, from  
Eighth to Ninth avenue, with granite-block pavement.

List 2300, No. 8. Paving One Hundred and Fifteenth  
street from Fifth to Sixth avenue, with granite-block  
pavement.

The limits embraced by such assessments include all  
the several houses and lots of ground, vacant lots, pieces  
and parcels of land situated on—

No. 1. Both sides of One Hundred and Thirty-fifth  
street, from Third to Alexander avenue, and to the  
extent of half the block at the intersecting avenues.

No. 2. Both sides of One Hundred and Fifty-sixth  
street, from Kingsbridge road to Eleventh avenue.

No. 3. Both sides of Eighty-sixth street, between  
Tenth and Riverside avenues.

No. 4. Both sides of Alexander avenue, from the  
Southern Boulevard to North Third avenue, and to the  
extent of half the block at the intersecting streets.

No. 5. Both sides of Eighty-eighth street, from Second  
to Third avenue, and to the extent of half the block at  
the intersecting avenues.

No. 6. Both sides of One Hundred and Thirty-fourth  
street, from Madison to Fifth avenue, and to the extent  
of half the block at the intersecting avenues.

No. 7. Both sides of Eighty-second street, from Eighth  
to Ninth avenue, and to the extent of half the block at  
the intersecting avenues.

No. 8. Both sides of One Hundred and Fifteenth street,  
from Fifth to Sixth avenue, and to the extent of half  
the block at the intersecting avenues.

All persons whose interests are affected by the above-  
named assessments, and who are opposed to the same, or  
either of them, are requested to present their objections  
in writing to the Chairman of the Board of Assessors,  
at their office, No. 11½ City Hall, within thirty days  
from the date of this notice.

The above-described lists will be transmitted, as pro-  
vided by law, to the Board of Revision and Correction of  
Assessments for confirmation, on the 26th day of July,  
1886.

EDWARD GILON, Chairman.  
PATRICK M. HAVERTY,  
CHAS. E. WENDT,  
VAN BRUGH LIVINGSTON,  
Board of Assessors.

OFFICE OF THE BOARD OF ASSESSORS,  
No. 11½ CITY HALL,  
NEW YORK, June 25, 1886.

PUBLIC NOTICE IS HEREBY GIVEN TO THE  
owner or owners, occupant or occupants of all  
houses and lots, improved or unimproved lands affected  
thereby, that the following assessments have been com-  
pleted and are lodged in the office of the Board of Assess-  
ors, for examination by all persons interested, viz.:

List 2136, No. 1. Regulating, grading, setting curb  
and flagging One Hundred and Thirty-seventh street,  
from Fifth to Seventh avenue.

List 2221, No. 2. Regulating, grading, setting curb and  
flagging Seventy-fourth street, from Eighth avenue to  
Riverside avenue.

The limits embraced by such assessments include all  
the several houses and lots of ground, vacant lots, pieces  
and parcels of land situated on—

No. 1. Both sides of One Hundred and Thirty-seventh  
street, from Fifth to Seventh avenue.

No. 2. Both sides of Seventy-fourth street, from Eighth  
avenue to Riverside Drive.

All persons whose interests are affected by the above-  
named assessments, and who are opposed to the same, or  
either of them, are requested to present their objections  
in writing to the Chairman of the Board of Assessors,  
at their office, No. 11½ City Hall, within thirty days  
from the date of this notice.

The above-described list will be transmitted, as pro-  
vided by law, to the Board of Revision and Correction of  
Assessments for confirmation, on the 2d day of July,  
1886.

EDWARD GILON, Chairman,  
PATRICK M. HAVERTY,  
CHAS. E. WENDT,  
VAN BRUGH LIVINGSTON,  
Board of Assessors

OFFICE OF THE BOARD OF ASSESSORS,  
No. 11½ CITY HALL,  
NEW YORK, May 29, 1886.

PUBLIC NOTICE IS HEREBY GIVEN TO THE  
owner or owners, occupant or occupants of all  
houses and lots, improved or unimproved lands affected  
thereby, that the following assessments have been com-  
pleted and are lodged in the office of the Board of Assess-  
ors, for examination by all persons interested, viz.:

List 1766, No. 1. Sewers and appurtenances in Third  
avenue, from the Southern Boulevard to One Hundred  
and Thirty-fifth street, and in One Hundred and Thirty-  
fifth and One Hundred and Thirty-fourth streets,  
from Third avenue to summit east of Willis avenue,  
with branches in Lincoln, Alexander and Willis avenues.

List 2126, No. 2. Regulating, grading, curbing and  
flagging Sixty-seventh street, from Third avenue to Ave-  
nue A.

The limits embraced by such assessments include all the  
several houses and lots of ground, vacant lots, pieces and  
parcels of land situated on—

No. 1. Blocks bounded by One Hundred and Thirty-  
fourth and One Hundred and Thirty-sixth streets, Third  
avenue and Brown place (including south side of One  
Hundred and Thirty-fourth street); also property  
bounded by One Hundred and Thirty-fourth and One  
Hundred and Forty-fourth streets, Third avenue and  
Mott Haven canal.

No. 2. Both sides of Sixty-seventh street, from Third  
avenue to Avenue A.

All persons whose interests are affected by the above-  
named assessments, and who are opposed to the same, or  
either of them, are requested to present their objections  
in writing to the Chairman of the Board of Assessors,  
at their office, No. 11½ City Hall, within thirty days  
from the date of this notice.

The above-described list will be transmitted, as pro-  
vided by law, to the Board of Revision and Correction of  
Assessments for confirmation, on the 28th day of June  
1886.

EDWARD GILON, Chairman.  
PATRICK M. HAVERTY,  
CHAS. E. WENDT,  
VAN BRUGH LIVINGSTON,  
Board of Assessors.

OFFICE OF THE BOARD OF ASSESSORS,  
No. 11½ CITY HALL,  
NEW YORK, May 27, 1886.

## DEPARTMENT OF PUBLIC WORKS.

DEPARTMENT OF PUBLIC WORKS,  
COMMISSIONER'S OFFICE,  
ROOM 6, No. 31 CHAMBERS STREET,  
NEW YORK, June 24, 1886.

## PROPOSALS FOR STOP COCKS, STOP- COCK BOXES AND COVERS, AND HYDRANTS.

BIDS OR ESTIMATES ENCLOSED IN A SEALED  
envelope, with the title of the work and the name of  
the bidder endorsed thereon, will be received at this  
office until Thursday, July 8, 1886, at 12 o'clock M., at  
which place and hour they will be publicly opened by  
the head of the Department, and read.

## FOR FURNISHING AND DELIVERING STOP COCKS, STOP-COCK BOXES AND COVERS, AND HYDRANTS.

Bidders for the above contracts must be regularly  
engaged in the business and well prepared for furnishing  
the materials they propose for; and no contract will be  
made with any bidder who is not prepared to furnish  
satisfactory evidence to that effect.

Each estimate must contain the name and place of  
residence of the person making the same, the names of  
all persons interested with him therein, and if no other  
person be so interested, it shall distinctly state that fact;  
that it is made without any connection with any other  
person making an estimate for the same work, and is in  
all respects fair and without collusion or fraud. That no  
member of the Common Council, head of a department,  
chief of a bureau, deputy thereof or clerk therein, or  
other officer of the Corporation, is directly or indirectly  
interested in the estimate or in the work to which it re-  
lates or in the profits thereof.

Each estimate must be verified by the oath, in writing,  
of the party making the same, that the several matters  
therein stated are true, and must be accompanied by the  
consent, in writing, of two householders or freeholders  
in the City of New York, to the effect that if the contract  
is awarded to the person making the estimate, they will,  
upon its being so awarded, become bound as his sureties  
for its faithful performance; and that if he shall refuse or  
neglect to execute the same, they will pay to the Corpora-  
tion any difference between the sum to which he would be  
entitled upon its completion and that which the Corpora-  
tion may be obliged to pay to the person to whom  
the contract shall be awarded at any subsequent letting;  
the amount to be calculated upon the estimated amount  
of the work by which the bids are tested.

The consent last above mentioned must be accompanied  
by the oath or affirmation, in writing, of each of the per-  
sons signing the same, that he is a householder or free-  
holder in the City of New York, and is worth the amount  
of the security required for the completion of the con-  
tract, over and above all his debts of every nature, and  
over and above his liabilities as bail, surety or otherwise,  
and that he has offered himself as surety in good faith,  
with the intention to execute the bond required by law.

No estimate will be considered unless accompanied by  
either a certified check upon one of the State or national  
banks of the City of New York, drawn to the order of the  
Comptroller, or money, to the amount of five per centum  
of the amount of the security required for the faithful  
performance of the contract. Such check or money must  
not be inclosed in the sealed envelope containing the  
estimate, but must be handed to the officer or clerk of  
the Department who has charge of the Estimate-book, and  
no estimate can be deposited in said book until such check  
or money has been examined by said officer or clerk  
and found to be correct. All such deposits, except  
that of the successful bidder, will be returned to the per-  
sons making the same within three days after the contract  
is awarded. If the successful bidder shall neglect or  
refuse, within five days after notice that the contract  
has been awarded to him, to execute the same, the amount  
of the deposit made by him shall be forfeited to and be  
retained by the City of New York, as liquidated damages  
for such neglect or refusal; but if he shall execute the  
contract within the time aforesaid, the amount of his de-  
posit will be returned to him.

## THE COMMISSIONER OF PUBLIC WORKS RESERVES THE RIGHT TO REJECT ALL BIDS RECEIVED FOR ANY PARTICULAR WORK IF HE DEEMS IT FOR THE BEST INTERESTS OF THE CITY.

Blank forms of bid or estimate, the proper envelopes in  
which to inclose the same, the specifications and agree-  
ments, and any further information desired, can be  
obtained at the office of the Chief Engineer of the  
Croton Aqueduct, Room 10, No. 31 Chambers street.

ROLLIN M. SQUIRE,  
Commissioner of Public Works.

DEPARTMENT OF PUBLIC WORKS,  
BUREAU OF WATER REGISTER,  
No. 31 CHAMBERS ST., ROOM 2,  
NEW YORK, June, 1886.

## CROTON WATER RATES.

NOTICE IS HEREBY GIVEN THAT THE AN-  
nual water rates for 1886 are now due and payable  
at this office.

Notice is also given that according to law, five per  
cent. will be added on the first of August next on all un-  
paid Croton water rates.

ROLLIN M. SQUIRE,  
Commissioner of Public Works.

DEPARTMENT OF PUBLIC WORKS,  
COMMISSIONER'S OFFICE,  
No. 31 CHAMBERS STREET,  
NEW YORK, June 17, 1886.

## NOTICE OF SALE AT PUBLIC AUCTION.

ON WEDNESDAY, JUNE 30, 1886, AT 11 O'CLOCK  
A. M., the Department of Public Works will sell at  
public auction, under the direction of the Superintendent  
of Street Improvements, by Messrs. Van Tassel &  
Kearney, Auctioneers, on the premises, the following  
buildings and structures, or such parts thereof as remain  
standing, in lots, viz.:

Within the lines of the widening of Gansevoort street,  
between Washington and Greenwich streets and  
Ninth avenue.

Lot No. 1.—2-story and basement brick and frame  
dwelling, 18.2½x19.9x17.11½x18.5.

Lot No. 2.—Frame shed, 9.8x19.9½x9.8½x19.9.

Lot No. 3.—Frame shed, 14.10½x16.2½x14.9½x16.4½.

Lots Nos. 4 and 5.—3-story frame store and dwelling,  
23.7x18.7½x24.1½x18.7½.

Lot No. 6.—1-story frame shed, 24.10½x19.11x24.8½x  
18.7½.

Lot No. 7.—3-story brick factory, 24.10½x19.11x24.10x  
19.11.

Lot No. 8.—3-story brick factory, 25.2½x19.11x25.2½x  
19.11.

Lot No. 9.—1½-story brick storehouse, 15.0½x19.7½x  
15.0½x19.10½.

Lot No. 10.—1½-story brick factory and office, 22.0x  
19.7½x22.0x19.7½.

Lot No. 11.—Frame shed, 25.0x20.0x25.0x19.7½.

Lot No. 12.—Frame shed, 19.3x10.3½x9.8½x15.1½x  
3.9x20.0½.

Lot No. 13.—2-story frame house, 31.7½x4.5x32.4x5.2½x  
20.0.

Lot No. 14.—3-story and basement brick store and  
dwelling, 8.4x15.3½x13.6x30.10½x4.2½x3.1½.

Lot No. 15.—3-story and basement brick dwelling,  
7.7½x15.6x13.6.

Within the lines of the widening of Gansevoort street,  
between Greenwich street and Ninth avenue and  
Hudson street.

Lot No. 16.—2-story cellar brick store and dwelling,  
24.9½x4.2x20.3½x10.3½.

Lot No. 17.—2-story brick stable, 2.63½x1.5½x2.11½.

Lot No. 18.—1½-story feed store, 29.7½x18.9½x25.11½x  
4.5½.

Lot No. 19.—3-story brick and frame store and dwell-  
ings, 42.11½x20.0x45.2½x18.9½x2.3.

Within the lines of the widening of Gansevoort street,  
between Hudson, West Fourth and Thirtieth  
streets.

Lot No. 19½.—2-story frame store, 27.2x7.6½x27.6½x  
4.3½.

Lot No. 20.—2-story frame store, 27.5½x12.7½x27.2x  
13.10½.

Lot No. 21.—2-story frame store, 14.9½x20.0x13.3x  
20.2½.

Lot No. 22.—2-story frame stable, 11.6½x20.0x10.9½x  
20.0.

Lot No. 23.—2-story frame stable, 10.9½x20.0x10.7½x  
20.0.

Lot No. 24.—2-story brick storehouse, 17.0x20.0x17.0½x  
20.0.

Lot No. 25.—2-story brick stores, 72.10½x14.6½x72.10½x  
10½x5.5½x21.11½x5.5½x14.6½.

Lot No. 26.—Frame shed, 100.10x14.9x11.8x94.15x20.0.

Lot No. 27.—1-story corrugated iron office, 21.1½x  
3.11x21.0x14.9.

Lot No. 28.—4-story brick dwelling, 2.10½x1.5½x  
2.6½.

Within the lines of the widening of Thirtieth street,  
between West Fourth street and Eighth avenue.

Lot No. 29.—5-story brick dwelling, tenement, 28.9½x  
11.4½x28.9½x11.4½.

Lot No. 30.—4-story brick dwelling, tenement, 28.6x  
11.4½x28.6x11.4½.

Lot No. 31.—3-story basement dwelling, tenement,  
20.6½x11.4½x20.6½



other officer of the Corporation is directly or indirectly interested in the estimate or in the work to which it relates or in the profits thereof.

Each estimate must be verified by the oath, in writing, of the party making the same, that the several matters therein stated are true, and must be accompanied by the consent, in writing, of two householders or freeholders in the City of New York, to the effect that if the contract is awarded to the person making the estimate, they will, upon its being so awarded, become bound as his sureties for its faithful performance; and that if he shall refuse or neglect to execute the same, they will pay to the Corporation any difference between the sum to which he would be entitled upon its completion and that which the Corporation may be obliged to pay to the person to whom the amount to be calculated upon the estimated amount of the work by which the bids are tested.

The consent last above mentioned must be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a householder or freeholder in the City of New York, and is worth the amount of the security required for the completion of the contract, over and above all his debts of every nature, and over and above his liabilities as bail, surety, or otherwise, and that he has offered himself as surety in good faith, with the intention to execute the bond required by law.

No estimate will be considered unless accompanied by either a certified check upon one of the State or national banks of the City of New York, drawn to the order of the Comptroller, or money, to the amount of five per centum of the amount of the security required for the faithful performance of the contract. Such check or money must not be inclosed in the sealed envelope containing the estimate, but must be handed to the officer or clerk of the Department who has charge of the Estimate-box, and no estimate can be deposited in said box until such check or money has been examined by said officer or clerk and found to be correct. All such deposits, except that of the successful bidder, will be returned to the persons making the same within three days after the contract is awarded. If the successful bidder shall neglect or refuse, within five days after notice that the contract has been awarded to him, to execute the same, the amount of the deposit made by him shall be forfeited to and retained by the City of New York, as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit will be returned to him.

THE COMMISSIONER OF PUBLIC WORKS RESERVES THE RIGHT TO REJECT ALL BIDS RECEIVED FOR ANY PARTICULAR WORK IF HE DEEMS IT FOR THE BEST INTERESTS OF THE CITY.

Blank forms of bid or estimate, the proper envelopes in which to inclose the same, the specifications and agreements, and any further information desired, can be obtained at the office of the Water Purveyor, Room 1, No. 31 Chambers street.

ROLLIN M. SQUIRE,  
Commissioner of Public Works.

#### BOARD OF EDUCATION.

SEALED PROPOSALS WILL BE RECEIVED BY the School Trustees of the Seventh Ward, at the Hall of the Board of Education, corner of Grand and Elm streets, until Monday, the 12th day of July, 1886, and until 4 o'clock P. M. on said day, for erecting a new School-house for Grammar School No. 2, on the south side of Henry street, near Pike street.

Plans and specifications may be seen, and blanks for proposals, and all necessary information may be obtained at the office of the Superintendent of School Buildings, No. 146 Grand, corner of Elm street, third floor.

Proposals will be received for the entire work and materials required for the erection of the building (excepting plumbing and steam-heating work, which will be furnished by other contractors under separate contracts.)

The party submitting a proposal, and the parties proposing to become sureties, must each write his name, place of residence, and place of business on said proposal. Two responsible and approved sureties, residents of this city, are required in all cases.

No proposal will be considered from persons whose character or antecedent dealings with the Board of Education render their responsibility doubtful.

The Trustees reserve the right to reject any or all of the proposals submitted.

WILLIAM H. TOWNLEY,  
MOSES I. MENDEL,  
JAMES B. MULRY,  
JAMES W. MCBARRON,  
JOHN H. BOSCHEN,  
Board of School Trustees, Seventh Ward.  
Dated New York, June 28, 1886.

SEALED PROPOSALS WILL BE RECEIVED BY the School Trustees of the Eighth Ward, at the Hall of the Board of Education, corner of Grand and Elm streets, until Monday, the 12th day of July, 1886, and until 4 o'clock A. M. on said day, for erecting a new School-house on the north side of King street, between Congress and Varick streets, known as Nos. 29, 31, 33 and 35.

Plans and specifications may be seen, and blanks for proposals, and all necessary information may be obtained at the office of the Superintendent of School Buildings, No. 146 Grand, corner of Elm street, third floor.

Proposals will be received for the entire work and materials required for the erection of the building (excepting Plumbing and steam-heating work, which will be furnished by other contractors under separate contracts.)

The party submitting a proposal and the parties proposing to become sureties must each write his name, place of residence and place of business on said proposal.

Two responsible and approved sureties, residents of this city, are required in all cases.

No proposal will be considered from persons whose character or antecedent dealings with the Board of Education render their responsibility doubtful.

The Trustees reserve the right to reject any or all of the proposals submitted.

C. WELBY BAUM,  
URIAH WELCH,  
GEORGE F. VETTER,  
O. ROCKEFELLER,  
CHARLES H. HONSLEY,  
Board of School Trustees, Eighth Ward.  
Dated New York, June 28, 1886.

SEALED PROPOSALS WILL BE RECEIVED BY the School Trustees of the Twenty-second Ward, at the Hall of the Board of Education, until Tuesday the sixth day of July, 1886, and until 4 o'clock P. M. on said day, for erecting a new School-house on the south side of West Fifth street, between Ninth and Tenth avenues.

Plans and specifications may be seen, and blanks for proposals and all necessary information may be obtained at the office of the Superintendent of School Buildings, No. 146 Grand, corner of Elm street, third floor.

Proposals will be received for the entire work and materials required for the erection of the building (excepting plumbing and steam-heating work, which will be furnished by other contractors, under separate contracts.)

The party submitting a proposal, and the parties proposing to become sureties, must each write his name, place of residence, and place of business on said proposal.

Two responsible and approved sureties, residents of this city, are required in all cases.

No proposal will be considered from persons whose character or antecedent dealings with the Board of Education render their responsibility doubtful.

The Committee reserve the right to reject any or all of the proposals submitted.

JAMES R. CUMING,  
J. SEAVAGE PAGE,  
GEO. H. ROBINSON,  
RICHARD S. TREACY,  
HENRY A. ROGERS,  
Board of School Trustees, Twenty-second Ward.  
Dated New York, June 23, 1886.

SEALED PROPOSALS WILL BE RECEIVED by the School Trustees of the Twelfth Ward, at the Hall of the Board of Education, No. 146 Grand street, until Thursday, July 1, 1886, and until 9:30 o'clock A. M. on said day, for Repairing the Steam-heating Apparatus in Grammar School No. 78, corner Pleasant avenue and One Hundred and Nineteenth street; also for Alterations, etc., at Grammar School No. 43, corner One Hundred and Twenty-ninth street and Tenth avenue.

Chairman,  
JOHN WHALEN, Secretary,  
Board of Trustees, Twelfth Ward.

SEALED PROPOSALS WILL ALSO BE RECEIVED by the School Trustees of the Nineteenth Ward, until 10 o'clock A. M. on the day, and at the place before named, for Repairing the Steam-heating Apparatus in Grammar School No. 74, at No. 220 East Sixty-third street.

I. P. CHAMBERS, Chairman,  
RICHARD KEELY, Secretary,  
Board of Trustees, Nineteenth Ward.

SEALED PROPOSALS WILL ALSO BE RECEIVED by the School Trustees of the Twenty-fourth Ward, until 10:30 o'clock A. M. on the day, and at the place before named, for Repairing the Steam-heating Apparatus in Grammar School No. 64, at No. 2436 Webster avenue.

ELMER A. ALLEN, Chairman,  
JOHN E. EUSTIS, Secretary,  
Board of Trustees, Twenty-fourth Ward.

Plans and specifications may be seen, and blanks for proposals, and all necessary information may be obtained at the office of the Superintendent of School Buildings, and Engineer, No. 146 Grand street, corner of Elm street, third floor.

The party submitting a proposal, and the parties proposing to become sureties, must each write his name, place of residence, and place of business on said proposal.

Two responsible and approved sureties, residents of this city, are required in all cases.

No proposal will be considered from persons whose character or antecedent dealings with the Board of Education render their responsibility doubtful.

The Committee reserve the right to reject any or all of the proposals submitted.

Dated New York, June 18, 1886.

#### SUPREME COURT.

In the matter of the application of the Counsel to the Corporation of the City of New York, for and in behalf of the Mayor, Aldermen and Commonalty of the City of New York, under and in pursuance of Chapter 496 of the Laws of 1885, to acquire title (wherever the same has not been heretofore acquired) to that part of TWELFTH AVENUE extending from Seventy-ninth Street to One Hundred and Twenty-ninth Street, in the Twenty-second and Twelfth Wards of the City of New York, as defined, laid out and established by said act.

PURSUANT TO THE PROVISIONS OF CHAPTER 496 of the Laws of 1885, and of all other statutes in such cases made and provided, notice is hereby given that an application will be made to the Supreme Court of the State of New York, at a Special Term of said Court to be held at Chambers thereof, in the County Court-house, in the City of New York, on Friday, the 9th day of July, 1886, at the opening of the Court on that day, or as soon thereafter as counsel can be heard thereon, for the appointment of Commissioners of Estimate and Assessment in the above-entitled matter. The nature and extent of the improvement hereby intended, is the acquisition of title, in the name and on behalf of the Mayor, Aldermen and Commonalty of the City of New York, to all the lands and premises, with the buildings thereon and appurtenances thereto belonging, required for the opening of a certain street or avenue, to be known as Twelfth Avenue, extending from Seventy-ninth Street to One Hundred and Twenty-ninth Street, in the Twenty-second and Twelfth Wards of the City of New York, as defined, laid out and established by Chapter 496 of the Laws of 1885, passed June 11th, 1885, being the following described lots, pieces or parcels of land, viz:

##### PARCEL A.

Beginning at the intersection of the northwestern prolongation of the northern line of Seventy-ninth Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northeasterly along the western line of the former Twelfth Avenue for 468.75 feet to the southern line of Eighty-first Street.
2. Thence northwesterly along the southern line of Eighty-first Street for 64.75 feet.
3. Thence southwesterly, deflecting to the left 91° 24' 33", for 468.75 feet.
4. Thence southeasterly, deflecting to the left 88° 35' 27", for 52.75 feet to the point of beginning.

##### PARCEL B.

Beginning at the intersection of the northern line of Eighty-first Street with the western line of the lands acquired for the former Twelfth Avenue.

1. Thence northeasterly along the western line of the former Twelfth Avenue for 372.75 feet.
2. Thence northeasterly, deflecting to the left 1° 24' 33", for 237.75 feet.
3. Thence northerly, curving to the left on the arc of a circle tangent to the preceding course whose radius is 5,967 feet, for 368.75 feet to the southern line of Eighty-fifth Street.
4. Thence northwesterly along the southern line of Eighty-fifth Street for 75.75 feet.
5. Thence southwesterly on the arc of a circle whose center lies southerly and westerly of the preceding course, and whose radius drawn through the western extremity of the preceding course forms an angle of 5° 00' 48" with its western prolongation, and is 5,892 feet for 370.75 feet.
6. Thence southwesterly, on a line tangent to the preceding course, for 627.75 feet to the northern line of Eighty-first Street.
7. Thence southeasterly along the northern line of Eighty-first Street for 65.75 feet to the point of beginning.

##### PARCEL C.

Beginning at a point in the northern line of Eighty-fifth Street, distant 32.75 feet northwesterly from the intersection of the northern line of Eighty-fifth Street with the western line of the lands acquired for the former Twelfth Avenue.

1. Thence northwesterly along the northern line of Eighty-fifth Street for 75.75 feet.
2. Thence northerly on the arc of a circle whose center lies southerly and westerly of the preceding course, and whose radius drawn through the western extremity of the preceding course forms an angle of 5° 35' 57" with its western prolongation, and is 5,892 feet, for 357.75 feet.
3. Thence northerly on a line tangent to the preceding course for 76.75 feet.
4. Thence northerly, curving to the right on the arc of a circle tangent to the preceding course whose radius is 3,108 feet, for 76.75 feet to the southern side of Eighty-seventh Street.
5. Thence southeasterly along the southern line of Eighty-seventh Street for 75.75 feet.
6. Thence southerly on the arc of a circle whose center lies northerly and easterly of the preceding course, and whose radius drawn through the eastern extremity of the preceding course forms an angle of 7° 51' 12" with its eastern prolongation, and is 3,033 feet, for 64.75 feet.
7. Thence southerly on a line tangent to the preceding course for 76.75 feet.
8. Thence southwesterly, curving to the right on the arc of a circle tangent to the preceding course whose radius is 5,967 feet, for 369.75 feet to the point of beginning.

##### PARCEL D.

Beginning at a point in the northern line of Eighty-seventh Street, distant 108.75 feet northwesterly from the intersection of the northern line of Eighty-seventh Street with the western line of the lands acquired for the former Twelfth Avenue.

1. Thence northwesterly along the northern line of Eighty-seventh Street for 75.75 feet.
2. Thence northerly on the arc of a circle whose center lies northerly and easterly of the preceding course, and whose radius drawn through the western extremity of the preceding course forms an angle of 6° 32' 53" with said course, and is 3,108 feet, for 75.75 feet to the southern line of Ninetieth Street.
3. Thence southeasterly along the southern line of Ninetieth Street for 75.75 feet.
4. Thence southerly on the arc of a circle whose center lies southerly and easterly of the preceding course, and whose radius drawn through the eastern extremity of the preceding course forms an angle of 6° 59' 56" with its eastern prolongation, and is 3,033 feet for 75.75 feet to the point of beginning.

##### PARCEL E.

Beginning at a point in the northern line of Ninetieth Street, distant 98.75 feet northwesterly from the intersection of the northern line of Ninetieth Street with the western line of the lands acquired for the former Twelfth Avenue.

1. Thence northwesterly along the northern line of Ninetieth Street for 75.75 feet.
2. Thence northeasterly on the arc of a circle whose center lies southerly and easterly of the preceding course, and whose radius drawn through the western extremity of the preceding course forms an angle of 7° 56' 41" with said course, and is 3,108 feet, for 103.75 feet.
3. Thence northeasterly on a line tangent to the preceding course for 34.75 feet.
4. Thence northeasterly, curving to the left on the arc of a circle tangent to the preceding course whose radius is 4,892 feet, for 18.75 feet to the southern line of Ninety-second Street.
5. Thence southeasterly along the southern line of Ninety-second Street for 76.75 feet.
6. Thence southwesterly on the arc of a circle whose center lies northerly and westerly of the preceding course, and whose radius drawn through the eastern extremity of the preceding course forms an angle of 9° 35' 12" with said course, and is 4,967 feet, for 31.75 feet.
7. Thence southwesterly on a line tangent to the preceding course for 34.75 feet.
8. Thence southwesterly, curving to the left on the arc of a circle tangent to the preceding course whose radius is 3,033 feet, for 95.75 feet to the point of beginning.

##### PARCEL F.

Beginning at a point in the northern line of Ninety-second Street, distant 9.75 feet northwesterly from the intersection of the northern line of Ninety-second Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northwesterly along the northern line of Ninety-second Street for 75.75 feet.
2. Thence northeasterly on the arc of a circle whose center lies northerly and westerly of the preceding course, and whose radius drawn through the western extremity of the preceding course forms an angle of 9° 01' 23" with its western prolongation, and is 4,892 feet, for 203.75 feet to the southern line of Ninety-third Street.
3. Thence northeasterly along the southern line of Ninety-third Street for 56.75 feet to the western line of the land acquired for the former Twelfth Avenue.
4. Thence southwesterly along the western line of the former Twelfth Avenue for 130.75 feet.
5. Thence southwesterly, curving to the right on the arc of a circle whose radius drawn through the southern extremity of the preceding course forms an angle of 81° 50' 28" with the said course, and is 4,967 feet, for 62.75 feet to the point of beginning.

##### PARCEL G.

Beginning at the intersection of the northern line of Ninety-third Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northeasterly along the line of the former Twelfth Avenue for 201.75 feet to the southern line of Ninety-fourth Street.
2. Thence northwesterly along the southern line of Ninety-fourth Street for 34.75 feet.
3. Thence southwesterly on the arc of a circle whose center lies northerly and westerly of the preceding course, and whose radius drawn through the western extremity of the preceding course forms an angle of 3° 34' 09" with its western prolongation, and is 4,892 feet, for 202.75 feet to the northern line of Ninety-third Street.
4. Thence southeasterly along the northern line of Ninety-third Street for 50.75 feet to the point of beginning.

##### PARCEL H.

Beginning at the intersection of the northern line of Ninety-fourth Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northeasterly along the western line of the former Twelfth Avenue for 201.75 feet to the southern line of Ninety-fifth Street.
2. Thence northwesterly along the southern line of Ninety-fifth Street for 24.75 feet.
3. Thence southwesterly on the arc of a circle whose center lies northerly and westerly of the preceding course, and whose radius drawn through the western extremity of the preceding course forms an angle of 0° 30' 22" with its western prolongation, and is 4,892 feet, for 201.75 feet to the northern line of Ninety-fourth Street.
4. Thence southeasterly along the northern line of Ninety-fourth Street for 30.75 feet to the point of beginning.

##### PARCEL I.

Beginning at the intersection of the northern line of Ninety-fifth Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northeasterly along the western line of the former Twelfth Avenue for 1,026.75 feet to the southern line of Ninety-ninth Street.
2. Thence northwesterly along the southern line of Ninety-ninth Street for 43.75 feet.
3. Thence southeasterly, deflecting to the left 91° 04' 44", for 951.75 feet.
4. Thence southeasterly, curving to the right on the arc of a circle tangent to the preceding course whose radius is 4,892 feet, for 75.75 feet to the northern line of Ninety-fifth Street.
5. Thence southeasterly along the northern line of Ninety-fifth Street for 24.75 feet to the point of beginning.

##### PARCEL J.

Beginning at the intersection of the northern line of Ninety-ninth Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northeasterly along the western line of the former Twelfth Avenue for 463.75 feet to the southern line of One Hundred and First Street.
2. Thence northwesterly along the southern line of One Hundred and First Street for 53.75 feet.
3. Thence southeasterly, deflecting to the left 91° 04' 44", for 463.75 feet to the northern line of Ninety-ninth Street.
4. Thence southeasterly along the northern line of Ninety-ninth Street for 44.75 feet to the point of beginning.

##### PARCEL K.

Beginning at the intersection of the northern line of One Hundred and First Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northeasterly along the western line of the former Twelfth Avenue for 1,089.75 feet.
2. Thence northeasterly, deflecting to the left 1° 04' 44", for 632.75 feet.
3. Thence northeasterly, curving to the left on the arc of a circle tangent to the preceding course whose radius is 9,967 feet, for 972.75 feet.
4. Thence northeasterly on a line tangent to the preceding course for 267.75 feet.
5. Thence northeasterly, curving to the right on the arc of a circle tangent to the preceding course whose radius is 3,033 feet, for 284.75 feet.
6. Thence northeasterly on a line tangent to the pre-

ceding course for 143.75 feet to the southern line of One Hundred and Fourteenth Street.

7. Thence northwesterly along the southern line of One Hundred and Fourteenth Street for 75.75 feet.

8. Thence southwesterly, deflecting to the left 91° 18', for 145.75 feet.

9. Thence southwesterly, curving to the left on the arc of a circle tangent to the preceding course whose radius is 3,108 feet, for 291.75 feet.

10. Thence southwesterly on a line tangent to the preceding course for 267.75 feet.

11. Thence southwesterly, curving to the right on the arc of a circle tangent to the preceding course whose radius is 3,108 feet, for 171.75 feet.

12. Thence southwesterly on a line tangent to the preceding course for 1,720.75 feet to the northern line of One Hundred and First Street.

13. Thence southwesterly along the northern line of One Hundred and First Street for 54.75 feet to the point of beginning.

##### PARCEL L.

Beginning at a point in the northern line of One Hundred and Fourteenth Street distant 32.75 feet northwesterly from the intersection of the northern line of One Hundred and Fourteenth Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northwesterly along the northern line of One Hundred and Fourteenth Street for 75.75 feet.
2. Thence northeasterly, deflecting to the left 88° 42', for 620.75 feet.
3. Thence northeasterly, curving to the right on the arc of a circle tangent to the preceding course whose radius is 3,108 feet, for 171.75 feet.
4. Thence northeasterly on a line tangent to the preceding course for 335.75 feet.
5. Thence northeasterly, curving to the left on the arc of a circle tangent to the preceding course whose radius is 2,892 feet, for 520.75 feet.
6. Thence northeasterly on a line tangent to the preceding course for 433.75 feet to the southern line of One Hundred and Twenty-second Street.
7. Thence southeasterly along the southern line of One Hundred and Twenty-second Street for 75.75 feet.
8. Thence southwesterly, deflecting to the right 81° 33' 30", for 422.75 feet.
9. Thence southwesterly, curving to the right on the arc of a circle tangent to the preceding course whose radius is 2,967 feet, for 333.75 feet.
10. Thence southwesterly on a line tangent to the preceding course for 335.75 feet.
11. Thence southwesterly, curving to the left on the arc of a circle tangent to the preceding course whose radius is 3,033 feet, for 167.75 feet.
12. Thence southwesterly on a line tangent to the preceding course for 621.75 feet to the point of beginning.

##### PARCEL M.

Beginning at a point in the northern line of One Hundred and Twenty-second Street distant 91.75 feet northwesterly from the intersection of the northern line of One Hundred and Twenty-second Street with the western line of the land acquired for the former Twelfth Avenue.

1. Thence northwesterly along the northern line of One Hundred and Twenty-second Street for 75.75 feet.
2. Thence northeasterly, deflecting to the right 81° 33' 30", for 500.75 feet.
3. Thence northeasterly, curving to the right on the arc of a circle tangent to the preceding course whose radius is 2,108 feet, for 528.75 feet.
4. Thence northeasterly on a line tangent to the preceding course for 776.75 feet to the southern line of One Hundred and Twenty-ninth Street.
5. Thence southeasterly along the southern line of One Hundred and Twenty-ninth Street for 75.75 feet.
6. Thence southwesterly, deflecting to the right 96° 12', for 785.75 feet.
7. Thence southwesterly, curving to the left on the arc of a circle tangent to the preceding course whose radius is 2,033 feet, for 519.75 feet.
8. Thence southwesterly on a line tangent to the preceding course for 511.75 feet to the point of beginning.

Dated New York, May 26, 1886.

E. HENRY LACOMBE,  
Counsel to the Corporation,  
2 Tryon Row, New York City.

#### NEW AQUEDUCT.

AQUEDUCT COMMISSIONERS' OFFICE,  
STEWART BUILDING, 280 BROADWAY, ROOM 209,  
NEW YORK, JUNE 24, 1886.

#### PUBLIC HEARING.

##### TO WHOM IT MAY CONCERN.

WHEREAS, IN THE PROGRESS OF THE work upon the New Croton Aqueduct it has become apparent to the Aqueduct Commissioners that the best interest of the City requires that for the proper construction, future protection, and maintenance of the said Aqueduct, the City should acquire the fee simple in lieu of an easement in perpetuity in the lands required for the said Aqueduct and its appurtenances, between the Croton river and the Gate House at One Hundred and Thirty-fifth street and Convent avenue in this city; now, therefore, in conformity with the requirements of section 2, chapter 490, of the Laws of 1883, of the State of New York, public notice is hereby given to all persons interested that full opportunity will be afforded them to be heard in relation to the plans now under consideration by the Aqueduct Commissioners for a modification of the plans heretofore adopted and proceeded upon for the construction of the said Aqueduct, from the Croton river to the aforesaid Gate-house in the City of New York; and for the acquisition of the fee simple, in lieu of an easement in perpetuity, in all the parcels of land required for said Aqueduct and its appurtenances (save a few exceptional cases) not heretofore taken in fee upon the line of the said Aqueduct.

The said public hearing to be at the above-named office of the Aqueduct Commissioners on THURSDAY, JULY 1, 1886, at 11 o'clock A. M., and upon such other days thereafter to which said hearing may be adjourned.

By order of the Aqueduct Commissioners.

JAMES W. McCULLOH,  
Secretary.

#### MANHATTAN ISLAND SECTION.

NOTICE OF APPLICATION FOR CONFIRMATION of the report of Commissioners of Appraisal, Manhattan Island Section, dated May 12, 1886, as to Parcels Eight (8), Nine (9), Ten (10) and Eleven (11).

Public notice is hereby given that it is my intention to make application before the Honorable Jackson O. Dykman, at a Special Term of the Supreme Court of the State of New York, to be held in the Second Judicial District, at the Court-house, in White Plains, Westchester County, on the 17th day of July, 1886, at 11 o'clock in the forenoon of that day, or as soon thereafter as counsel can be heard, to confirm the report as to parcels Eight (8), Nine (9), Ten (10) and Eleven (11), of the Commissioners of Appraisal appointed in the above matter pursuant to the provisions of chapter 490 of the Laws of 1883, which said report was filed in the office of the Clerk of the County of Westchester, on the 14th day of June, 1886, and a copy of which was filed in the office of the Clerk of the County of New York on the same day.

Dated New York, June 16, 1886.

E. HENRY LACOMBE,  
Counsel to the Corporation,  
2 Tryon Row, New York City.

#### THE CITY RECORD.

COPIES OF THE CITY RECORD CAN BE obtained at No. 2 City Hall (northwest corner basement). Price three cents each.